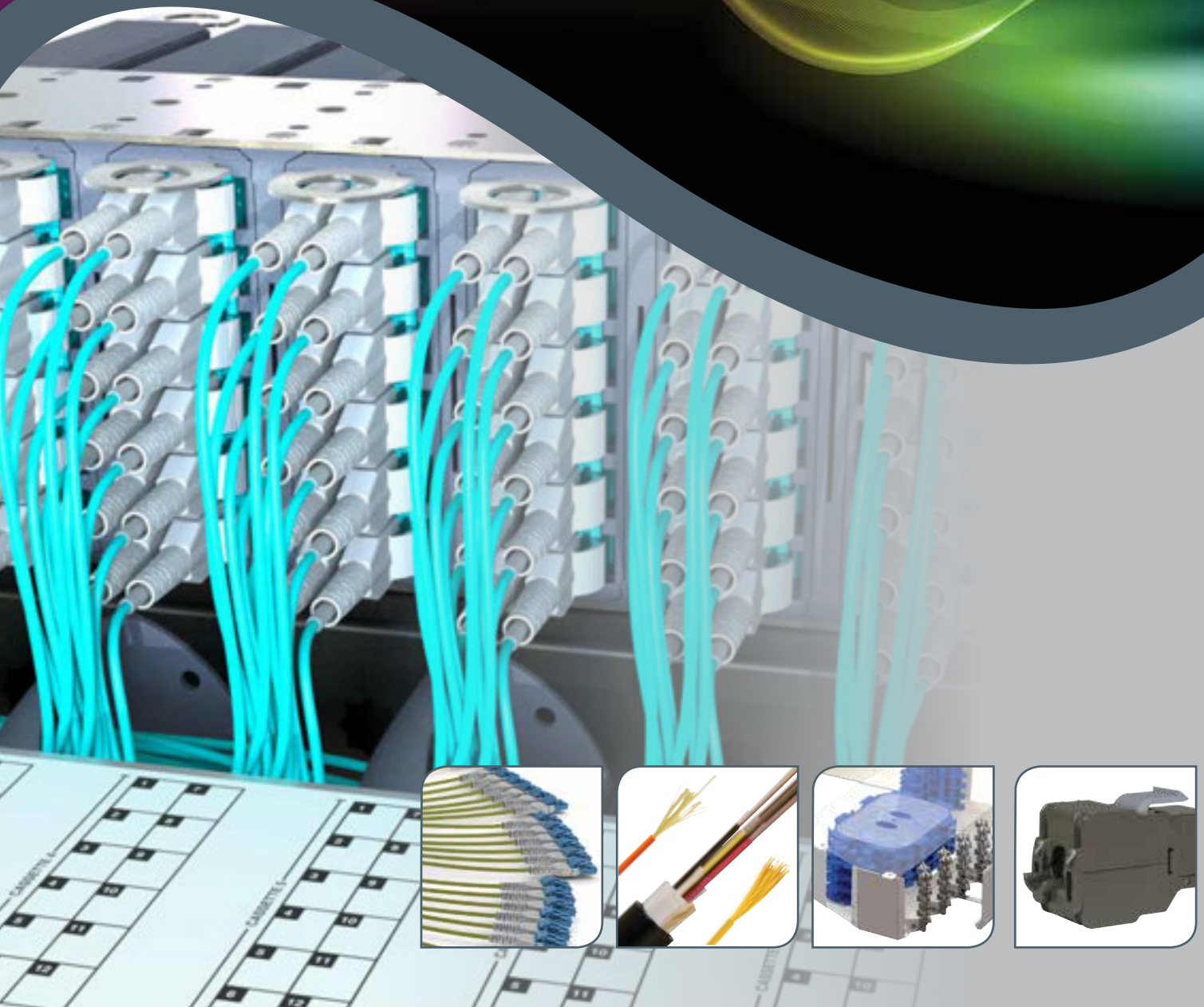


FOPTRONICS

Complete Connectivity Solutions



Optronics

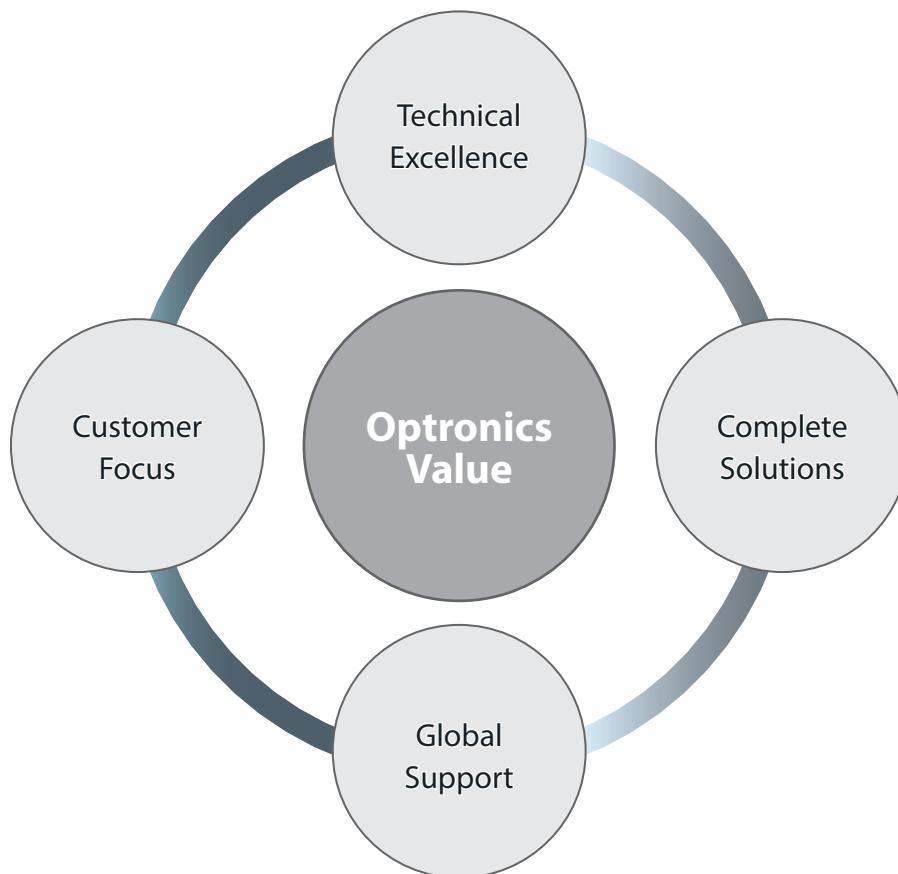
An industry leader in enterprise connectivity

About Us

Optronics products provide a comprehensive range of premium end-to-end fibre optic connectivity and copper structured cabling solutions.

Optronics products are designed, manufactured and supported by a team of industry leaders dedicated to creating the highest quality products that exceed industry standards and are assured to give years of reliable service. All products are manufactured in ISO 9001:2008 certified facilities.

International standards are the basis for Optronics products, ensuring compatibility in all networks. Solutions constructed with Optronics products according to design, installation and testing standards will give years of reliable service. We stand behind our products with full product and system warranties.



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General Information

It is the customer's responsibility to check whether the components illustrated in this catalogue comply with different regulations from those stated in special fields of application we are unable to foresee.

We reserve the right to modify designs in order to improve quality, keep pace with technological advancement or meet particular requirements in production.

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Standards Applicable to Enterprise Networks

International standards are produced by ISO (International Organisation for Standardisation) and the IEC (International Electrotechnical Commission). Optronics products are designed and supplied in conformance with the standards cited on the related data sheet; in most cases IEC standards.

Regional standards bodies operate in concert with the international organisations and may introduce specific regional variants of the international standards. In North America, TIA (Telecommunications Industry Association) standards are widely followed. In Europe the EN (European Norm) standards are common. International and European standards are often republished by national standards bodies.

Primary Enterprise Communication Network Standards

The standards listed below are top level standards for enterprise or premise communications networks. The standards refer to further standards covering fibre itself, copper and fibre cables, connectivity products, testing practices and installation methods.

ISO/IEC 11801 (2nd edition); ANSI/TIA-568-C.1; EN 50173-1

These standards provide general requirements relating to the performance, installation and testing of generic cabling systems. Basic structured cabling classes are defined here – Cat 6, Cat 6A, OM1, OM2, OM3, OM4, OS1 and OS2.

specification, administration, planning, installation, handover, maintenance and repair of cabling systems. The US standards TIA-606-A, TIA-569-B, TIA-758-A and ANSI-J-STD-607-A cover most of these topics.

ISO/IEC 24764; ANSI/TIA-942; EN 50173-5:2007

These standards provide general requirements relating to the performance and installation of generic cabling systems within Data Centres.

IEC 14763-3; IEC 61280; TIA-568-C; EN 50346

These standards focus on the inspection and testing of cabling systems.

ISO/IEC 14763-2; EN 50174-1 (-2 and -3)

These standards provide information relating to the

ISO/IEC TR14763-2-1; ANSI/TIA 606-B

These standards are widely used as reference guides for the labelling of Structured Cabling Systems.

Fibre Standards

The following Technical Information Sheets provide a summary of optical fibre types and key parameters including basic fibre specifications and Ethernet application standards. These have been compiled from multiple IEC, TIA and ITU standards and are up-to-date as of the publication of this catalogue.

Optical Fibre Types

Channel Insertion Loss	Protocol	Max Transmission Distance (km)					
1 GBPS	1000 BASE-LH, 1000BASE-LH-LX	dB	1310	4.56	4.56	4.56	4.56
	1000BASE-ZX**	dB	1550				
10 GBPS	10G BASE-LR	dB	1310	6.2	6.2	6.2	6.2
	10G BASE-ER	dB	1550	10.9	10.9	10.9	10.9
	10G BASE-ZR**	dB	1550				
	10G BASE LX4	km	1295 to 1310	6.2	6.2	6.2	6.2
40 GBPS	40G BASE LR4	dB	1271 to 1331	6.7	6.7	6.7	6.7
	40G BASE FR		1550	4	4	4	4
100 GBPS	100GBASE-LR4	dB	1295 to 1310	6.3	6.3	6.3	6.3
	100G BASE-ER4	dB	1295 to 1310	18	18	18	18

Note 1 See ITU-T Recommendation

** Not specified by IEEE.

Optical Fibre Types

Single Mode Optical Fibre Selection Chart			Single mode optical fibre optimized for operation in the 1310 nm band				Low Water Peak Non dispersion Shifted Single Mode Fibre		Dispersion Shifted Single Mode Fibre		Non zero Dispersion Shifted Single Mode Fibre			Bending-loss insensitive single-mode optical fibre and cable for the access network				
			ISO/IEC 11801	Legacy		OS1/OS2							OS1/OS2					
			IEC	IEC 60793-2-50 B1.1		IEC 60793-2-50 B1.3		IEC 60793-2-50 B2		IEC 60793-2-50 B4			IEC 60793-2-50 B6_a1		IEC 60793-2-50 B6_a2			
			TIA	TIA 492 CAAA		TIA 492 CAAB				TIA 492 DAAA								
Performance Characteristics		Units	ITU-T	ITU-T G.652 A	ITU-T G.652 B	ITU-T G.652 C	ITU-T G.652 D	ITU-T G.653 A	ITU-T G.653 B	ITU-T G.655C	ITU-T G.655D	ITU-T G.655E	ITU-T G.657A1		ITU-T G.657A2			
Mode field diameter	Wavelength	nm		1310	1310	1310	1310	1550	1550	1550	1550	1550	1310		1310			
	Range of nominal values	µm		8.6-9.5	8.6-9.5	8.6-9.5	8.6-9.5	7.8-8.5	7.8-8.5	8-11	8-11	8-11	8.6-9.5		6.3-9.5			
	Tolerance	µm		±0.6	±0.6	±0.6	±0.6	±0.8	±0.6	±0.7	±0.6	±0.6	±0.4		±0.4			
Cladding diameter	Nominal	µm		125	125	125	125	125	125	125	125	125	125		125			
	Tolerance	µm		±1	±1	±1	±1	±1	±1	±1	±1	±1	±0.7		±0.7			
Core concentricity error	Maximum	µm		0.6	0.6	0.6	0.6	0.8	0.6	0.8	0.6	0.6	0.5		0.5			
Cladding noncircularity	Maximum			1.0%	1.0%	1.0%	1.0%	2.0%	1.0%	2.0%	1.0%	1.0%	1.0%		1.0%			
Cable cut-off wavelength	Maximum	nm		1260	1260	1260	1260	1270	1270	1450	1450	1450	1260		1260			
Macrobend loss	Radius	mm		30	30	30	30	30	30	30	30	30	15	10	15	10	7.5	
	Number of turns			100	100	100	100	100	100	100	100	100	10	1	10	1	1	
	Maximum at 1550 nm	dB		0.1	-	-	-	0.5	0.1				0.25	0.75	0.03	0.1	0.5	
	Maximum at 1625 nm	dB		-	0.1	0.1	0.1	-		0.50	0.1	0.1	1.0	1.5	0.1	0.2	1.0	
Proof stress	Minimum	GPa		0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69		0.69			
Chromatic dispersion coefficient	λ0min	nm		1300	1300	1300	1300	1500					1300		1300			
	λ0max	nm		1324	1324	1324	1324	1600					1324		1324			
	S0max	ps/nm2 × km		0.092	0.092	0.092	0.092	0.085					0.092		0.092			
	λmin	nm						1525										
Attenuation coefficient	λmax	nm						1575										
	Dmax	ps/nm × km						3.5										
	Specific details								Note 1	Note 1	Note 1	Note 1						
	Maximum at 1310 nm	dB/km		0.5	0.4	0.4	0.4						0.4		0.4			
	Maximum at 1383 nm	dB/km				0.4	0.4						0.4		0.4			
PMD coefficient	Maximum at 1550 nm	dB/km		0.4	0.35	0.3	0.3	0.35	0.35	0.35	0.35	0.35	0.3		0.3			
	Maximum at 1625 nm	dB/km		-	0.4	0.4	0.4			0.4	0.4	0.4	0.4		0.4			
	M	cables		20	20	20	20	20	20	20	20	20	20		20			
	Q			0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%		0.01%			
	Maximum PMDQ	ps/√km		0.5	0.20	0.5	0.20	0.5	0.20	0.20	0.20	0.20	0.20		0.20			

Note 1 See ITU-T Recommendation
 ** Not specified by IEEE.

Ethernet Distances		Protocol						Max Transmission Distance (km)			
1 GBPS	1000 BASE-LH, 1000BASE-LH-LX	km	1310	2	5	5	5				
	1000BASE-ZX**	km	1550	70	70	70	70				
10 GBPS	10G BASE-LR	km	1310	2	10	10	10				
	10G BASE-ER	km	1550	2	22	22	22				
	10G BASE-ZR**	km	1550	80	80	80	80				
	10G BASE LX4	km	1295 to 1310	2	10	10	10				
40 GBPS	40G BASE LR4	km	1271 to 1331	10	10	10	10				
	40G BASE FR	km	1550	2	2	2	2				
100 GBPS	100G BASE-LR4	km	1295 to 1310	10	10	10	10				
	100G BASE-ER4	km	1295 to 1310	40	40	40	40				

Note 1 See ITU-T Recommendation
 ** Not specified by IEEE.

FIBRE | STANDARDS

Multimode Optical Fibre Selection Chart			Multimode Fibre with a 62.5-Micron Core		Multimode Fibre with a 50-Micron Core	Multimode Fibre with a 50-Micron Core Laser optimized	Multimode Fibre with a 50-Micron Core Laser optimized
			ISO/IEC 11801	OM1	OM2	OM3	OM4
			IEC	IEC 60793-2-10 A1b	IEC 60793-2-10 A1a.1a	IEC 60793-2-12 A1a.2	IEC 60793-2-12 A1a.3
			ITU-T		ITU-T G.651.1	ITU-T G.651.1	ITU-T G.651.1
Performance Characteristics		Units	TIA	TIA 492 AAAA	TIA 492 AAAB	TIA 492 AAAC-A	TIA 492 AAAD
Attenuation coefficient	Maximum	dB/km	tight buffer	3.5	3.5	3.5	3.5
				1.5	1.5	1.5	1.5
			loose tube	3	3	3	3
				1	1	1	1
Numerical Aperture	Nominal and tolerance			0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Macrobend Attenuation Change	Maximum	dB	100 turns on 75 mm Mandrel	0.5	0.5	0.5	0.5
Proof Strength	Minimum	Gpa		0.69	0.69	0.69	0.69
Cladding Diameter	Nominal and tolerance	microns		125±2	125±2	125±2	125±2
Core Diameter	Nominal and tolerance	microns		62.5±2.5	50±2.5	50±2.5	50±2.5
Core non-circularity	Maximum	%		6	6	6	6
Coating Diameter	Nominal and tolerance	microns		250±15	250±15	250±15	250±15
Core/Clad Concentricity Error	Maximum	microns		3	3	3	3
Cladding Non-Circularity	Maximum	%		2	2	2	2
Coating/Cladding Concentricity Error	Maximum	microns		12.5	12.5	12.5	12.5
Minimum Bandwidth: Overfilled Launch	Minimum	MHz.km	850nm	200	500	1500	3500
			1300nm	500	500	500	500
Minimum Bandwidth:Laser Effective Modal Bandwidth	Minimum	MHz.km	850	-	-	2000	4700
Ethernet Distances	Protocol			Max Transmission Distance (m)			
10 MBPS	IEEE 10BASE-FL	m	850nm	2000	2000	2000	2000
100 MBPS	IEEE 100BASE-SX**	m	850nm	500	750	1000	NA
	IEEE 100BASE-FX	m	1300nm	2000	2000	2000	2000
1 GBPS	IEEE 1000BASE-SX	m	850nm	275	550		
	IEEE 1000BASE-LX	m	1300nm	550	550	550	550
10 GBPS	IEEE 10G BASE-SR	m	850nm	33	82	300	400
	IEEE 10G BASE-LRM	m	1300nm	220	220	220	220
	IEEE 10G BASE LX4	m	1269 to 1355.9	300	300	300	300
40 GBPS (4 pairs)	IEEE 40GBASE-SR4	m	850nm	-	-	100	150
100 GBPS (10 pairs)	IEEE 100GBASE-SR10	m	850nm	-	-	100	150
Ethernet Channel Insertion Loss	Protocol			Maximum Channel Insertion Loss			
10 MBPS	IEEE 10BASE-FL	dB	850nm	12.5	12.5	12.5	12.5
100 MBPS	IEEE 100BASE-SX**	dB	850nm				
	IEEE 100BASE-FX	dB	1300nm	11	6.3	6.3	6.3
1 GBPS	IEEE 1000BASE-SX	dB	850nm	2.6	3.56	3.56	3.56
	IEEE 1000BASE-LX	dB	1300nm	2.35	2.35	2.35	2.35
10 GBPS	IEEE 10G BASE-SR	dB	850nm	1.6	1.8	2.6	2.9
	IEEE 10G BASE-LRM	dB	1300nm	1.9	1.9	1.9	1.9
	IEEE 10G BASE LX4	dB	1269 to 1355.9	2	2	2	2
40 GBPS (4 pairs)	IEEE 40GBASE-SR4	dB	850nm	-	-	1.9	1.5
100 GBPS (10 pairs)	IEEE 100GBASE-SR10	dB	850nm	-	-	1.9	1.5

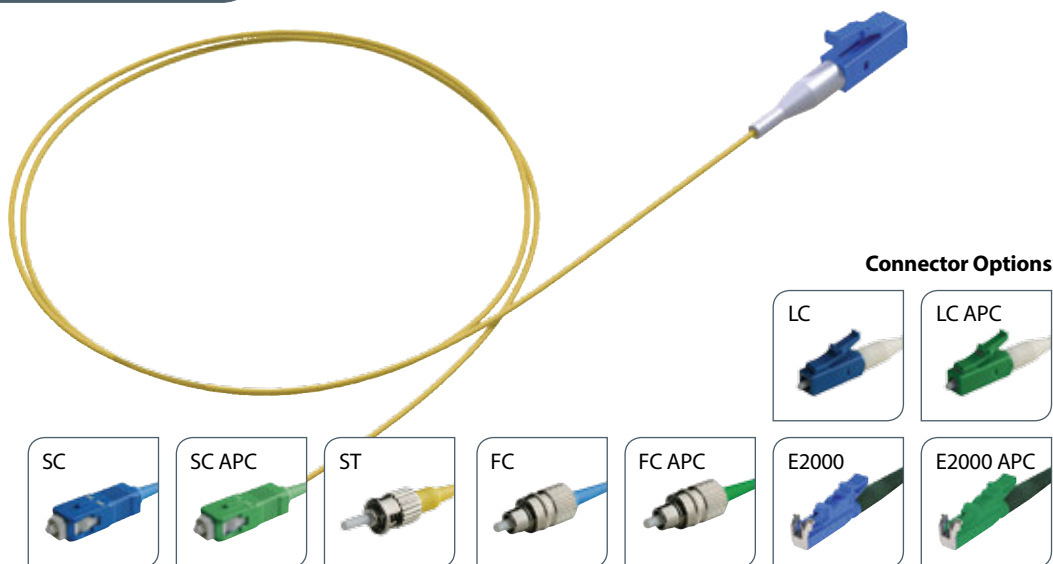
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Optical Fibre Assemblies

Pigtails & Patch Cords

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OS2 Premium Low Loss Simplex & Duplex Patch Cords	11
OS2 Premium Low Loss Simplex & Duplex Patch Cords APC	12
OM1 and OM2 Premium Low Loss Duplex Patch Cords	13
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Patch Cords Part Numbers	15
Master Test Leads	18
Armoured Patch Cords	20

Singlemode Pigtails



Singlemode pigtails are used in telecom, datacom networks and also used for high speed metropolitan and access network. The singlemode pigtail buffer conforms to IEC, EIA TIA or

Telcordia standards. The singlemode pigtails are terminated with premium low loss connectors which gives optimum optical performance.

Features & Specifications

- > Available in SC, ST, FC, LC, E2000 connector styles
- > Optronics product manufactured on 900 micron buffer fibre (nominal dia.)
- > Individual test sheet and unique product identification number for traceability
- > Low insertion loss ($\leq 0.15\text{dB}$) & high return loss ($\geq 55\text{dB}$)
- > Buffer available in up to 12 colours
- > Materials compliant to 2011/65/EU

Technical Specifications

TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$
Singlemode Return Loss UPC	IEC 61300-3-6	$\geq 55\text{dB}$

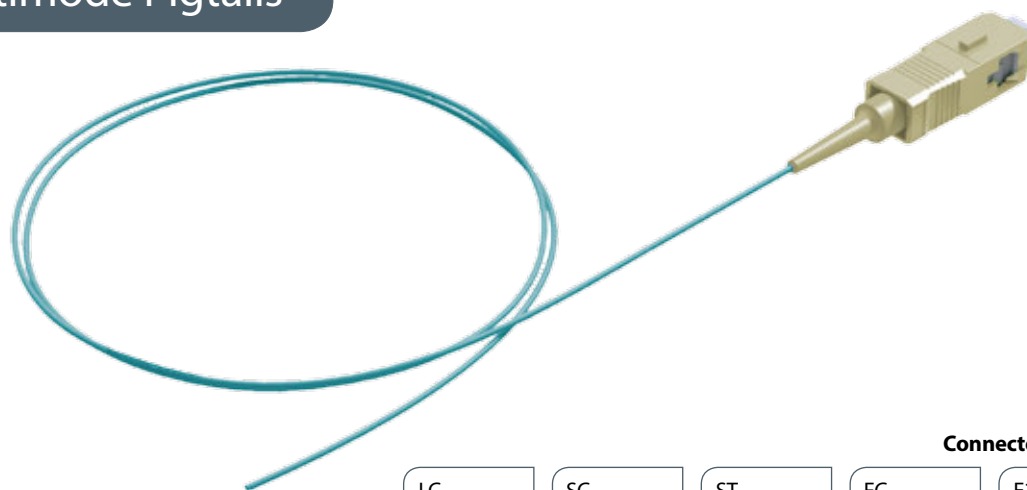
ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m

Ordering Information

LENGTH	OS2 SINGLEMODE PIGTAILS	OS2 SINGLEMODE APC PIGTAILS
1 METRE	OPTFCOS2B1-YE-P	OPTFCAOS2B1-YE-P
1 METRE	OPTLCOS2B1-YE-P	OPTLCAOS2B1-YE-P
1 METRE	OPTSCOS2B1-YE-P	OPTSCAOS2B1-YE-P
1 METRE	OPTSTOS2B1-YE-P	-
2 METRES	OPTFCOS2B2-YE-P	OPTFCAOS2B2-YE-P
2 METRES	OPTLCOS2B2-YE-P	OPTLCAOS2B2-YE-P
2 METRES	OPTSCOS2B2-YE-P	OPTSCAOS2B2-YE-P
2 METRES	OPTSTOS2B2-YE-P	-



Multimode Pigtails



Connector Options



Multimode pigtails are used to connect high speed networks like gigabit ethernet, fast ethernet and ethernet. The multimode pigtail buffer conforms to IEC, EIA TIA or Telcordia

standards. The multimode pigtails are terminated with premium low loss connector which gives optimum optical performance.

Features & Specifications

- > Available in SC, ST, FC, LC, E2000 connector styles
- > Optronics product manufactured on 900 micron buffer (nominal dia.)
- > Low insertion loss ($\leq 0.15\text{dB}$)
- > Individual test sheet and unique product identification number for traceability
- > Buffer available in up to 12 colours
- > Materials compliant to 2011/65/EU

Technical Specifications

TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$

ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m

Ordering Information

LENGTH	OM1 MULTIMODE PIGTAILS	OM2 MULTIMODE PIGTAILS	OM3 MULTIMODE PIGTAILS	OM4 MULTIMODE PIGTAILS
1 METRE	OPTST62B1-OR-P	OPTST50B1-OR-P	OPTSTOM3B1-AQ-P	OPTSTOM4B1-EV-P
1 METRE	OPTSC62B1-OR-P	OPTSC50B1-OR-P	OPTSCOM3B1-AQ-P	OPTSCOM4B1-EV-P
1 METRE	OPTFC62B1-OR-P	OPTFC50B1-OR-P	OPTFCOM3B1-AQ-P	OPTFCOM4B1-EV-P
1 METRE	OPTLC62B1-OR-P	OPTLC50B1-OR-P	OPTLCOM3B1-AQ-P	OPTLCOM4B1-EV-P
2 METRES	OPTST62B2-OR-P	OPTST50B2-OR-P	OPTSTOM3B2-OR-P	OPTSTOM4B2-OR-P
2 METRES	OPTSC62B2-OR-P	OPTSC50B2-OR-P	OPTSCOM3B2-AQ-P	OPTSCOM4B2-EV-P
2 METRES	OPTFC62B2-OR-P	OPTFC50B2-OR-P	OPTFCOM3B2-AQ-P	OPTFCOM4B2-EV-P
2 METRES	OPTLC62B2-OR-P	OPTLC50B2-OR-P	OPTLCOM3B2-AQ-P	OPTLCOM4B2-EV-P



OPTICAL FIBRE ASSEMBLIES | TECHNICAL SPECIFICATION

Optronics Premium low loss range patch cords are suitable for low loss telecom, datacom, data centre and some critical applications. The patch cords provide flexible interconnection to active equipment, passive optical devices and cross-connects. The patch cords are terminated

with Premium range physical contact (singlemode & multimode) or angled physical contact (singlemode) zirconia ceramic ferrule connectors which are manufactured with precision factory mounting and polishing techniques which helps assure high transmission quality.

Features

- > Conform to IEC, EIA-TIA, or Telcordia performance requirements
- > Available in different fibre types
- > Available with different connector types
- > Available in standard and custom lengths
- > REACH / SvHC compliant
- > Materials compliant to 2011/65/EU

Application

- > Data centre
- > Telecommunication networks
- > High bandwidth 40G & 100G networks
- > CATV
- > LAN and WAN
- > FTTX

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15dB	0.15dB	IEC 61300-3-4
IL/Random (97%)	0.30dB	0.25dB	IEC 61300-3-34
Ave/Master*	0.12dB	0.08dB	IEC 61300-3-4
Ave/Random*	0.12dB	0.10dB	IEC 61300-3-34
Return Loss	55/65dB	>0.28dB	IEC 61300-3-6
MECHANICAL PROPERTIES	CRITERIA*		CONFORMANCE
Mechanical endurance	500 matings		IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude		IEC 61300-2-1
Drop	Drop height 1m, 5 drops		IEC 61300-2-12
Cable retention	Magnitude 50N		IEC 61300-2-4
Cable torsion	1.5kg - 2.5kg for 2mm - 3mm cable diameter		IEC 61300-2-5

* The change in attenuation for all the above listed criteria shall be a maximum of 0.20dB

Termination Specification

CONNECTOR TYPE	CONFORMANCE	SM SIMPLEX	SM DUPLEX	MM DUPLEX
SC connector	IEC 61754-4	SM PC - Blue APC - Green	SM PC - Blue APC - Green with clips	MM PC - Aqua with clips Boot - red & black
LC connector	IEC 61754-20	SM PC - Blue APC-Green Boot - White	SM PC - Blue APC - Green with clips Boot-White	MM PC - Aqua or erika violet with clips Boot - White
ST connector	IEC 61754-2	SM PC - Yellow boot	SM PC - Yellow boot	MM PC - Red & Black boot
FC connector	IEC 61754-13	SM PC - Blue boot APC - Green boot	SM PC - Blue boot APC - Green boot	MM PC - Black boot

IMPORTANT: Clips will be provided for channel identification of duplex FC and ST patch cords.

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX & DUPLEX
Cable Material		LSZH or PVC
Strength Member		Aramid
Crush	N	1000
Operating Temperature	°C	-20 to +60
Secondary Buffer Diameter (2.0mm and 2.8mm)	µm	900±50
Minimum Bending Radius	mm	10D (installed) 20D (loaded)

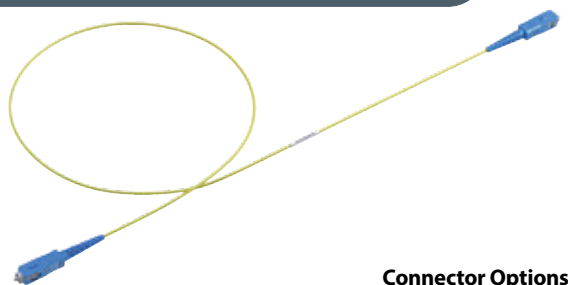
IMPORTANT: The patch cords are available in standard length of 1m, 2m, 3m, 5m, 10m, 15m and 20m. For other lengths please contact Optronics for the actual lead times.

OPTICAL CABLE	OPTICAL FIBRE	
	IEC	ITU-T
OM1	IEC 60793-2-A1b	
OM2	IEC 60793-2-A1a.1a	G.651.1
OM3	IEC 60793-2-A1a.2a	G.651.1
OM4	IEC 60793-2-A1a.3a	G.651.1
OS2	IEC 60793-2-50-B6a	G.657A1

NOTE: OS2 Singlemode optical fibre is fully compatible with OS1, IEC 60793-2-50-B1.3 and ITU-T G.652D



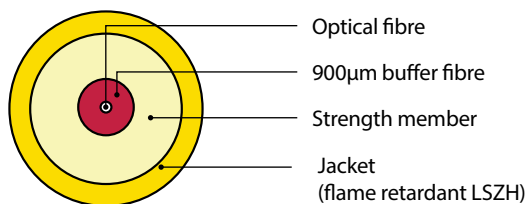
OS2 Premium Low Loss



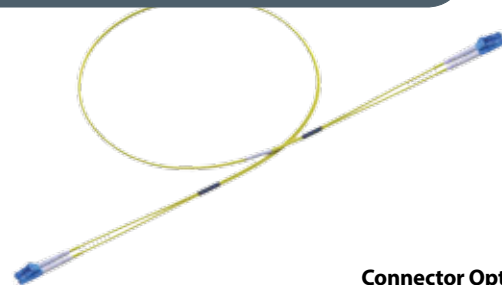
Connector Options



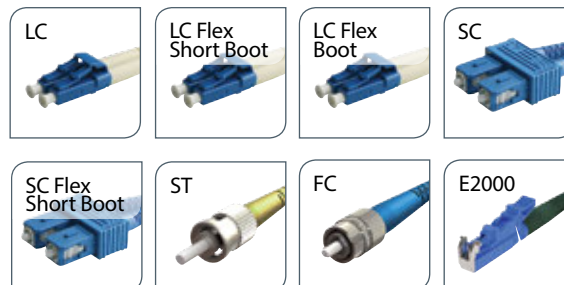
Cable Construction



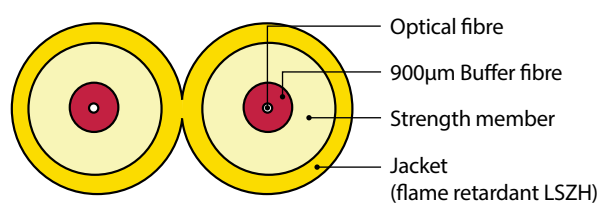
OS2 Premium Low Loss



Connector Options



Cable Construction



Features & Specifications

- > Available in SC, ST, FC, LC, E2000 connector styles
- > Optronics product manufactured on 2.0mm or 2.8mm (nominal dia.) LSZH cable
- > Individual test sheet and unique product identification number for traceability

- > Low insertion loss ($\leq 0.15\text{dB}$) & high return loss ($\geq 55\text{dB}$)
- > Yellow cable
- > Materials compliant to 2011/65/EU

Technical Specifications

TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$
Flammability	IEC 60332-1	-
Singlemode Return Loss UPC	IEC 61300-3-6	$\geq 55\text{dB}$

ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m

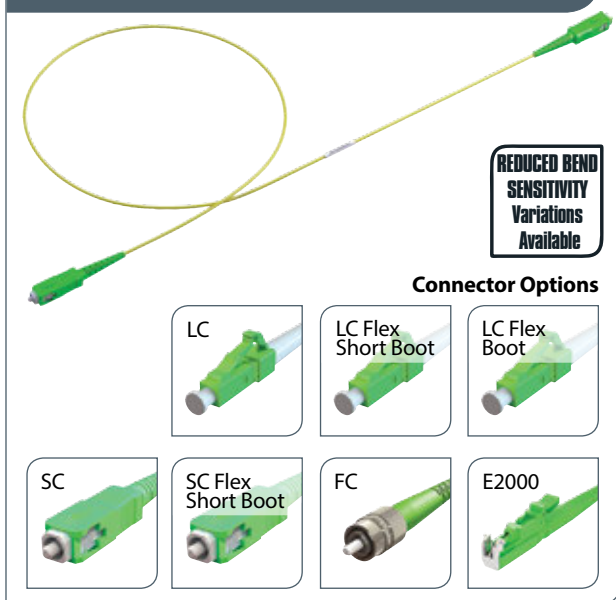


For ordering information
see page 15-17

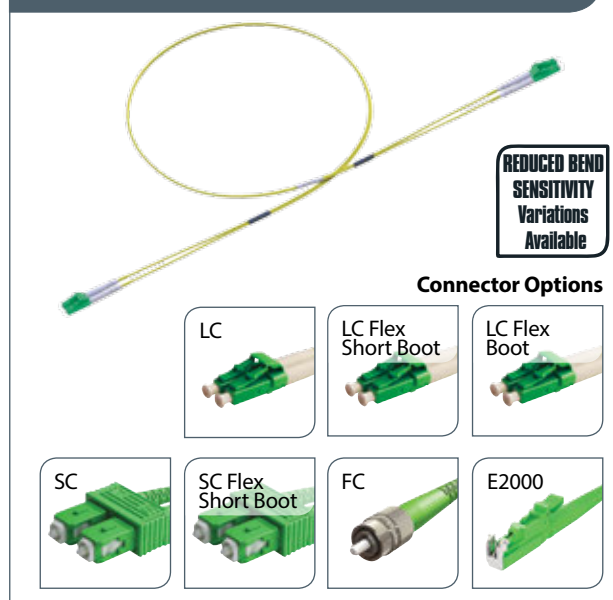
sales@optronicsnet.com



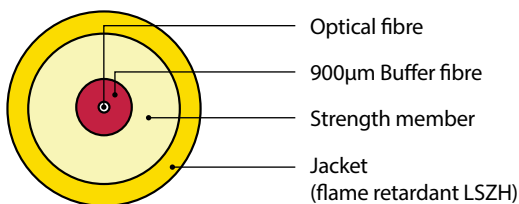
OS2 Premium Low Loss APC



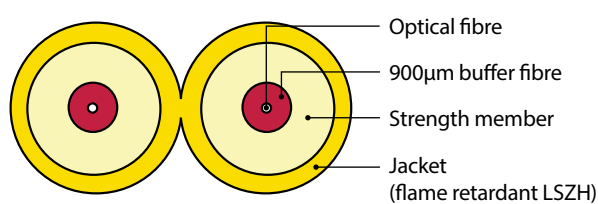
OS2 Premium Low Loss APC



Cable Construction



Cable Construction



Features & Specifications

- > Available in SC, FC, LC, E2000 connector styles
- > Optronics product manufactured on 2.0mm or 2.8mm (nominal dia.) LSZH cable
- > Individual test sheet and unique product identification number for traceability

- > Low insertion loss ($\leq 0.15\text{dB}$) & high return loss ($\geq 65\text{dB}$)
- > Yellow cable
- > Materials compliant to 2011/65/EU

Technical Specifications

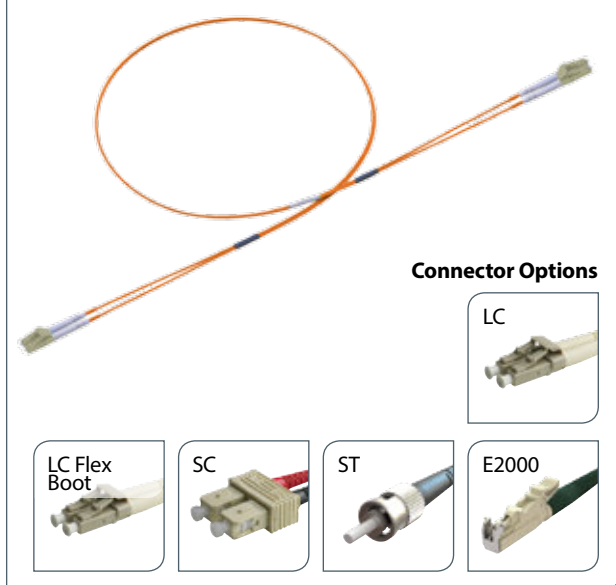
TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$
Flammability	IEC 60332-1	-
Singlemode Return Loss APC	IEC 61300-3-6	$\geq 65\text{dB}$

ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m

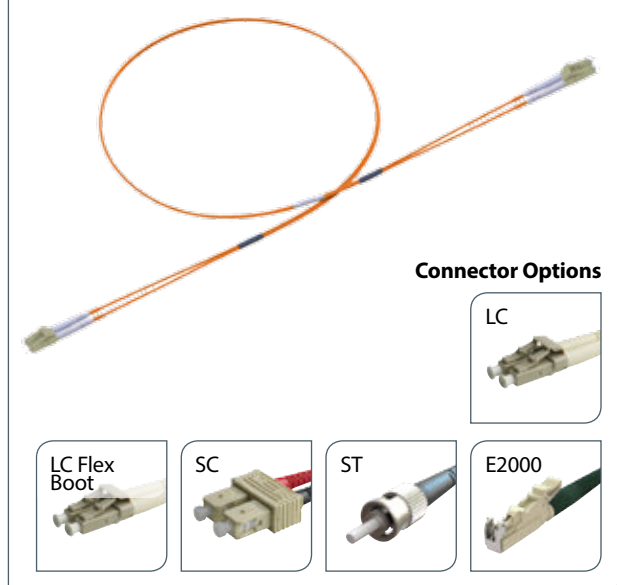


For ordering information
see page 15-17

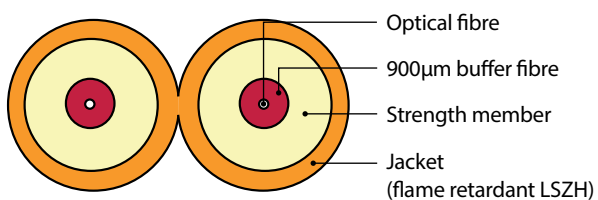
OM1 Premium Low Loss



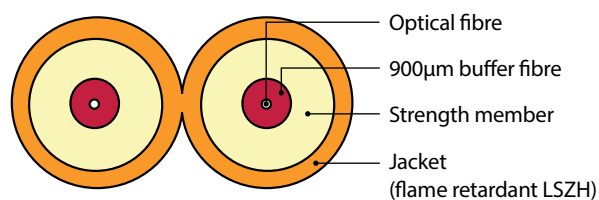
OM2 Premium Low Loss



Cable Construction



Cable Construction



Features & Specifications

- > Available in SC, ST, LC, E2000 connector styles
- > Optronics product manufactured on 2.0mm or 2.8mm (nominal dia.) LSZH cable
- > Low insertion loss ($\leq 0.15\text{dB}$)

- > Individual test sheet and unique product identification number for traceability
- > Orange cable
- > Materials compliant to 2011/65/EU

Technical Specifications

TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$
Flammability	IEC 60332-1	-

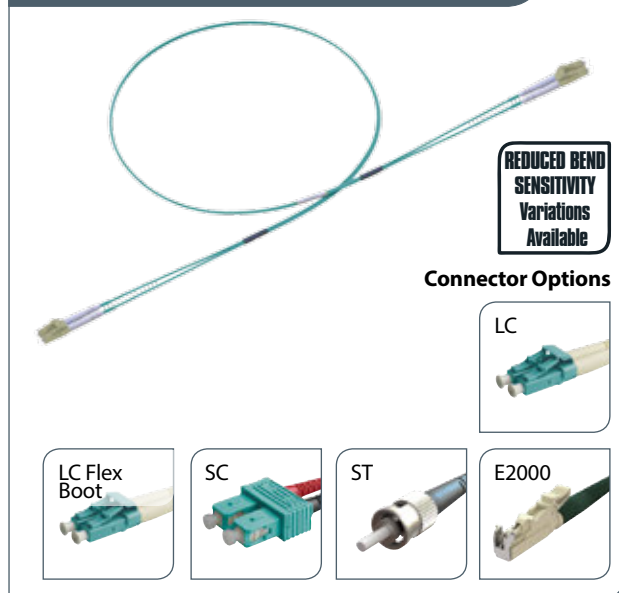
ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m



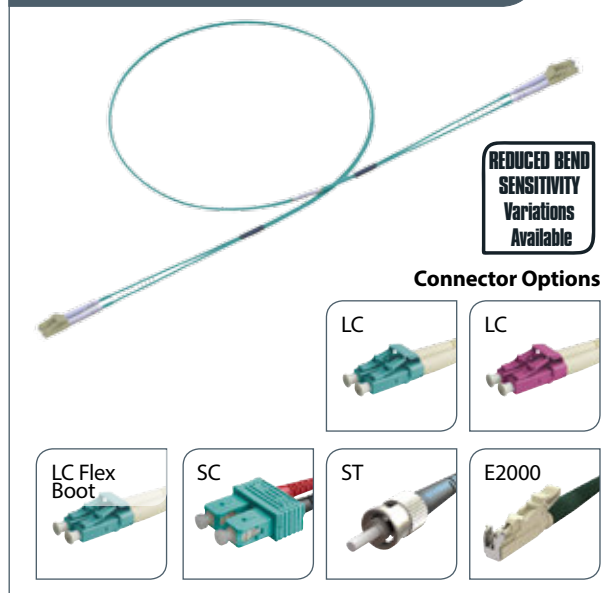
For ordering information
see page 15-17



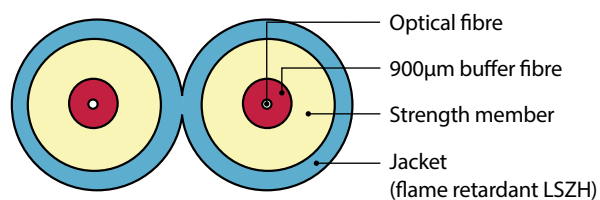
OM3 Premium Low Loss



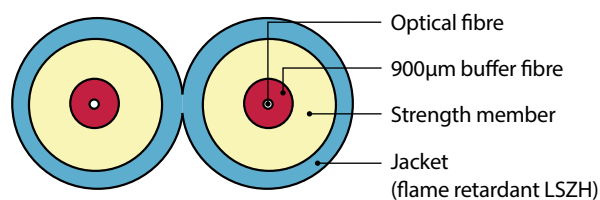
OM4 Premium Low Loss



Cable Construction



Cable Construction



Features & Specifications

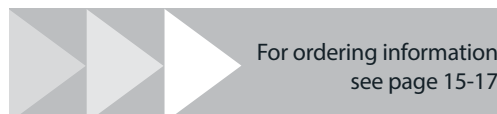
- > Available in SC, ST, LC, E2000 connector styles
- > Optronics product manufactured on 2.0mm or 2.8mm (nominal dia.) LSZH cable
- > Low insertion loss ($\leq 0.15\text{dB}$)

- > Individual test sheet and unique product identification number for traceability
- > OM3 aqua cable, OM4 aqua or erika violet cable
- > Materials compliant to 2011/65/EU

Technical Specifications

TEST	METHOD	SPECIFICATION
Connector Type Standards	IEC 61574 series	-
Insertion Loss	IEC 61300-3-4	$\leq 0.15\text{dB}$
Flammability	IEC 60332-1	-

ASSEMBLY SPECIFICATION	
Length of assembly	Tolerance
Less than 0.5m	-0/+0.10m
Between 0.5m and 5m	-0/+0.15m
Greater than 5m	-0/+0.20m



Ordering Information - OS2 Singlemode

LENGTH	LC 2MM DUPLEX CABLE	LC SHORT BOOT 2MM DUPLEX CABLE	FC 3MM DUPLEX CABLE	SC 3MM DUPLEX CABLE	ST 3MM DUPLEX CABLE
1 METRE	OPTLCLCOS2DYE1P	OPTLCSLCSOS2DYE1P	OPTFCFCOS2DYE1P	OPTSCSCOS2DYE1P	OPTSTSTOS2DYE1P
2 METRES	OPTLCLCOS2DYE2P	OPTLCSLCSOS2DYE2P	OPTFCFCOS2DYE2P	OPTSCSCOS2DYE2P	OPTSTSTOS2DYE2P
3 METRES	OPTLCLCOS2DYE3P	OPTLCSLCSOS2DYE3P	OPTFCFCOS2DYE3P	OPTSCSCOS2DYE3P	OPTSTSTOS2DYE3P
5 METRES	OPTLCLCOS2DYE5P	OPTLCSLCSOS2DYE5P	OPTFCFCOS2DYE5P	OPTSCSCOS2DYE5P	OPTSTSTOS2DYE5P
7 METRES	OPTLCLCOS2DYE7P	OPTLCSLCSOS2DYE7P	OPTFCFCOS2DYE7P	OPTSCSCOS2DYE7P	OPTSTSTOS2DYE7P
10 METRES	OPTLCLCOS2DYE10P	OPTLCSLCSOS2DYE10P	OPTFCFCOS2DYE10P	OPTSCSCOS2DYE10P	OPTSTSTOS2DYE10P
15 METRES	OPTLCLCOS2DYE15P	OPTLCSLCSOS2DYE15P	OPTFCFCOS2DYE15P	OPTSCSCOS2DYE15P	OPTSTSTOS2DYE15P
20 METRES	OPTLCLCOS2DYE20P	OPTLCSLCSOS2DYE20P	OPTFCFCOS2DYE20P	OPTSCSCOS2DYE20P	OPTSTSTOS2DYE20P
	LC/APC 2MM DUPLEX CABLE	LC/APC SHORT BOOT 2MM DUPLEX CABLE	FC/APC 3MM DUPLEX CABLE	SC/APC 3MM DUPLEX CABLE	
1 METRE	OPTLCALCAOS2DYE1P	OPTLCASLCASOS2DYE1P	OPTFAFCAOS2DYE1P	OPTSCASCAOS2DYE1P	-
2 METRES	OPTLCALCAOS2DYE2P	OPTLCASLCASOS2DYE2P	OPTFAFCAOS2DYE2P	OPTSCASCAOS2DYE2P	-
3 METRES	OPTLCALCAOS2DYE3P	OPTLCASLCASOS2DYE3P	OPTFAFCAOS2DYE3P	OPTSCASCAOS2DYE3P	-
5 METRES	OPTLCALCAOS2DYE5P	OPTLCASLCASOS2DYE5P	OPTFAFCAOS2DYE5P	OPTSCASCAOS2DYE5P	-
7 METRES	OPTLCALCAOS2DYE7P	OPTLCASLCASOS2DYE7P	OPTFAFCAOS2DYE7P	OPTSCASCAOS2DYE7P	-
10 METRES	OPTLCALCAOS2DYE10P	OPTLCASLCASOS2DYE10P	OPTFAFCAOS2DYE10P	OPTSCASCAOS2DYE10P	-
15 METRES	OPTLCALCAOS2DYE15P	OPTLCASLCASOS2DYE15P	OPTFAFCAOS2DYE15P	OPTSCASCAOS2DYE15P	-
20 METRES	OPTLCALCAOS2DYE20P	OPTLCASLCASOS2DYE20P	OPTFAFCAOS2DYE20P	OPTSCASCAOS2DYE20P	-
	LC 2MM SIMPLEX CABLE	LC SHORT BOOT 2MM SIMPLEX CABLE	FC 3MM SIMPLEX CABLE	SC 3MM SIMPLEX CABLE	ST 3MM SIMPLEX CABLE
1 METRE	OPTLCLCOS2SYE1P	OPTLCSLCSOS2SYE1P	OPTFCFCOS2SYE1P	OPTSCSCOS2SYE1P	OPTSTSTOS2SYE1P
2 METRES	OPTLCLCOS2SYE2P	OPTLCSLCSOS2SYE2P	OPTFCFCOS2SYE2P	OPTSCSCOS2SYE2P	OPTSTSTOS2SYE2P
3 METRES	OPTLCLCOS2SYE3P	OPTLCSLCSOS2SYE3P	OPTFCFCOS2SYE3P	OPTSCSCOS2SYE3P	OPTSTSTOS2SYE3P
5 METRES	OPTLCLCOS2SYE5P	OPTLCSLCSOS2SYE5P	OPTFCFCOS2SYE5P	OPTSCSCOS2SYE5P	OPTSTSTOS2SYE5P
7 METRES	OPTLCLCOS2SYE7P	OPTLCSLCSOS2SYE7P	OPTFCFCOS2SYE7P	OPTSCSCOS2SYE7P	OPTSTSTOS2SYE7P
10 METRES	OPTLCLCOS2SYE10P	OPTLCSLCSOS2SYE10P	OPTFCFCOS2SYE10P	OPTSCSCOS2SYE10P	OPTSTSTOS2SYE10P
15 METRES	OPTLCLCOS2SYE15P	OPTLCSLCSOS2SYE15P	OPTFCFCOS2SYE15P	OPTSCSCOS2SYE15P	OPTSTSTOS2SYE15P
20 METRES	OPTLCLCOS2SYE20P	OPTLCSLCSOS2SYE20P	OPTFCFCOS2SYE20P	OPTSCSCOS2SYE20P	OPTSTSTOS2SYE20P
	LC/APC 2MM SIMPLEX CABLE	L/APC SHORT BOOT 2MM SIMPLEX CABLE	FC/APC 3MM SIMPLEX CABLE	SC/APC 3MM SIMPLEX CABLE	
1 METRE	OPTLCALCAOS2SYE1P	OPTLCASLCASOS2SYE1P	OPTFAFCAOS2SYE1P	OPTSCASCAOS2SYE1P	-
2 METRES	OPTLCALCAOS2SYE2P	OPTLCASLCASOS2SYE2P	OPTFAFCAOS2SYE2P	OPTSCASCAOS2SYE2P	-
3 METRES	OPTLCALCAOS2SYE3P	OPTLCASLCASOS2SYE3P	OPTFAFCAOS2SYE3P	OPTSCASCAOS2SYE3P	-
5 METRES	OPTLCALCAOS2SYE5P	OPTLCASLCASOS2SYE5P	OPTFAFCAOS2SYE5P	OPTSCASCAOS2SYE5P	-
7 METRES	OPTLCALCAOS2SYE7P	OPTLCASLCASOS2SYE7P	OPTFAFCAOS2SYE7P	OPTSCASCAOS2SYE7P	-
10 METRES	OPTLCALCAOS2SYE10P	OPTLCASLCASOS2SYE10P	OPTFAFCAOS2SYE10P	OPTSCASCAOS2SYE10P	-
15 METRES	OPTLCALCAOS2SYE15P	OPTLCASLCASOS2SYE15P	OPTFAFCAOS2SYE15P	OPTSCASCAOS2SYE15P	-
20 METRES	OPTLCALCAOS2SYE20P	OPTLCASLCASOS2SYE20P	OPTFAFCAOS2SYE20P	OPTSCASCAOS2SYE20P	-



Ordering Information - OM1 Multimode

LENGTH	LC 2MM DUPLEX CABLE	SC 3MM DUPLEX CABLE	ST 3MM DUPLEX CABLE
1 METRE	OPTLCLC62DOR1P	OPTSCSC62DOR1P	OPTSTST62DOR1P
2 METRES	OPTLCLC62DOR2P	OPTSCSC62DOR2P	OPTSTST62DOR2P
3 METRES	OPTLCLC62DOR3P	OPTSCSC62DOR3P	OPTSTST62DOR3P
5 METRES	OPTLCLC62DOR5P	OPTSCSC62DOR5P	OPTSTST62DOR5P
7 METRES	OPTLCLC62DOR7P	OPTSCSC62DOR7P	OPTSTST62DOR7P
10 METRES	OPTLCLC62DOR10P	OPTSCSC62DOR10P	OPTSTST62DOR10P
15 METRES	OPTLCLC62DOR15P	OPTSCSC62DOR15P	OPTSTST62DOR15P
20 METRES	OPTLCLC62DOR20P	OPTSCSC62DOR20P	OPTSTST62DOR20P

Ordering Information - OM2 Multimode

LENGTH	LC 2MM DUPLEX CABLE	SC 3MM DUPLEX CABLE	ST 3MM DUPLEX CABLE
1 METRE	OPTLCLC50DOR1P	OPTSCSC50DOR1P	OPTSTST50DOR1P
2 METRES	OPTLCLC50DOR2P	OPTSCSC50DOR2P	OPTSTST50DOR2P
3 METRES	OPTLCLC50DOR3P	OPTSCSC50DOR3P	OPTSTST50DOR3P
5 METRES	OPTLCLC50DOR5P	OPTSCSC50DOR5P	OPTSTST50DOR5P
7 METRES	OPTLCLC50DOR7P	OPTSCSC50DOR7P	OPTSTST50DOR7P
10 METRES	OPTLCLC50DOR10P	OPTSCSC50DOR10P	OPTSTST50DOR10P
15 METRES	OPTLCLC50DOR15P	OPTSCSC50DOR15P	OPTSTST50DOR15P
20 METRES	OPTLCLC50DOR20P	OPTSCSC50DOR20P	OPTSTST50DOR20P

Ordering Information - OM3 Multimode

LENGTH	LC 2MM DUPLEX CABLE	SC 3MM DUPLEX CABLE	ST 3MM DUPLEX CABLE
1 METRE	OPTLCLCOM3DAQ1P	OPTSCSCOM3DAQ1P	OPTSTSTOM3DAQ1P
2 METRES	OPTLCLCOM3DAQ2P	OPTSCSCOM3DAQ2P	OPTSTSTOM3DAQ2P
3 METRES	OPTLCLCOM3DAQ3P	OPTSCSCOM3DAQ3P	OPTSTSTOM3DAQ3P
5 METRES	OPTLCLCOM3DAQ5P	OPTSCSCOM3DAQ5P	OPTSTSTOM3DAQ5P
7 METRES	OPTLCLCOM3DAQ7P	OPTSCSCOM3DAQ7P	OPTSTSTOM3DAQ7P
10 METRES	OPTLCLCOM3DAQ10P	OPTSCSCOM3DAQ10P	OPTSTSTOM3DAQ10P
15 METRES	OPTLCLCOM3DAQ15P	OPTSCSCOM3DAQ15P	OPTSTSTOM3DAQ15P
20 METRES	OPTLCLCOM3DAQ20P	OPTSCSCOM3DAQ20P	OPTSTSTOM3DAQ20P

Ordering Information - OM4 Multimode

LENGTH	LC 2MM DUPLEX CABLE	SC 3MM DUPLEX CABLE	ST 3MM DUPLEX CABLE
1 METRE	OPTLCLCOM4DEV1P	OPTSCSCOM4DEV1P	OPTSTSTOM4DEV1P
2 METRES	OPTLCLCOM4DEV2P	OPTSCSCOM4DEV2P	OPTSTSTOM4DEV2P
3 METRES	OPTLCLCOM4DEV3P	OPTSCSCOM4DEV3P	OPTSTSTOM4DEV3P
5 METRES	OPTLCLCOM4DEV5P	OPTSCSCOM4DEV5P	OPTSTSTOM4DEV5P
7 METRES	OPTLCLCOM4DEV7P	OPTSCSCOM4DEV7P	OPTSTSTOM4DEV7P
10 METRES	OPTLCLCOM4DEV10P	OPTSCSCOM4DEV10P	OPTSTSTOM4DEV10P
15 METRES	OPTLCLCOM4DEV15P	OPTSCSCOM4DEV15P	OPTSTSTOM4DEV15P
20 METRES	OPTLCLCOM4DEV20P	OPTSCSCOM4DEV20P	OPTSTSTOM4DEV20P



Hybrid connector patchcords available

HYBRID CONNECTOR PATCHCORDS AVAILABLE			SIMPLEX OR DUPLEX CABLE SIZE
FCLC	FCALC	FCLCA	2mm cable
FCSC	FCASC	FCSCA	3mm cable
FCST	FCAST		3mm cable
LCSC	LCASC	LCSCA	2mm cable
LCST	LCAST		2mm cable
SCST	SCAST		3mm cable



Master Test Leads



Master Test Leads are suitable for general optical performance test applications. The test leads are terminated with the highest quality physical contact (singlemode) and angled physical contact

(singlemode) zirconia ferrule connectors. The connectors are manufactured with precision mounting and polishing techniques which help assure high transmission quality.

Features

- > Conform to IEC, EIA-TIA, and Telcordia performance requirements
- > Supplied with ultra tight geometry singlemode and multimode optical fibre
- > Available with different connector types
- > Available in standard and custom lengths
- > Precision glass geometry
- > Concentricity, end face geometry, IL, RL certificate
- > REACH / SvHC compliant
- > Materials compliant to 2011/65/EU

Application

- > Testing labs
- > Critical telecom and data centre application
- > Instrumentation

Termination Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10dB	0.15dB	IEC 61300-3-4
IL/Random (97%)	0.20dB	0.25dB	IEC 61300-3-34
Ave/Master*	0.08dB	0.08dB	IEC 61300-3-4
Ave/Random*	0.08dB	0.10dB	IEC 61300-3-34
Return Loss	55/65dB	-	IEC 61300-3-6
MECHANICAL PROPERTIES	CRITERIA*		CONFORMANCE
Mechanical endurance	500 matings		IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude		IEC 61300-2-1
Drop	Drop height 1m, 5 drops		IEC 61300-2-12
Cable retention	Magnitude 70N		IEC 61300-2-4
Cable torsion	1.5kg - 2.5kg for 2mm - 3mm cable diameter		IEC 61300-2-5

*The change in attenuation for all the above listed criteria shall be a maximum of 0.10dB



Cable Specification

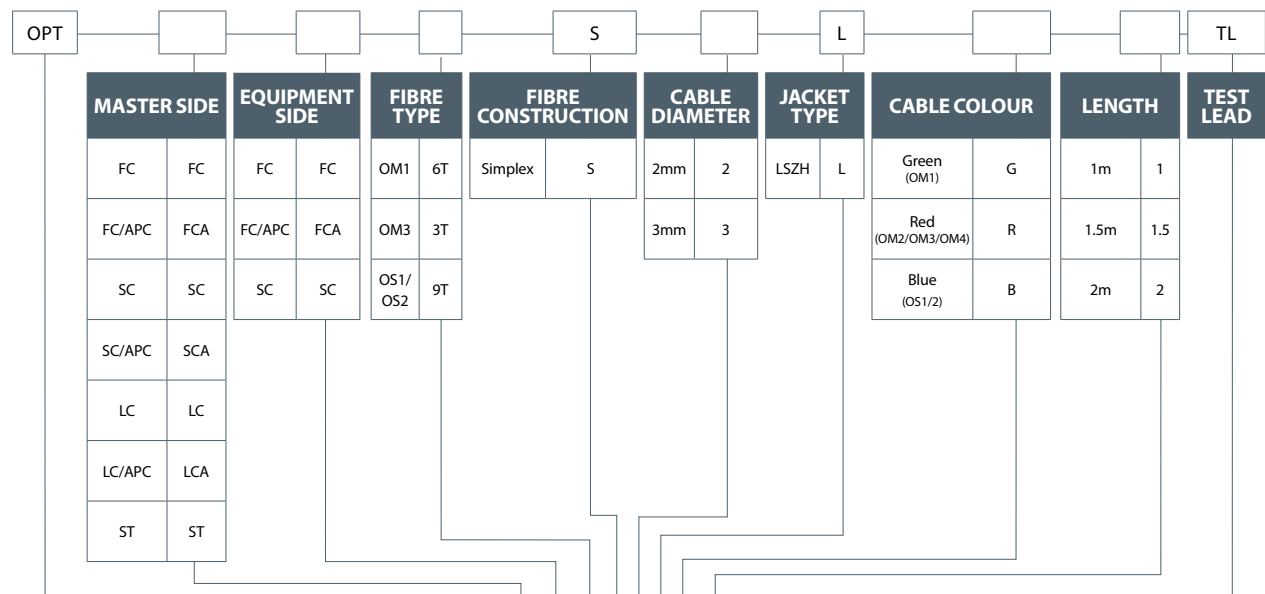
CHARACTERISTICS	UNITS	SIMPLEX
Cable Material		LSZH
Strength Member		Aramid
Crush	N	1000
Operating Temperature	°C	-20 to 60
Colour		SM – Blue OM1 – Green OM3 – Red

Fibre Specification

CHARACTERISTICS	UNITS	SINGLEMODE
Cladding Diameter	µm	125±0.4
Core/Cladding Concentricity Error	µm	≤0.3
Cladding Non Circularity	%	≤0.3
Mode Field Diameter (mfd) @ 1310nm	µm	9.0±0.4
Mode Field Diameter (mfd) @ 1550nm	µm	10.1±0.5

CHARACTERISTICS	UNITS	MULTIMODE
Cladding Diameter	µm	125±1
Core Diameter	µm	50±1
Core/Cladding Concentricity Error	µm	≤ 1.5
Cladding Non Circularity	%	≤ 1.0
Numerical Aperture		0.2±0.015

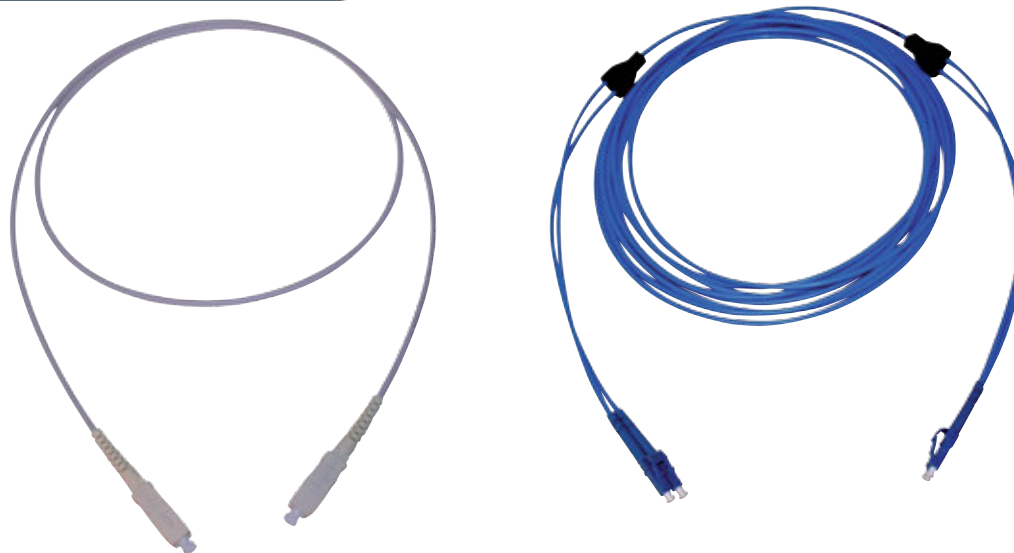
Part Number Generator



Example Part Number: OPT FC FC 6T S 2 L G 1.5 TL
Will configure a 1.5 metre, FC to FC, OM1 simplex, LSZH test lead with a green jacket.



Armoured Patch Cords



Optronics armoured patch cords are used in customer premises, central offices and in harsh environments. The patch cords provide flexible interconnection to active equipment, passive optical devices and cross-connections. Armoured patch cords are constructed with an

helical stainless steel tape over a buffered fibre surrounded by a layer of aramid and stainless steel mesh with an outer jacket. Optronics patch cords are terminated with our standard range of connectors, all quality tested to meet Optronics and international standards.

Features

- > SC, LC, ST and FC connectors
- > Available in low smoke zero halogen (LSZH) jacket
- > Conforms to IEC, EIA-TIA or Telcordia performance requirements
- > Available in different fibre types
- > Available in standard and custom lengths
- > REACH / SvHC compliant
- > Materials compliant to 2011/65/EU

Application

- > Telecommunication networks
- > CATV
- > LAN and WAN
- > FTTX
- > Broadband network
- > Military application

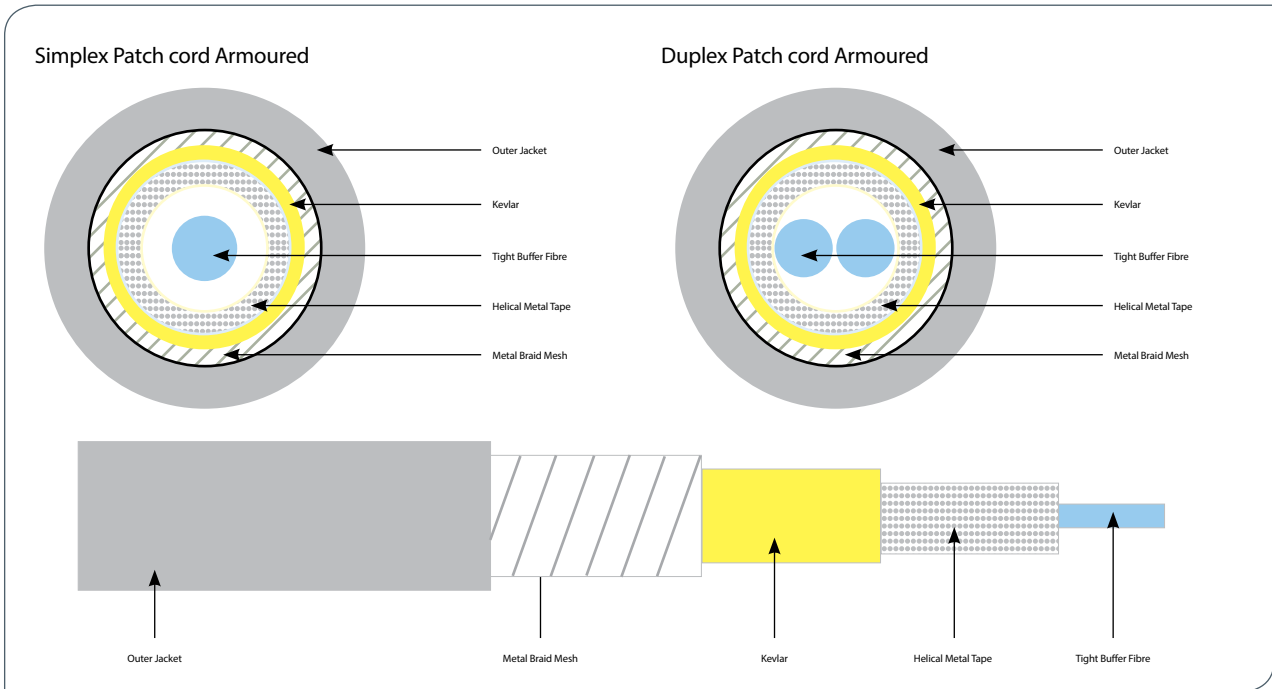
Fibre Specification

CHARACTERISTICS	
Attenuation (dB/km) Singlemode	0.38@1310nm / 0.25 @1550nm
Chromatic Dispersion (ps/nm x km) Singlemode	3.0 @ 1310nm / 18.0 @1550nm
Attenuation (dB/km) Multimode	2.8@850nm / 0.8 @1300nm

Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH	LSZH
Strength Member	Aramid	Aramid
Crush (N) short term	3000	3000
Crush (N) long term	200	200
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1	IEC 60332-1





Connector Performance

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.3dB	0.3dB	IEC 61300-3-4
Ave/Master*	0.18dB	0.2dB	IEC 61300-3-4
Ave/Random*	0.18dB	-	IEC 61300-3-34
Return Loss Singlemode UPC/APC	50/60 dB	-	IEC 61300-3-6

* UPC/APC

Part Number Generator

OPT

ARM

CONNECTOR END A

FC

FC

FCAPC

FCA

SC

SC

SC/APC

SCA

ST

ST

LC

LC

CONNECTOR END B

FC

FC

FCAPC

FCA

SC

SC

SC/APC

SCA

ST

ST

LC

LC

CABLE TYPE

OS1/OS2

09

OM1

62

OM2

50

OM3

OM3

OM4

OM4

CABLE CONFIGURATION

Duplex 3.3mm

D

Simplex 3mm

S

CABLE COLOUR

SM Blue

BL

OM1/OM2 Grey

GR

OM3 / OM4 Aqua

AQ

CABLE LENGTH (m)

XX

Example Part Number: OPT FC FC 09 D BL 10 ARM
Will configure a 10 metre, FC to FC, OS1 duplex armoured patch cord with a blue jacket.

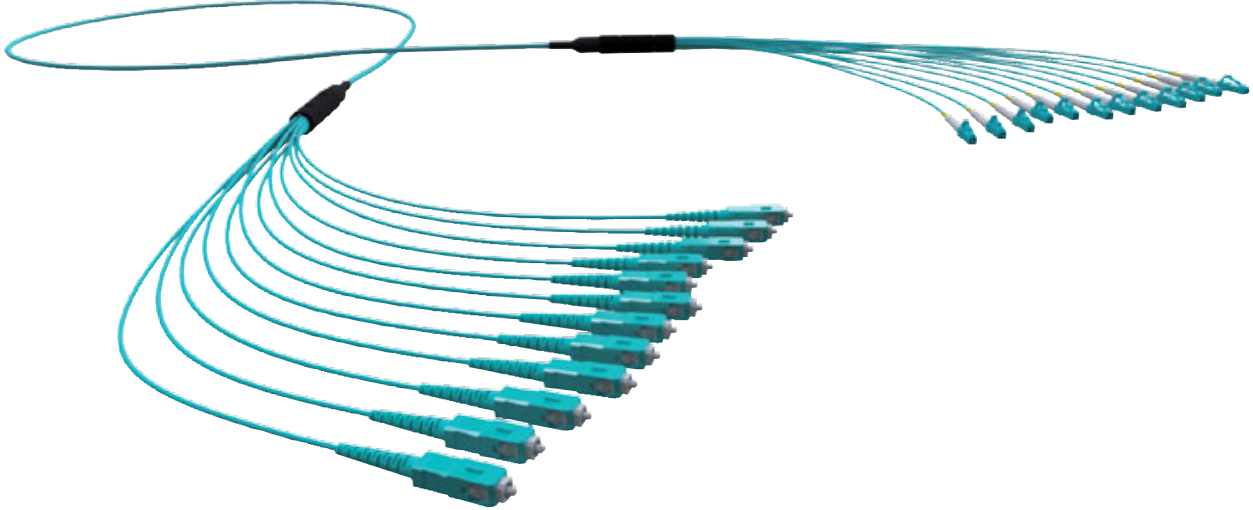


Optical Fibre Assemblies

Pre-Terminated Assemblies

FirstLight™ Micro	23
FirstLight™ Nano	25
FirstLight™ Prime	27
<i>"Four Innovative Building Blocks"</i>	29
FirstLight™ Prime Cable Assemblies	31
Pre-Terminated Multifibre	33
Field Deployable Tactical Cable Reel	35
Fan Out Kits	37

FirstLight™ Micro



The FirstLight™ Micro cable assembly perfectly complements our traditional full breakout product offerings. It offers a smaller, more flexible and compact product whilst providing the improved optical performance of its microcable structure. The 2mm patch cord style tails are ruggedised, to protect the optical

fibre in the demanding environments outside the patch panel or ODF.

The network topology can be reduced and simplified by direct connection; bypassing wall boxes, ODFs or fibre patch panels, the end result is greatly improved fibre management.

FirstLight™ Prime Mini Module



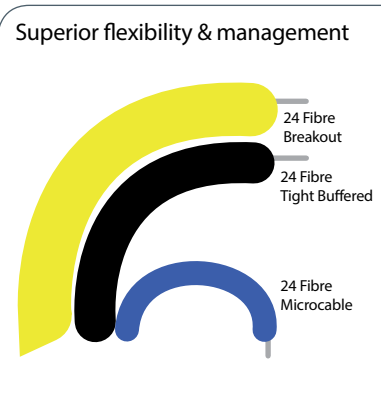
Secures fibre transition to 900µm or 2mm tails

Microcable inside



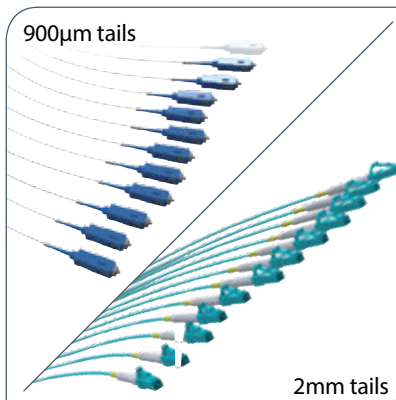
Small size of microcable

Superior flexibility & management

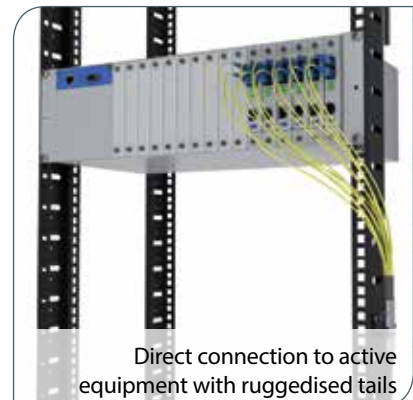


Improved optical performance

900µm tails



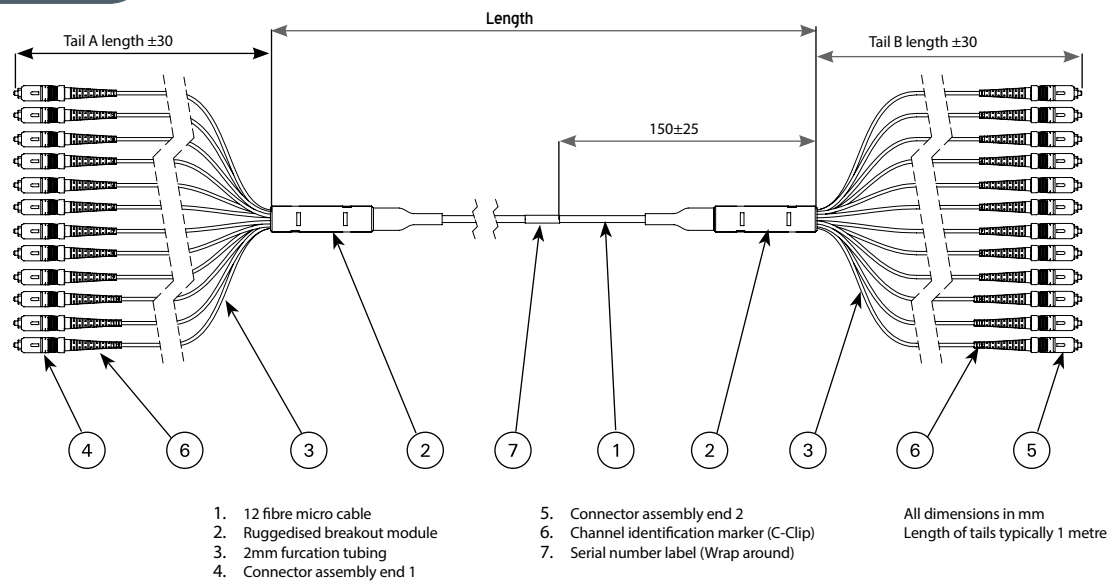
2mm tails



Direct connection to active equipment with ruggedised tails



Drawing



Part Number Generator

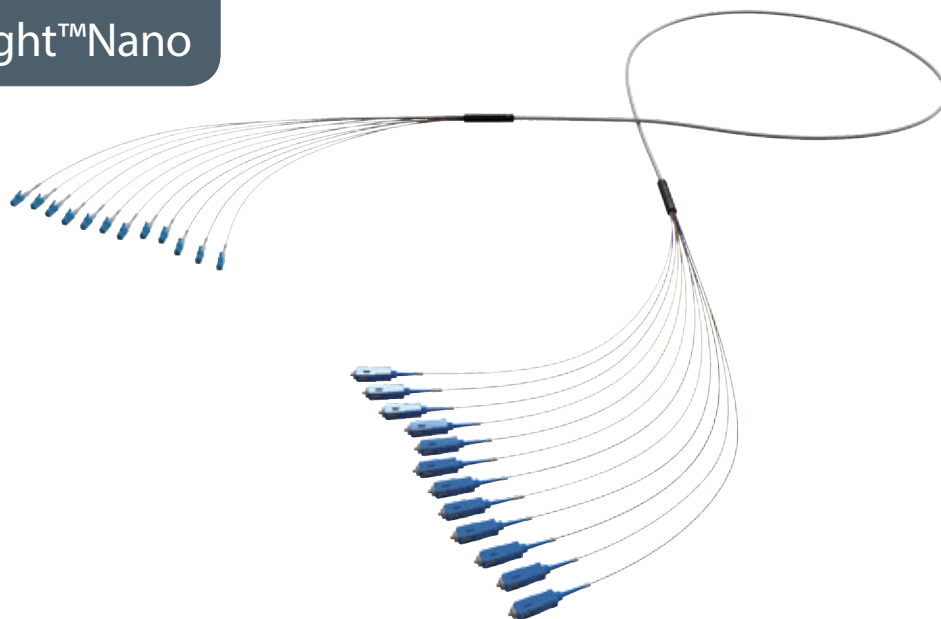
PRE	FIBRE COUNT	CONNECTOR END A		CONNECTOR END B*		FIBRE TYPE		CABLE CONSTRUCTION		CABLE LENGTH (M)	JACKET TYPE	
	12	LC	LC	LC	LC	OS1/OS2	09	Microcore	MC	XX	LSZH	Leave Blank
	24	LC/APC	LCA	LC/APC	LCA	OM1	62				Plenum	OFNP
		SC	SC	SC	SC	OM2	50				Riser	OFNR
		SC/APC	SCA	SC/APC	SCA	OM3	OM3					
		ST	ST	ST	ST	OM4	OM4					
		FC	FC	FC	FC	G.657/A1	A1					
		FC/APC	FCA	FC/APC	FCA							
		E2000	E2	E2000	E2							
		E2000/APC	E2A	E2000/APC	E2A							

* If end B differs from end A

Example Part Number: **PRE 24 LC LC OM4 MC 10 -**
Will configure a 24 fibre LC to LC OM4 micro core LSZH pre-terminated 10 metre cable.



FirstLight™ Nano



The FirstLight™ Nano Cable assembly features a small, compact size of Nanocable and provides flexibility through a ruggedised

product with the improved optical performance of the Nanocable structure.

- > Extremely small size
- > High Crushing resistance - up to 1500N
- > Can be bent around tight corners
- > 900µm tails for installation inside fibre management - ODFs, panels

- > Ideal for FTTH application - small size of ruggedised for drop class for assemblies.
- > Ideal for data centre - small size in high density environment
- > Secure FirstLight™ Prime breakout module

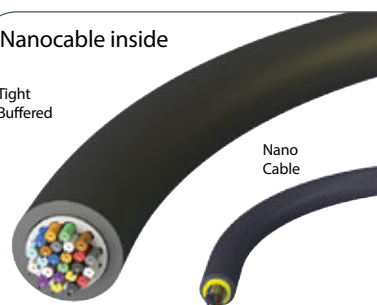
FirstLight™ Prime Micro Module Applied



Secures fibre transition to 900µm tails

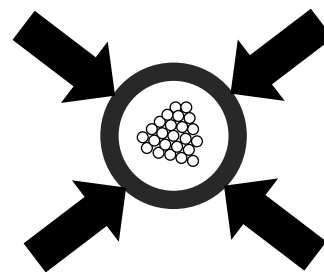
Nanocable inside

Tight Buffered



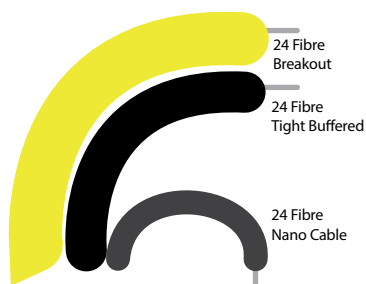
Small size of microcable

High Crush Resistance



Up to 1500N

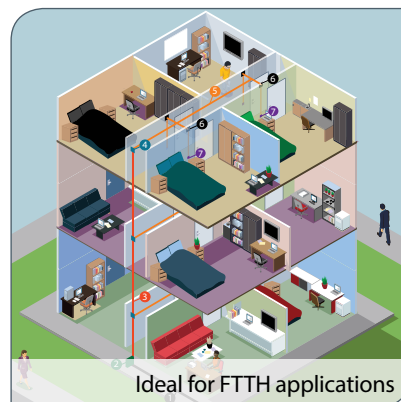
Bending Capability



Superior flexibility & management



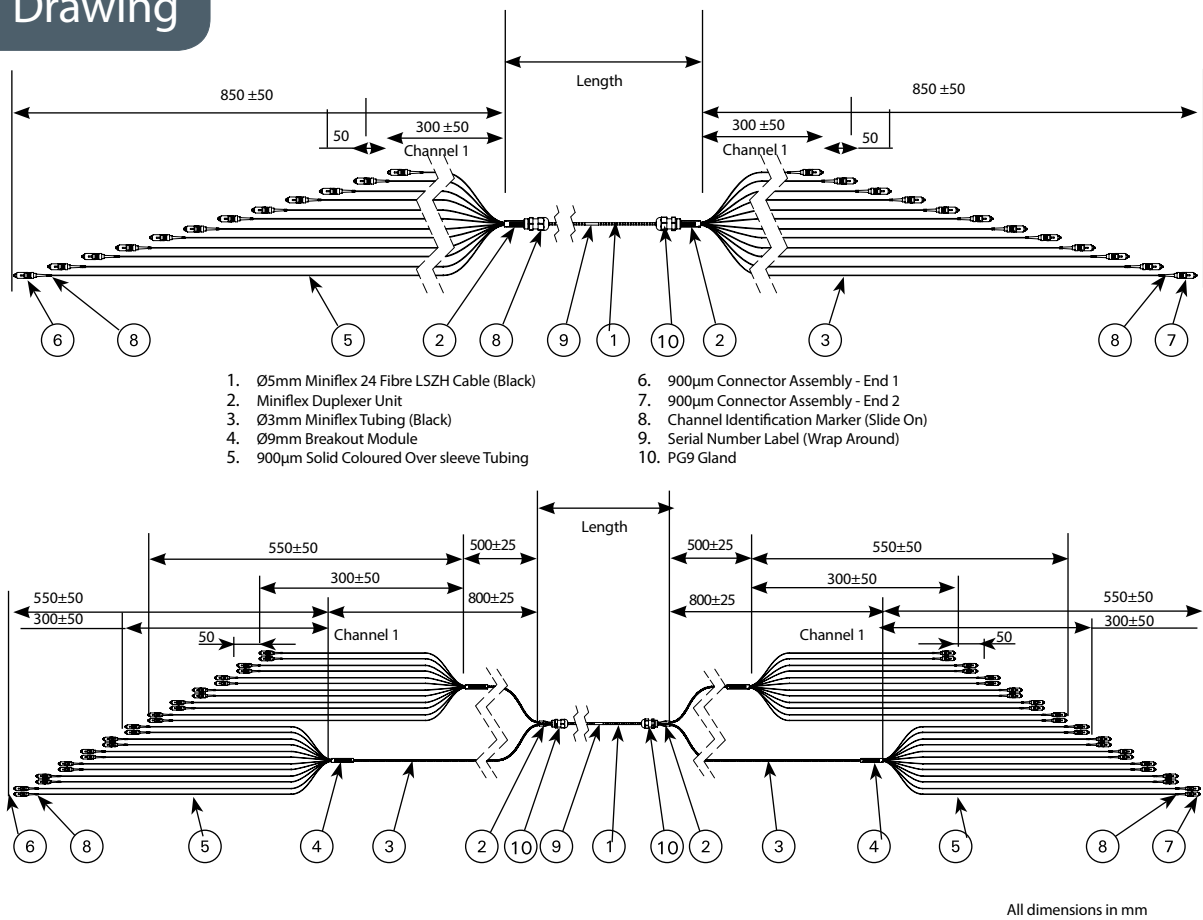
Improved optical performance



Ideal for FTTH applications



Drawing



Part Number Generator

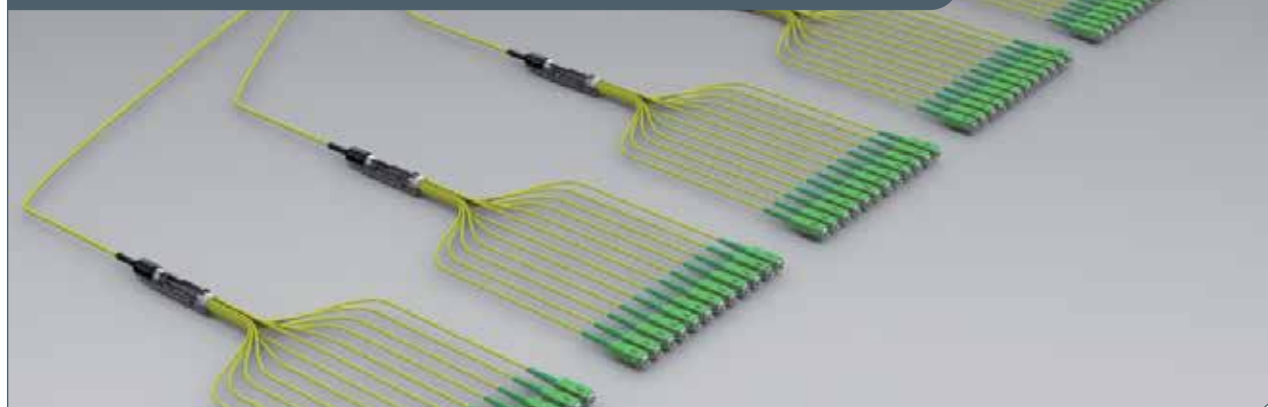
PRE	FIBRE COUNT	CONNECTOR END A	CONNECTOR END B*	FIBRE TYPE	CABLE CONSTRUCTION	CABLE LENGTH (M)	JACKET TYPE	P
	12	LC LC	LC LC	OS1/ OS2 09	Nano NC	XX	LSZH Leave Blank	
	24	LC/APC LCA	LC/APC LCA	OM1 62			Plenum OFNP	
		SC SC	SC SC	OM2 50			Riser OFNR	
		SC/APC SCA	SC/APC SCA	OM3 OM3				
		ST ST	ST ST	OM4 OM4				
		FC FC	FC FC	G.657/ A1 A1				
		FC/ APC FCA	FC/ APC FCA					
		E2000 E2	E2000 E2					
		E2000/ APC E2A	E2000/ APC E2A					

* If end B differs from end A

Example Part Number: PRE 24 LC LC OM4 NC 10 - P
Will configure a 24 fibre LC to LC OM4 LSZH nano pre-terminated 10 metre cable.



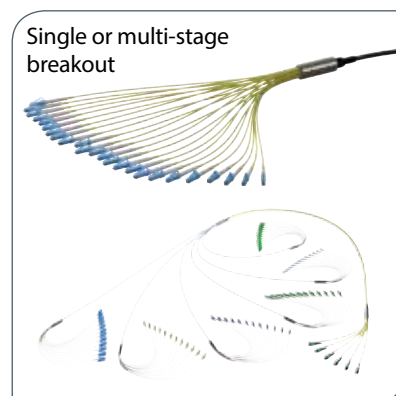
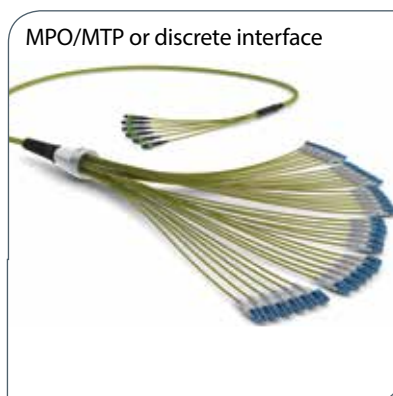
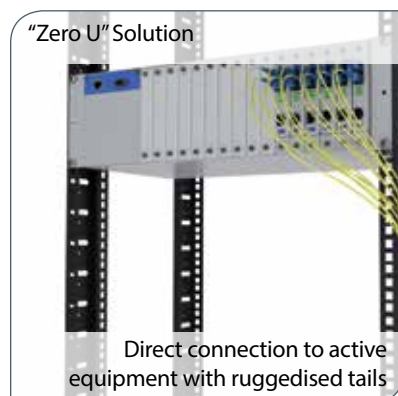
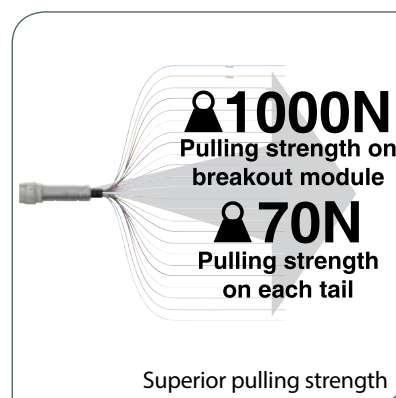
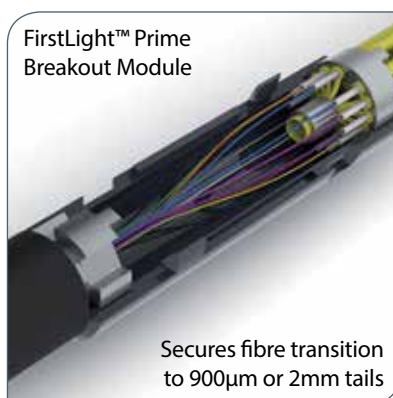
What's the difference with FirstLight™ Prime?



The Optronics FirstLight™ Prime is the range of premium optical fibre assemblies, utilising the patented FirstLight™ Prime transition module. The design can offer assemblies from 4 to 144 cores fibre cables and guarantee superior tensile strength and crush resistance (true 1000 Newton pulling strength). This technology platform is the ideal choice for long trunks requiring

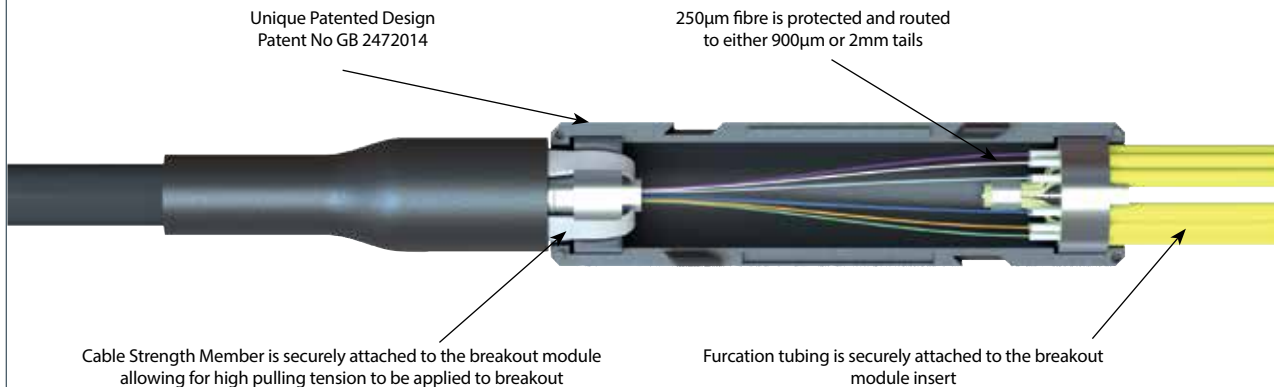
improved physical properties or high core count trunk assemblies. These cables can be assembled with both MPO/MTP and discrete connectors and can also be used as trunk or ruggedised MPO/MTP Fan Outs in data centres, providing cabinet to cabinet connections without the need of fibre jumpers. Innovative dry loose tube cable construction offers superior physical and optical performance.

- > High (4-144) fibre counts
- > High tensile strength and crush resistance
- > Can be secured to cabinet mounting profile for saving space
- > Zero-U solutions available
- > Compact cable and module dimension easing duct and rack congestions
- > Reduced interconnection topology improves power budget
- > FirstLight™ Prime module applied
- > MPO/MTP or discrete connector interface
- > 900µm or 2mm tails



FirstLight™ Prime Breakout Module

Provides a secure transition and protection of fibres when breaking out to 900µm or 2mm tails



Unique construction - Patented design provides very high 1000N pulling tension

Patent No. GB 2472014



Micro Module
Up to 12 tails



Mini Module
Up to 24 tails



Maxi Module
Up to 48 tails

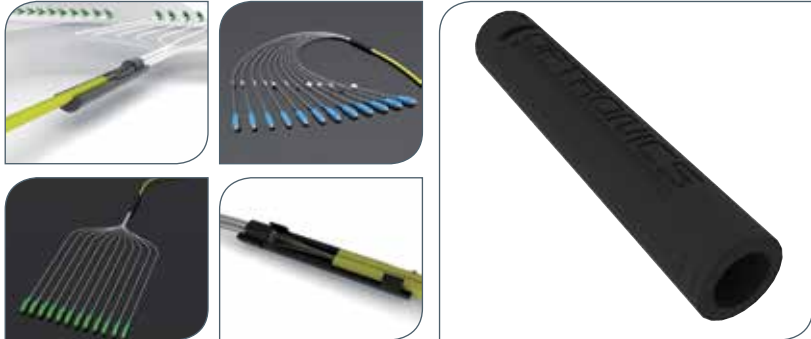


Mega Module
Up to 144 tails



Micro Breakout Module

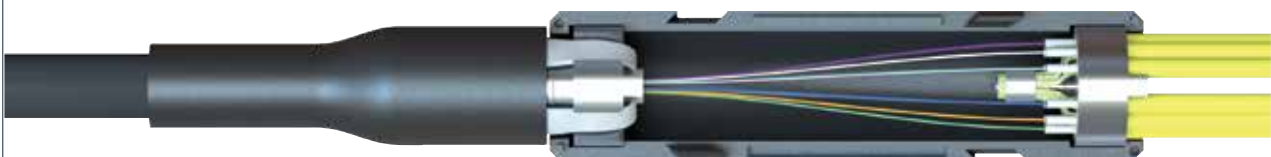
- > Up to 12 x 900µm tails
- > Small 9mm diameter
- > Plastic bodied



Patent No. GB 2472014

Mini Breakout Module

- > Up to 24 x 900µm tails
- > Up to 12 x 2mm tails
- > 15mm diameter
- > Plastic bodied

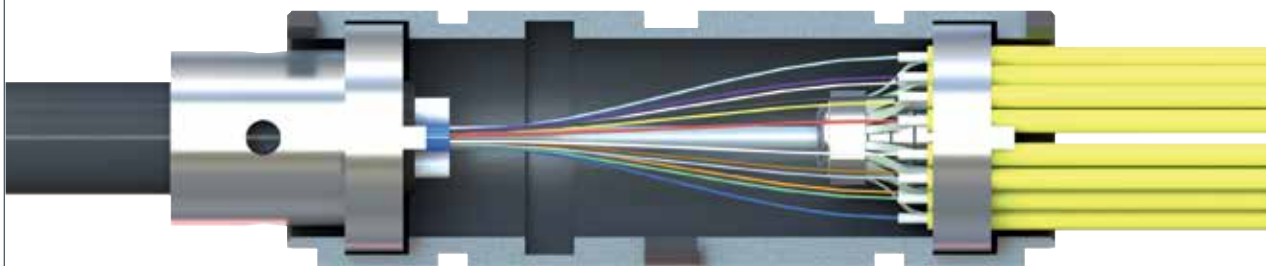


Patent No. GB 2472014



Maxi Breakout Module

- > Up to 48 x 900µm tails
- > Up to 24 x 2mm tails
- > 21mm diameter
- > Rugged metal body



Patent No. GB 2472014

Mega Breakout Module

- > Up to 144 x 900µm tails
- > Up to 72 x 2mm tails
- > 50mm diameter
- > Rugged metal body



Patent No. GB 2472014



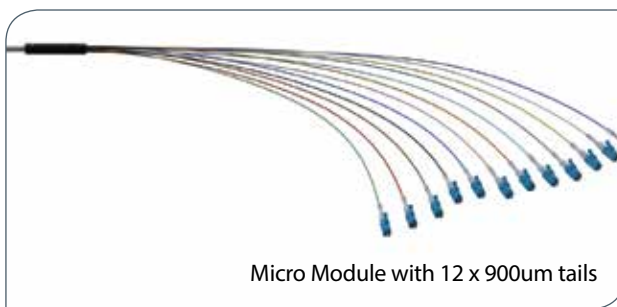
High Density Pre-Terminated Multifibre FirstLight™ Prime Cable Assemblies

FirstLight™ Prime is a special design platform for multifibre optical cable assemblies. It utilises the patented FirstLight™ Prime transition module and guarantees superior tensile strength and crushing resistance. The high density design can scale from 4 up

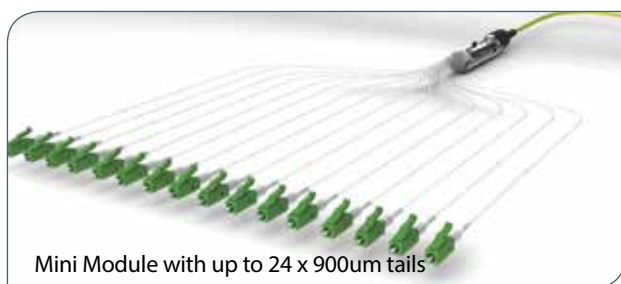
to 144 fibres and can feature both 900µm and ruggedised 2mm tail leads. Assemblies can comprise of both multifibre MPO/MTP and discrete connectors, making the FirstLight™ Prime a flexible hybrid solution for diverse applications in data centres.



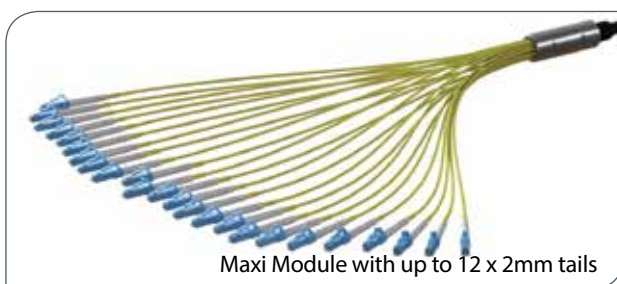
Micro Module with up to 12 x 2mm tails



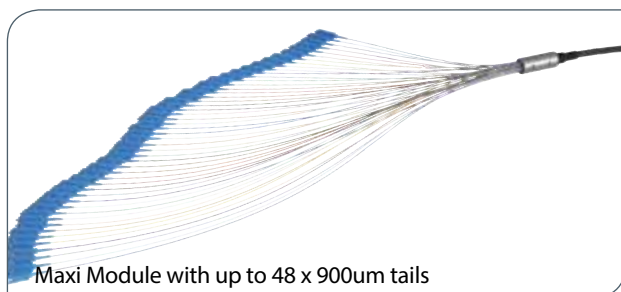
Micro Module with 12 x 900um tails



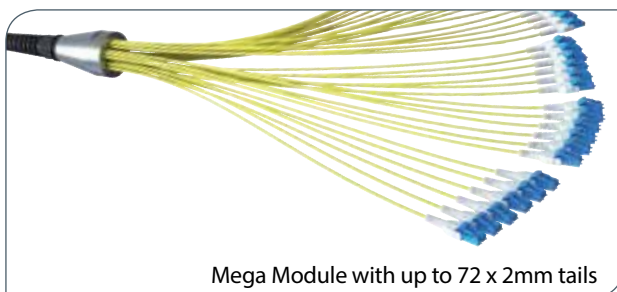
Mini Module with up to 24 x 900um tails



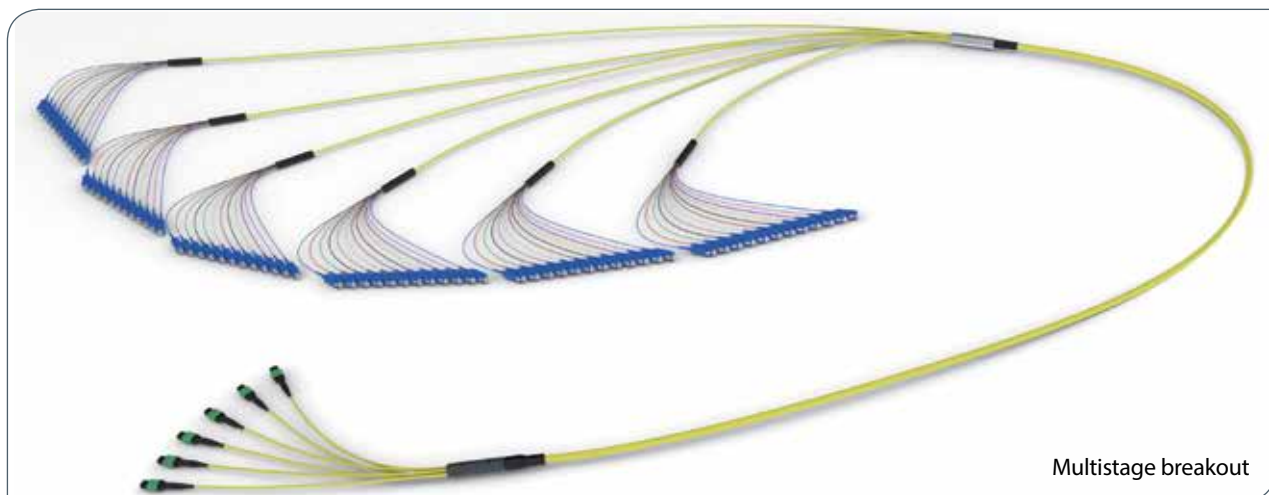
Maxi Module with up to 12 x 2mm tails



Maxi Module with up to 48 x 900um tails



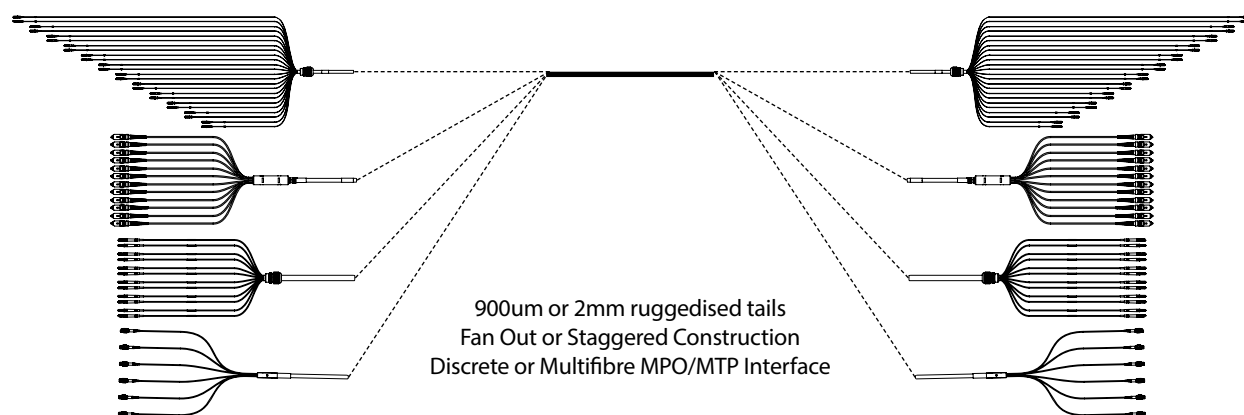
Mega Module with up to 72 x 2mm tails



Multistage breakout



Drawing



Part Number Generator

FIBRE COUNT	CONNECTOR END A		CONNECTOR END B*		FIBRE TYPE		CABLE CONSTRUCTION		CABLE LENGTH (M)	JACKET TYPE	
2	LC	LC	LC	LC	OS1/OS2	09	Dry Loose Tube 900µm	DLTP	XX	LSZH	Leave Blank
4	LC/APC	LCA	LC/APC	LCA	OM1	62	Dry Loose Tube 2mm	DLTR		Plenum	OFNP
6	SC	SC	SC	SC	OM2	50	Loose Tube 900µm	LTP		Riser	OFNR
8	SC/APC	SCA	SC/APC	SCA	OM3	OM3	Loose Tube 2mm	LTR			
12	ST	ST	ST	ST	OM4	OM4					
16	FC	FC	FC	FC	G.657/A1	A1					
24	FC/APC	FCA	FC/APC	FCA							
48	E2000	E2	E2000	E2							
	E2000/APC	E2A	E2000/APC	E2A							

* If end B differs from end A

Example Part Number: PRE 24 LC LC OM4 DLTP 10 -

Will configure a 24 fibre LC to LC OM4 LSZH
900um dry loose tube pre-terminated 10
metre cable.



Pre-Terminated Multifibre



This FirstLight, factory made, quality controlled, fibre optic assembly can be built using distribution tight buffer cable and is designed for short internal optical links. FirstLight™ Loose Tube Assemblies feature improved mechanical and optical properties ideal for use in internal / external cabling environments. The 900µm presentation lends itself to installation within a patch panel, a wall box or an Optical

Distribution Frame (ODF). Crush resistant protective tubing assures secure transportation and installation. The high strength pulling element allows fast, safe and effective pulling. The overall assembly and packing are light and compact, reducing transport cost and storage space. Installation waste is also reduced. A unique Optronics link loss certificate accompanies all FirstLight™ multifibre assemblies.

Protective tubing



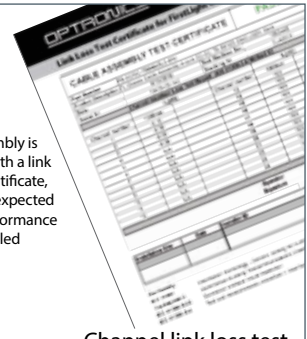
High crush resistance

FirstLight™ Prime module



1000N pulling strength

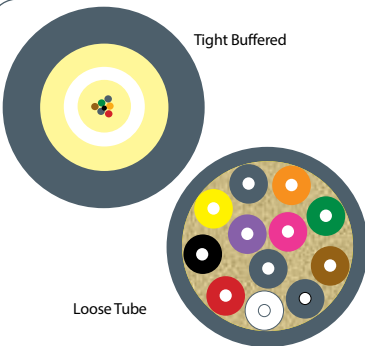
Every assembly is supplied with a link loss test certificate, indicating expected optical performance when installed



Channel link loss test
Unique to Optronics

Tight Buffered

Loose Tube



Cable construction options

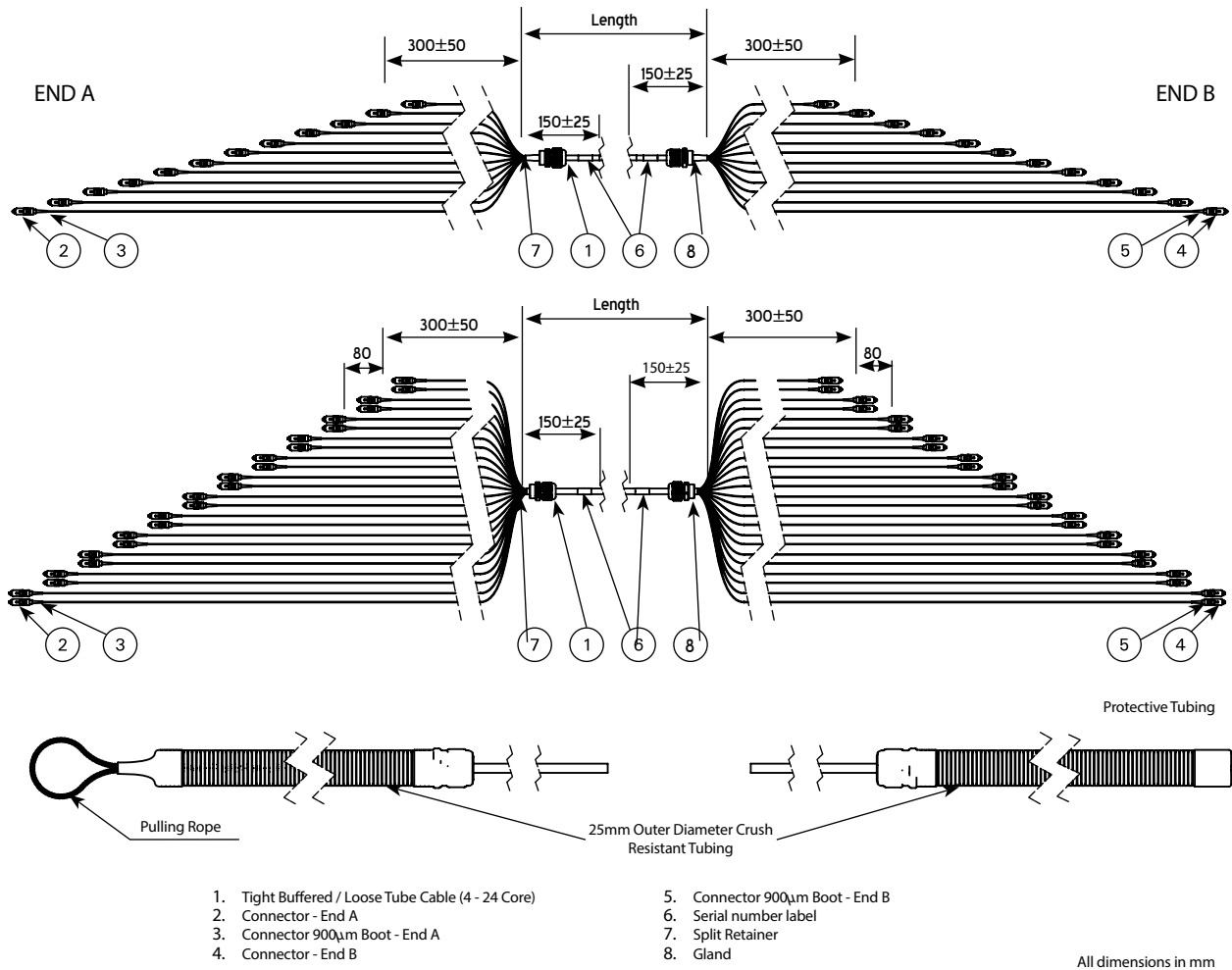
Low waste eco-friendly packaging



Factory quality

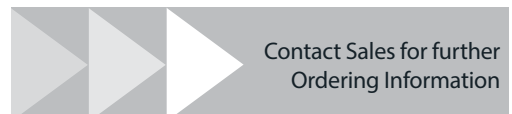


Drawing



Product Configurator

PRE	TERMINATED FIBRE COUNT	CONNECTOR A (PULLING EYE)	CONNECTOR B	FIBRE TYPE	CABLE CONSTRUCTION	LENGTH (m)	P
	02	SC	Open end (XX)	OM1 62	Tight Buffered TB	XX	
	04	LC	SC	OM2 50	Loose Tube LT		
	06	FC	LC	OM3 OM3			
	08	ST	FC	OM4 OM4			
	12	E2 (E2000)	ST				
	16		E2 (E2000)				
	24						
	48						



Field Deployable Tactical Cable Reel



This ruggedised fibre optic assembly has been optimised for use in the harsh environments where mobility and rapid deployment of cable is essential. This assembly is specifically designed for field deployable applications, particularly broadcasting where it delivers the ability for film crews to connect HDTV camera

equipment to central broadcasting trucks at events such as music concerts and sporting events. This deployable assembly includes a Marcaddy® drum, breakout modules with ruggedised tails at each end, choice of connectors, tactical cable and a high durability protective conduit IP rated pulling sock.

Benefits

- > Portable and durable Marcaddy® Cable Reel
- > IP67 Rated connector tail protection conduit
- > Choice of either Tactical cable with Polyurethane (PU) jacket for repeated use in harsh environments or Loose Tube Cable with standard LSZH or PE jackets
- > Choice of connectors (SC, FC, ST, LC and more) to suit your needs
- > Pulling sock for conduit
- > Ruggedized connector tails
- > FirstLight™ Prime Breakout modules
- > Rapid deployment and re-coiling of cable
- > Ruggedized 2mm tails

Applications

- > Broadcasting
- > ENG Vehicles
- > Emergency Services
- > Military Communications
- > Temporary Communication Links



Part Number Generator

FIBRE COUNT	CONNECTOR A (PULLING SOCK)		CONNECTOR B*		FIBRE TYPE		CABLE CONSTRUCTION		LENGTH (M)
02	LC	LC	LC	LC	OM1	62	Tactical** (PU)	TC	Choose length
04	LC/APC	LCA	LC/APC	LCA	OM2	50	Loose Tube (LSZH)	LTR	
06	SC	SC	SC	SC	OM3	OM3	Loose Tube (PE)	LTRPE	
08	SC/APC	SCA	SC/APC	SCA	OM4	OM4			
12	ST	ST	ST	ST	G.657/A1	A1			
	FC	FC	FC	FC	G.652d	G			
	FC/APC	FCA	FC/APC	FCA					
	E2000	E2	E2000	E2					
	E2000/APC	E2A	E2000/APC	E2A					

Example Part Number: FDC 08 SC A1 TC 150 P

* If end B differs from end A

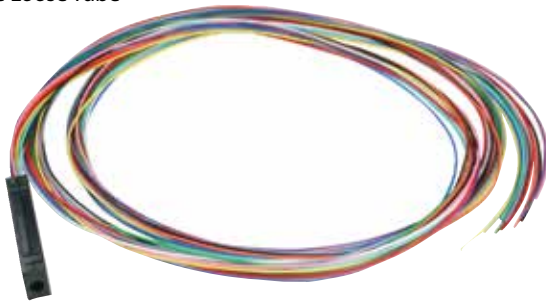
** Limited availability of fibre types for tactical cable

This part number refers to 8 cores G.657/A1 Singlemode fibre SC to SC Tactical cable assembly, 150 metres, PU Jacket in black.



Fan Out Kits

12 Fibre Loose Tube



6 Fibre Loose Tube

900µm
Tube Assembly

Indoor Buffer Tube Fan out Kits are specifically designed for the termination of 6 and 12 Fibre loose tube cables. These fan out kits provide the ultimate solution for those users who wish to field-install connectors. The kits provide the most compact, easy-to-install fan out solution which requires no additional

hardware or space than that required for terminating tight-buffered cables. The Fan out Kit features a 900µm fan out assembly that is colour coded to match the fibres you are terminating. The Fan out assembly is available for 6 or 12 fibre units in a length of 1.2m.

Features

- > Coloured fan out tubing
- > Compact design
- > Bend radius protection
- > 900µm tails
- > Internal/external application

Application

- > Field termination of loose tube cables into indoor cross-connects

Benefits

- > Cost effective
- > Time saving on site
- > Makes loose tube fibre easier to work with

Technical Specification

TUBING SPECIFICATION	
I.D	0.5 +/- 0.05mm
O.D	0.9 +/- 0.05mm
Max Tensile Load	45N
Min Bend Radius	13mm
Crush Resistance	52N/cm Max
Temperature Range	-45°C to +85°C

Ordering Information

DESCRIPTION	PART NUMBER
Fan Out Kit Loose Tube. 6 Fibre 1.2m	KFO6LT1P/Z
Fan Out Kit Loose Tube. 12 Fibre 1.2m	KFO12LT1P/Z



Cable Performance

FIBRE TYPE (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	0.38 Max (1300nm)	3.5 Max (850nm)	3.5 Max (850nm)	3.5 Max (850nm)	3.5 Max (850nm)
	0.25 Max (1300nm)	1.5 Max (1300nm)	1.5 Max (1300nm)	1.5 Max (1300nm)	1.5 Max (1300nm)
	0.34 Typ (1550nm)	2.9 Typ (850nm)	2.7 Typ (850nm)	2.7 Typ (850nm)	2.7 Typ (850nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	200 (850nm)	500 (850nm)	1500 (850nm)	3500 (850nm)
		500 (1300nm)	500 (1300nm)	500 (1300nm)	500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	2000 (850nm)	4700 (850nm)

Connector Performance - MTP

CONNECTOR MATING	IL AVERAGE STANDARD	IL MAX STANDARD	IL AVERAGE PREMIUM	IL MAX PREMIUM	RETURN LOSS	IL MAX	RETURN LOSS
MTP Elite (MM)	0.20 dB	0.35 dB	NA	MTP Elite (SM)	0.18 dB	0.25 dB	>60dB
MTP (MM)	0.35 dB	0.60 dB	NA	MTP (SM)	0.25 dB	0.75 dB	>60dB
LC, SC (MM)	0.15dB	0.30dB	NA	LC, SC (SM)	0.18dB	0.25dB	>55/65dB*
LC, SC Premium (MM)	0.08dB	0.15dB	NA	LC, SC Premium (SM)	0.12dB	0.15dB	>55/65dB*

* UPC/APC

Connector Performance - Traditional

CONNECTOR TYPE	CONFORMANCE	SINGLEMODE	MULTIMODE	SM DUPLEX	MM DUPLEX
SC connector	IEC 61754-4	SM PC- Blue APC-Green	MM PC- Beige	SM PC- Blue APC-Green with clips	MM PC- Beige with clips Boot -Red & Black
LC connector	IEC 61754-20	SM PC- Blue APC-Green Boot-White	MM PC- Beige Boot-White	SM PC- Blue APC-Green with clips Boot-White	MM PC- Beige with clips Boot-White
ST connector	IEC 61754-2	SM PC- Yellow boot	MM PC- Black boot	SM PC- Yellow boot	MM PC- Red & Black boot
FC connector	IEC 61754-13	SM PC- Blue boot APC-Green boot	MM PC- Black boot	SM PC- Blue boot APC-Green boot	MM PC- Black boot

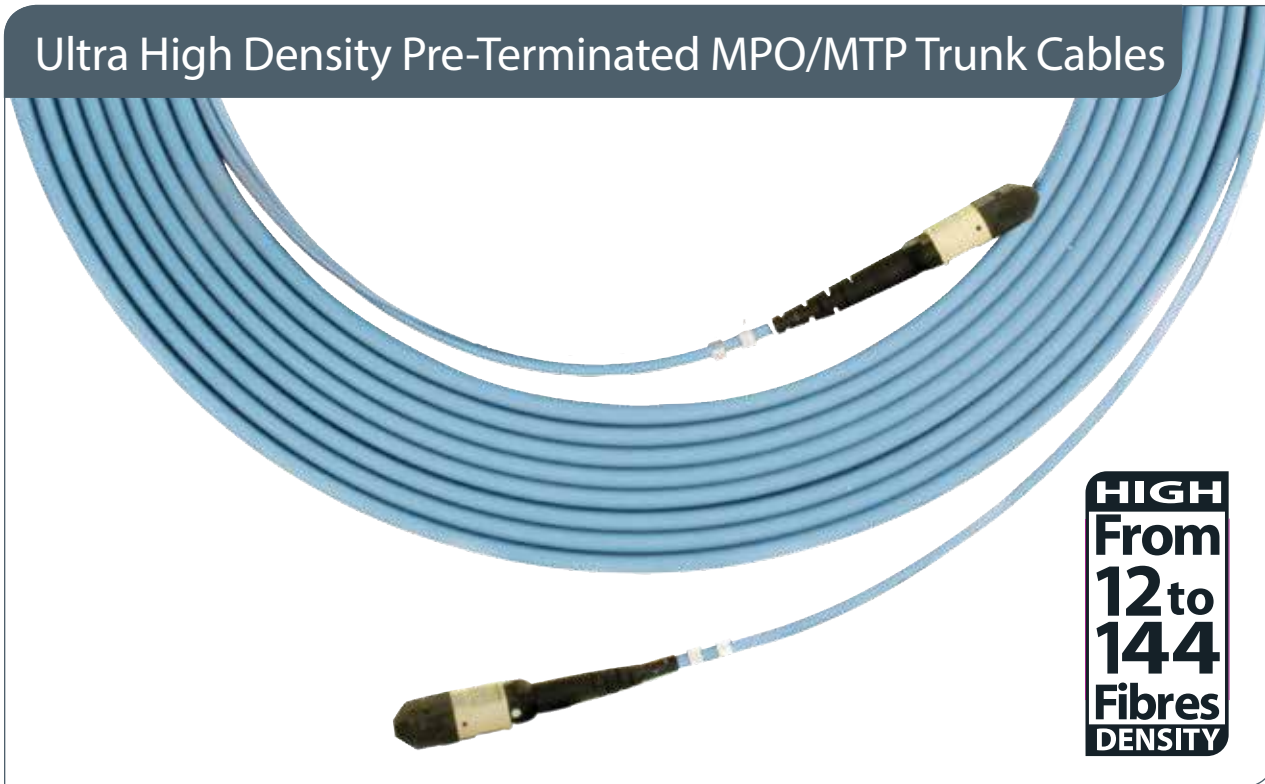


Optical Fibre Assemblies

MPO/MTP Assemblies

Pre-Terminated MPO/MTP Trunk Cable	40
Pre-Terminated MPO/MTP Fan Out Assembly	42
MPO/MTP Ruggedised Pigtail	44
MPO/MTP FirstLight™ Prime Loose Tube Trunk	46
MPO/MTP Nano Ruggedised Trunk Cable	48
40G QSFP+ (MPO/MTP) to QSFP+ Assembly	50
40G QSFP+ (MPO/MTP) to 4x10G SFP+ (8xLC) Assembly	52
MPO/MTP Low Loss Multifibre Connector	54

Ultra High Density Pre-Terminated MPO/MTP Trunk Cables



HIGH
From
12 to
144
Fibres
DENSITY

Optronic MPO/MTP trunk multicore cable assemblies facilitate rapid deployment of high density backbone cabling in data centres and other high fibre environments reducing network installation or re-configuration time and cost. They are used to interconnect cassettes, panels or ruggedised MPO/MTP Fan Outs, spanning MDA, HDA and EDA zones.

MPO/MTP trunk assemblies are offered in most fibre types as standard 12 to 144 core versions using a compact and rugged microcable structure. The compact cables optimise cable-way use and improve airflow.

Optronic MPO/MTP trunks are built with highest quality components. Standard MPO/MTP as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.

Benefits

- > MPO/MTP Interface - MPO/MTP US Conec brand components feature superior optical and mechanical properties
- > Optimised Performance - low loss MPO/MTP Elite, discrete Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment
- > High Density - multifibre connector and compact dimension of ruggedised Microcable ease space in costly data centre environments
- > Rapid Deployment - factory terminated modular system saves installation and re-configuration time during moves, adds and changes
- > Reliability - 100% tested- combination of high quality components and Optronic manufacturing quality control guarantees product to the highest standards
- > Next Generation Network Proof - emerging high speed protocol are going to use MPO/MTP interface- your cabling infrastructure remains unchanged

Features

- > OS1/2, OM3, OM4 Fibre Grades (OM1 and OM2 available)
- > 12, 24 and 48 Core Microcable Trunk
- > LSZH, OFNP, OFNR Cable Jacket
- > Female (standard) and Male MPO/MTP connectors
- > Polarity A (standard), B or C
- > Factory terminated and tested

Applications

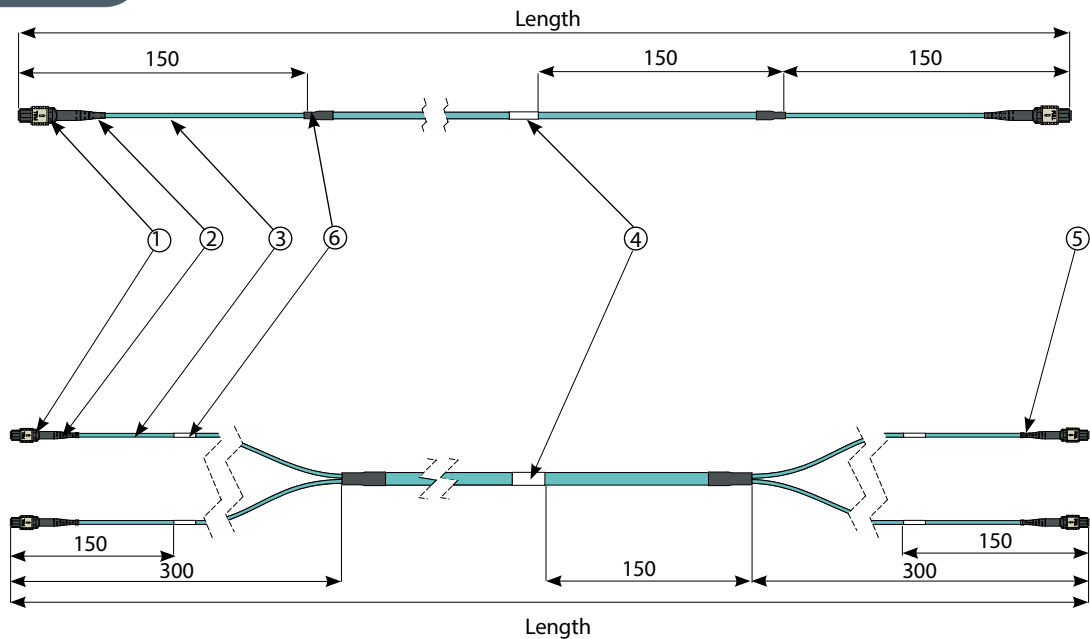
- > Data Centre Infrastructure
- > Storage Area Network- Fibre Channel
- > Parallel Optics
- > Infiniband
- > Emerging 40 and 100Gbps Protocols

Standards Compliance

TIA/EIA-568-C.3 and ISO/IEC 11801
IEC-61754-7 & EIA/TIA-604-5
NFPA 262 (OFNP) or IEC 60332 (LSZH)
TIA/EIA 568-B.1-7
This product conforms to the materials requirements of
RoHS2
REACH and SvHC



Drawing



- 1. MPO/MTP Connector
- 2. MPO/MTP Connector Boot
- 3. Fibre Optic Microcable
- 4. Serial Number Label
- 5. Channel ID Clip
- 6. Heat shrink

All dimensions in mm

Part Number Generator

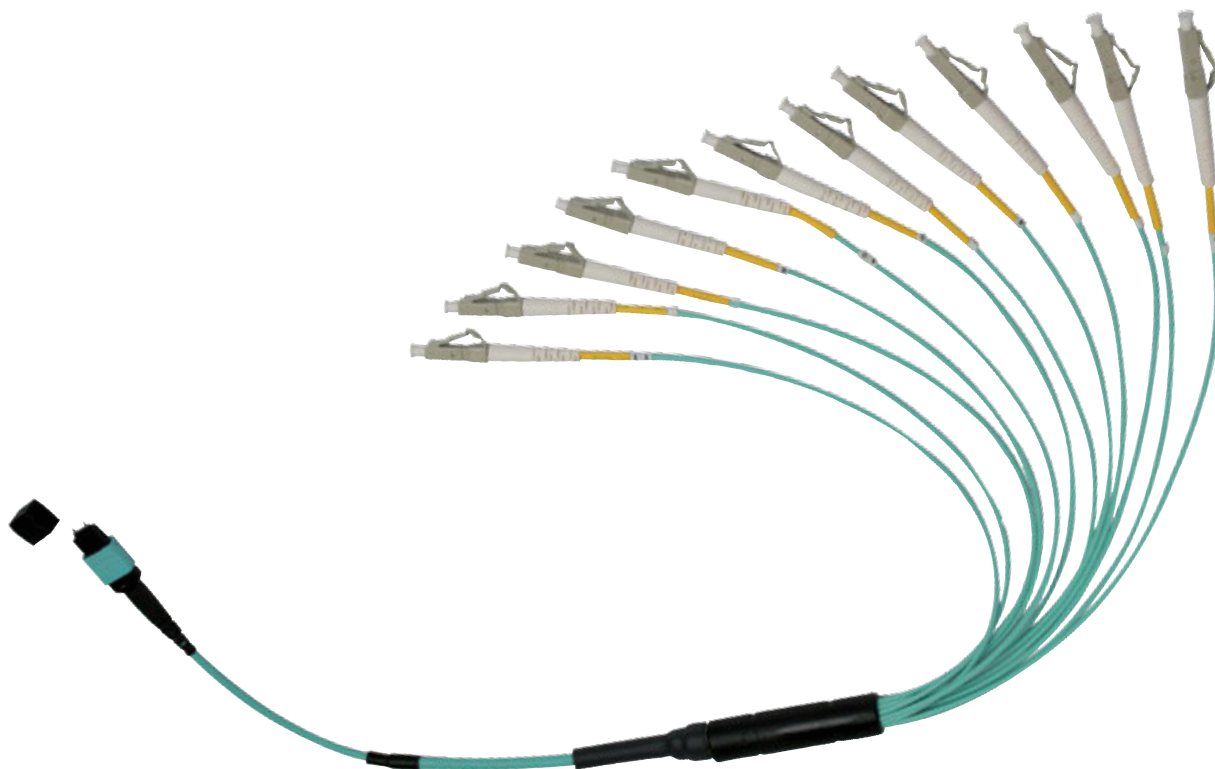
CONNECTOR END A		GENDER A		CONNECTOR END B		GENDER B		CABLE TYPE		FIBRE COUNT	CABLE LENGTH (m)	POLARITY	COLOUR		JACKET TYPE	
MTP standard	MTP	Female	F	MTP standard	MTP	Female	F	OS1/2	09	12	XX	A	Aqua (OM3)	AQ	LSZH standard	Leave Blank
MTP Elite	MTPE	Male	M	MTP Elite	MTPE	Male	M	OM1	62	24		B	Purple (OM3)	Blank	OFNP	PL
								OM2	50	48		C	Orange (OM1/2)	Blank	OFNR	R
								OM3	OM3				Yellow (OS1/2)	Blank		
								OM4	OM4							
								G.657.A1	A1							
								G.657.A2	A2							

Example Part Number: MTP F MTP F OM3 12 16 A AQ

MTPFMTPFOM31216AAQLS will configure a 16 metre, 12 Core, MTP female to MTP female, OM3, LSZH trunk assembly with polarity method A and an Aqua jacket.



Ultra High Density Pre-Terminated MPO/MTP Fan Out Assembly



Optronics MPO/MTP ruggedised Fan Out assemblies route multifibre MPO/MTP connection into discrete connectors. They are used to directly interconnect MPO/MTP cassettes, panels or backbone MPO/MTP assemblies with the active equipment, saving costly data centre rack space and easing fibre management.

MPO/MTP Fan Out assemblies are offered in most fibre types as standard 12 to 144 core versions using a compact and rugged microcore structure. The compact cables optimise cable-way use and improve airflow.

Optronics MPO/MTP Fan Out are built with highest quality components. Standard MPO/MTP as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.

Benefits

- > MPO/MTP Interface - MPO/MTP US Conec brand components feature superior optical and mechanical properties
- > Optimised Performance - low loss MPO/MTP Elite, discrete Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment
- > High Density - ruggedised Fan Out allows for direct connection between backbone and active equipment eliminating rack space usage
- > Rapid Deployment - factory terminated modular system saves installation and re-configuration time during moves, adds and changes
- > Reliability - 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards

Features

- > OS1/2, OM3, OM4 Fibre Versions (OM1 and OM2 available)
- > 12, 24 and 48 Core Microcable Trunk Assemblies
- > LSZH, OFNP, OFNR Cable Jacket
- > Female or Male MTP connectors
- > Factory Terminated and Tested

Applications

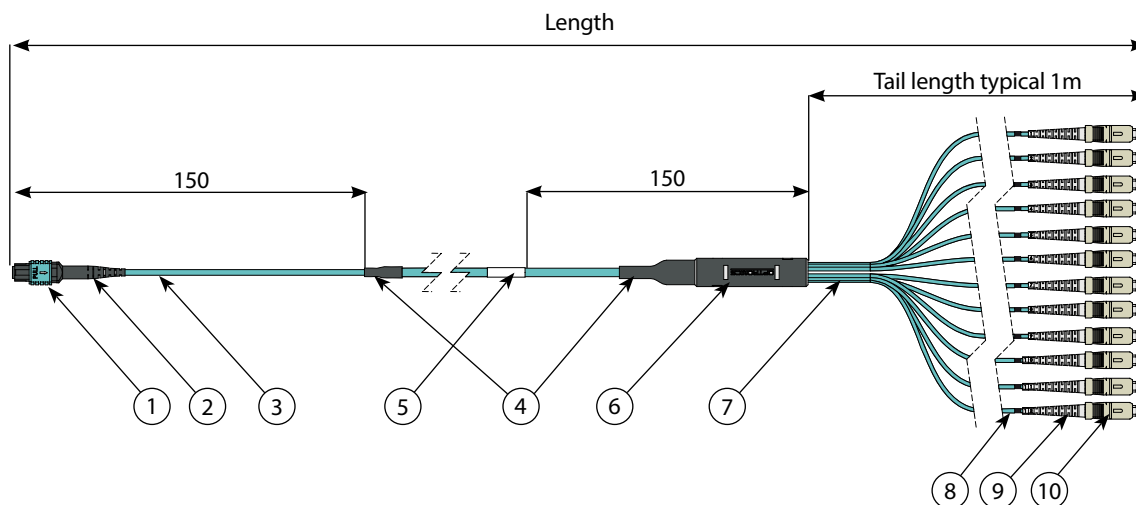
- > Data Centre Infrastructure
- > Storage Area Network
- > Fibre Channel

Standards Compliance

TIA/EIA-568-C.3 and ISO/IEC 11801
IEC-61754-7 & EIA/TIA-604-5
NFPA 262 (OFNP) or IEC 60332 (LSZH)
TIA/EIA 568-B.1-7
This product conforms to the materials requirements of RoHS2
REACH and SvHC



Drawing



- | | |
|---------------------------|----------------------------|
| 1. MPO/MTP Connector | 6. Breakout Module |
| 2. MPO/MTP Connector Boot | 7. 2mm Furcation Tubes |
| 3. Fibre Optic Microcable | 8. ID Clip |
| 4. Heat shrink | 9. Discreet Connector Boot |
| 5. Serial Number Label | 10. Discreet Connector |

All dimensions in mm

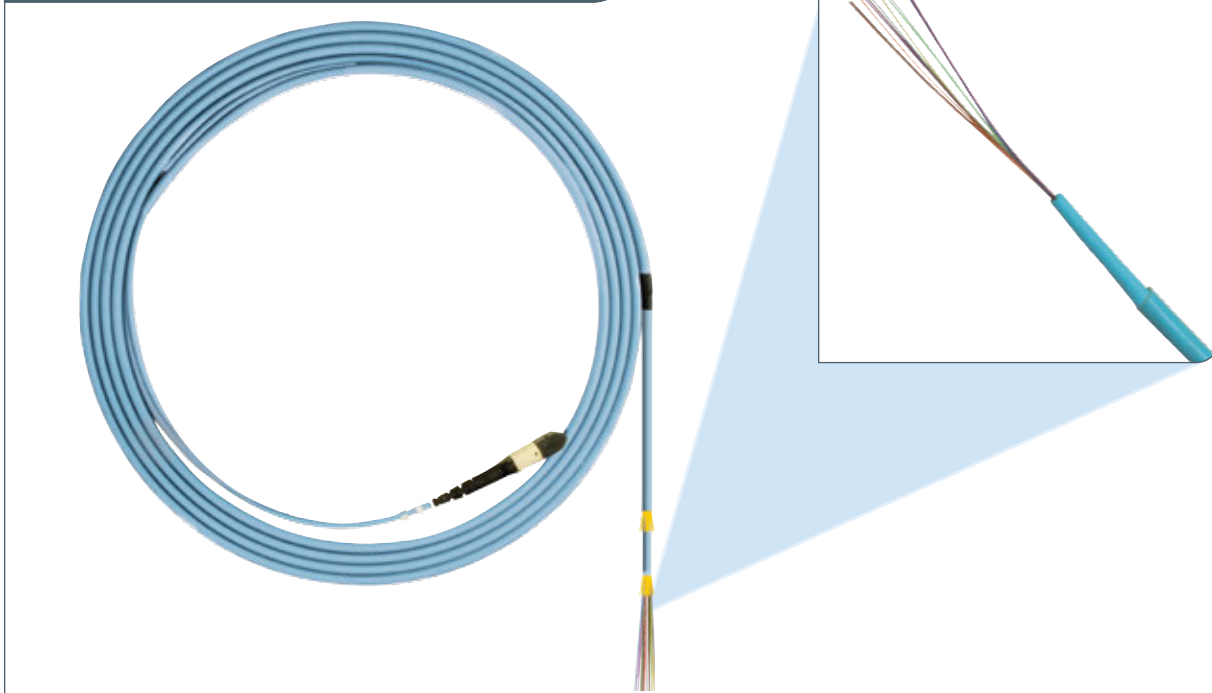
Part Number Generator

CONNECTOR END A		GENDER A		FIBRE COUNT	CONNECTOR END B		CABLE TYPE		DF	LENGTH (m)	COLOUR		JACKET TYPE	
MTP standard	MTP	Female	F	12 - 144	LC	LC	OS1/2	09		XX	Aqua (OM3)	AQ	LSZH	Leave Blank
MTP Elite	MTPE	Male	M		SC	SC	OM1	62			Purple (OM3)	Blank	OFNP	PL
							OM2	50			Orange (OM1/2)	Blank	OFNR	R
							OM3	OM3			Yellow (OS1/2)	Blank		
							OM4	OM4						
							G.657.A1	A1						
							G.657.A2	A2						

Example Part Number: **MTP F 12 LC OM3 DF 16 AQ**
 MTPFLCOM312DF16AQLS will configure a 16 metre, 12 core, MTP female to LC OM3, LSZH ruggedised Fan Out with an Aqua jacket.



MPO/MTP Ruggedised Pigtail



The Optronics MPO/MTP ruggedised pigtail enables rapid deployment of a high density backbone / horizontal cabling, this reduces installation time and cost.

The small footprint of the MPO/MTP interface simplifies and reduces the amount of front patch panel adaptor space compared to traditional discrete connectors. The ruggedised 5/3mm construction allows for longer pigtail lengths enabling

splice management to be located outside the patch panel racks. These MPO/MTP pigtail assemblies feature colour coded fibres for easy splice identification.

The MPO/MTP interface is compatible with next generation networks and parallel optics protocols, making any network utilising this product future proof.

Features

- > Multifibre MPO/MTP connector interface
- > Fibres are colour coded as per IEC 60304 MPO/MTP interface
- > OS1/2, OM3, OM4 fibre grades (OM1 and OM2 available)
- > Ruggedised 5/3mm Microcable pigtail construction with 250µm fibres in 3mm tube.
- > Low smoke zero halogen LSZH, Plenum OFNP, Riser OFNR buffer
- > Factory terminated and tested

Benefits

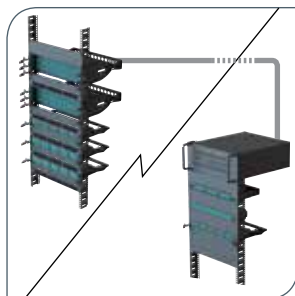
- > MPO/MTP interface reduces front panel adaptor space
- > Increased speed of installation
- > Ruggedised pigtails allow for splicing to be done remotely away from the equipment zone
- > Next generation networks proof

On-site MTP splicing system



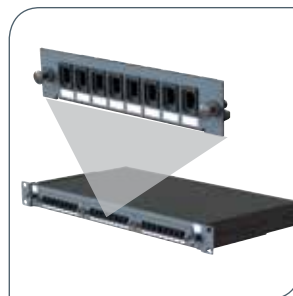
Flexible on site termination

Long ruggedised MTP pigtail



Splice management outside equipment zone

Reduce size of patching interface



Cost effective compact system

No dedicated site survey required



Fast, economic installation



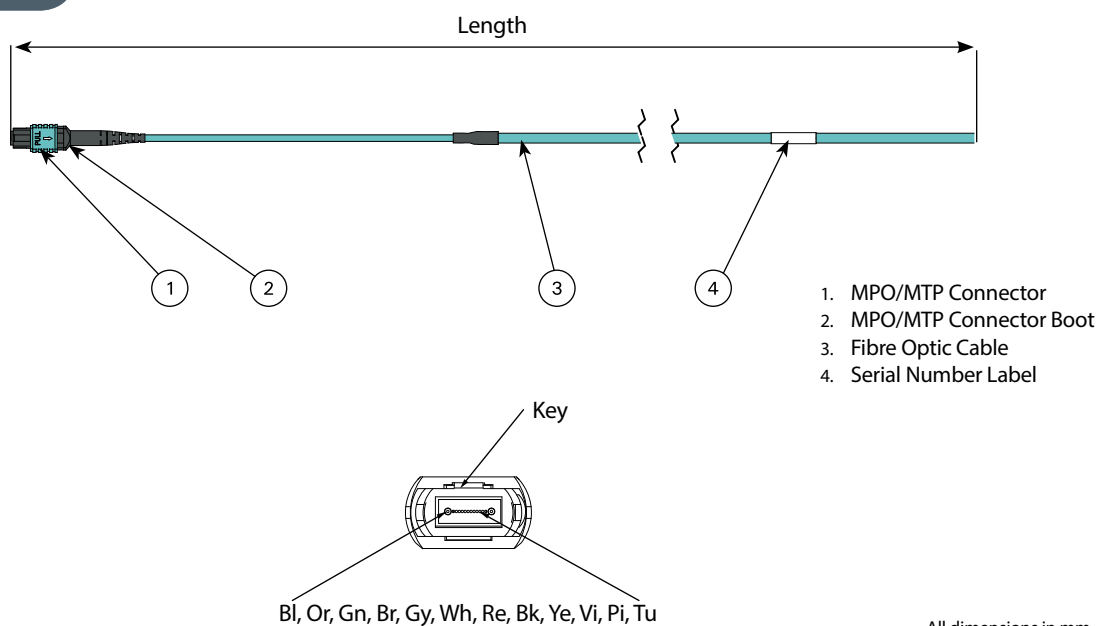
Applications

- > Telecom and datacom application
- > Patch panels, wall boxes, ODFs and splice cassettes
- > Supports high speed multi channel video, data and voice services in metropolitan and access networks
- > ATM, SONET and WDM, ETHERNET, FIBRE CHANNEL

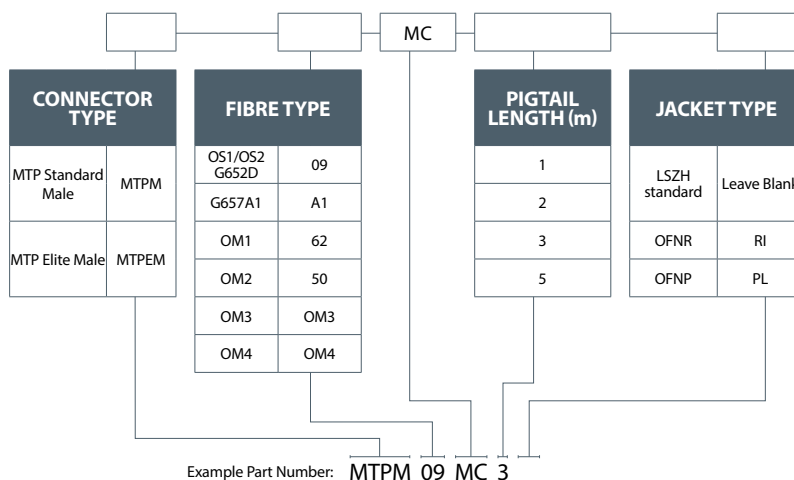
Standards Compliance

- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > IEC 60332
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC
- > IEC-60793

Drawing



Part Number Generator



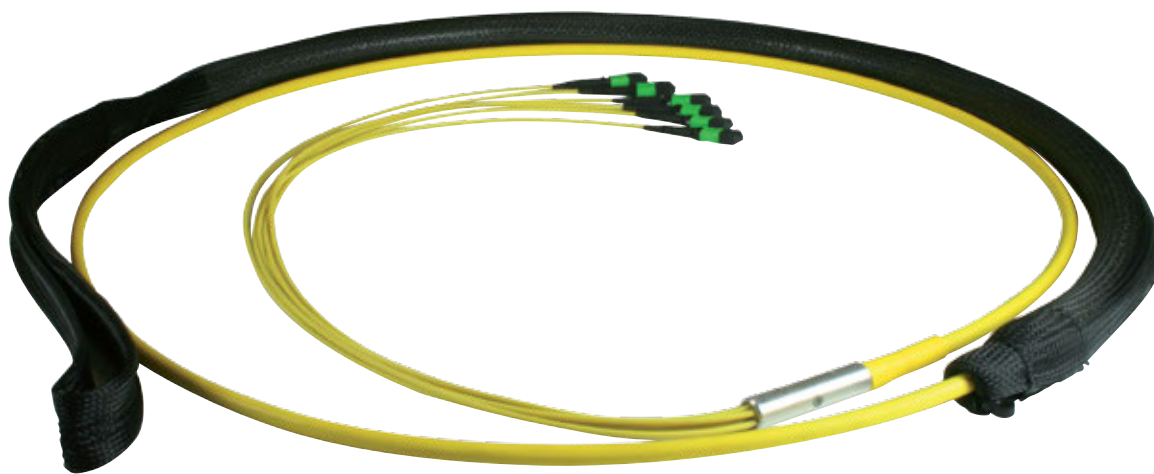
This part number will configure a 3 metre singlemode OS1/2 G652D MTP ruggedised pigtail with a standard MTP male connector



NB: coloured splice protectors are available upon request



MPO/MTP FirstLight™ Prime Loose Tube Trunk



FirstLight™ Prime LT is a special design platform for Loose Tube multifibre optical cable assemblies. It utilizes the patented FirstLight™ Prime transition module which guarantees superior tensile strength and crushing resistance. The high density

design can scale up to 144 fibres and can feature both MPO/MTP and discrete interface.

It is perfect solution for trunks requiring MPO/MTP interface and Universal or External applications

Features

- > Available in OS1/2, G.657A1, OM1, OM2, OM3, OM4
- > Up to 144 fibre core count
- > Available with Multifibre MPO/MTP and discrete connectors
- > Internal/External Application - LSZH or PE cable jacket available
- > OFNP, OFNR Jacket Available
- > Factory terminated and tested
- > Loose Tube (LT), Dry Loose Tube (DLT) or Loose Tube Armoured (STA) cable selection

Standards Compliance

- > TIA/EIA-568-C.3 and IEC 11801
- > ISO/IEC 60793 and ISO/IEC 60794
- > ISO/IEC 61753, IEC 61754 and IEC 61755
- > ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC

Benefits

- > Very High Density - First Light Prime LT can scale up to 144 fibres for very high density Data Centre or Central Office application.
- > Hybrid MPO/MTP and Discrete Connector Interface - FirstLight™ Prime LT can be used as high density multifibre MPO/MTP ruggedized trunk or ruggedized MPO/MTP to LC or SC fanouts.
- > Rapid Deployment - factory terminated cabling saves installation and reconfiguration time eliminating field deployment variables.
- > Optimised Performance - low loss MPO/MTP Elite, discrete Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- > Compact Size - small dimension of breakout module and multifibre assemblies improves space management in high density applications.

Applications

- > Data Centre Infrastructure
- > Central Office, Access Points or CATV hubs
- > Internal and Backbone Application



The diagram illustrates a 12-core optical cable with the following dimensions and labels:

- Dimensions:**
 - Core diameter: 50
 - Cladding diameter: 300 ± 50
 - Inner cladding diameter: 150 ± 25
 - Outer cladding diameter: 300 ± 50
 - Core-to-core pitch: 150 ± 25
 - Total length: **Length**
- Labels:**
 - 1:** Core
 - 2:** Inner cladding
 - 3:** Outer cladding
 - 4:** Core
 - 5:** Inner cladding
 - 6:** Outer cladding
 - 7:** Core

1. Loose tube cable
2. Ruggedised breakout module
3. 3mm Miniflex tubing (white)
4. MPO/MTP connector
5. MPO/MTP round connector boot (black)
6. Tail identification marker (C-clip)
7. Serial number label (wrap around)

FIBRE COUNT		CONNECTOR END A			CONNECTOR END B			FIBRE TYPE		CABLE CONSTRUCTION		JACKET TYPE		CABLE LENGTH (M*)	POLARITY					
12	MTP® Female	Standard	MTPF	LC	LC	MTP® Female	Standard	MTPF	OS1/2	9	Loose Tube	LTR	LSZH standard	-	XX	A				
24		Elite®	MTEF	LC APC	LCA		Elite®	MTEF	OM3	OM3		Loose Tube Steel Tape Armoured	STAR	PE		PE	B			
48	MTP® Male	Standard	MTPM	SC	SC	MTP® Male	Standard	MTPM	OM4	OM4	G.657A1	A1	OFNR	RI*		C				
72		Elite®	MTPM	SC APC	SCA		Elite®	MTPM	OM3	OM3			OFNR	RI*						
96	MTP® Female 24 fibre ferrule	Standard	M2F	ST	ST	MTP® Female 24 fibre ferrule	Standard	M2F									OFNP	PL*		
144		Elite®	M2EF	FC	FC		Elite®	M2EF												
	MTP® Male 24 fibre ferrule	Standard	M2M	FC APC	FCA	MTP® Male 24 fibre ferrule	Standard	M2M												
		Elite®	M2EM	E2000 APC	E2		Elite®	M2EM												

Example Part Number: PRE 24 MTPF LC OM4 LTR PE 16 A

PRE24MTPFLCOM4LTRPE16 will configure a 16 metre 24 Core MTP® female to LC OM4 PE jacket, colour Aqua MTP® FirstLight™ Prime Trunk Cable Assembly, polarity A.

* For Riser and Plenum length is measured in feet



MPO/MTP Nano Ruggedised Trunk Cable



The FirstLight™ Nano MPO/MTP trunk assembly features the small, compact size of Nano Cable providing a flexible though ruggedized product with the improved optical performance of Nano Cable structure.

MPO/MTP Nano trunk multicore cable assemblies facilitate rapid deployment of high density backbone cabling in data centres and other high fibre environments reducing network

installation or reconfiguration time and cost. They are used to interconnect cassettes, panels or ruggedized MPO/MTP fanouts, spanning MDA, HDA and EDA zones.

MPO/MTP trunks are built with highest quality components. Standard MPO/MTP as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.

Features

- > OS1/2, OM3, OM4 fibre grades
- > 12 or 24 fibres
- > LSZH, OFNP cable jacket
- > Female (standard) and Male MPO/MTP connectors
- > Polarity A (standard), B or C
- > Factory terminated and tested

Standards Compliance

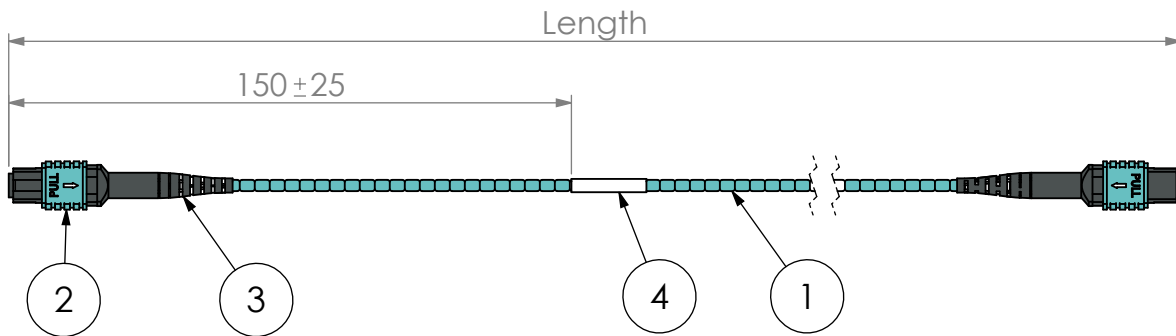
- > TIA/EIA-568-C.3 and IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > NFPA 262 or IEC 60332
- > IEC-61754-20 & IEC-61754-14
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC
- > IEC-60793

Benefits

- > MPO/MTP Interface - MPO/MTP US Conec brand components feature superior optical and mechanical properties.
- > Optimised Performance - low loss MPO/MTP Elite, discreet Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- > High Density - multifibre connector and compact dimension of ruggedized Microcable ease space in costly data centre environments.
- > Rapid Deployment - factory terminated modular system saves installation and reconfiguration time during moves, adds and changes.
- > Reliability - 100% tested- combination of high quality components and manufacturing quality control guarantees product to the highest standards.
- > Next Generation Network Proof - emerging high speed protocols are going to use MTP interface- your cabling infrastructure remains unchanged.



Drawing



1. 3mm 12 Fibre Nano Cable
2. 12 Fibre MPO/MTP Connector

3. MPO/MTP 3mm Connector Boot
4. Serial Number Label (wrap around)

Applications

- > Data Centre Infrastructure
- > Storage Area Network- Fibre Channel
- > Parallel Optics
- > Infiniband
- > Emerging 40 and 100Gbps Protocols

Part Number Generator

FIBRE COUNT	CONNECTOR END A			CONNECTOR END B*			FIBRE TYPE		CABLE CONSTRUCTION		CABLE LENGTH (M)	JACKET TYPE		POLARITY
12	MTP® Female	Standard	MTPF	MTP® Female	Standard	MTPF	G.657/A2	A2	Nano Cable Ruggedised	NCR	XX	LSZH standard	-	A
24		Elite®	MTPEF		Elite®	MTPEF	OM3	OM3				OFNP	PL	B
	MTP® Male	Standard	MTPM	MTP® Male	Standard	MTPM	OM4	OM4						C
		Elite®	MTPEM		Elite®	MTPEM								
	MTP® Female 24 fibre ferrule	Standard	M2F	MTP® Female 24 fibre ferrule	Standard	M2F								
		Elite®	M2EF		Elite®	M2EF								
	MTP® Male 24 fibre ferrule	Standard	M2M	MTP® Male 24 fibre ferrule	Standard	M2M								
		Elite®	M2EM		Elite®	M2EM								

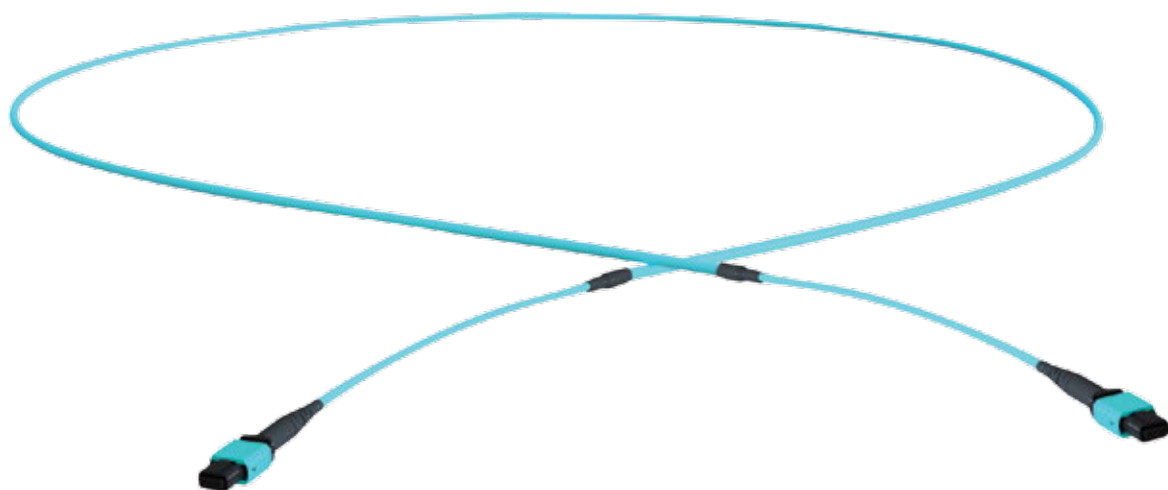
Example Part Number: PRE 24 MTPF OM4 NCR 20 A

*Only if end B differs from end A

PRE24MTPFOM3NCR20A will configure a 20 metre 24 core OM3 multifibre MTP® Nano cable ruggedised assembly, MTP® female to MTP® female with LSZH jacket, colour Aqua, polarity A.



40G QSFP+ (MPO/MTP) to QSFP+ Assembly



MTP/MPO QSFP+ trunk/ patch cord assemblies are interconnecting QSFP+ transceivers operating within 40GBASE-SR parallel optics networks. QSFP+ transceivers utilize 12Fibres MPO/MTP interface and perform 40G transmission using 4 x 10G channels (8fibres: 4xTX and 4xRX). MPO/MTP QSFP+ assemblies are offered as 8Fibres OM3 or OM4 Trunks using a compact and rugged double jacket Microcable structure or patch cords using compact single jacket MicroCable. Compact and flexible Microcable optimises cable-way use and improve airflow. MPO/MTP QSFP+ assemblies are built with highest quality components. Standard MPO/MTP as well low loss Elite versions

are offered featuring low insertion loss for demanding high speed networks where power budgets are critical. QSFP+ MPO/MTP assembly when connected directly to QSFP+ transceivers should feature FEMALE Un-pinned MPO/MTP connector. When assembly is mated with another MPO/MTP QSFP+ Assembly – Male/ Pinned or Female/ Un-Pinned Connector should be chosen accordingly (MPO/MTP Male/Pinned connector must always be mated with MPO/MTP Female/ Un-Pinned connector. When two Males or Females MPO/MTP connectors are mated together via MPO/MTP Adapter – high losses will occur)

Features

- > OM3, OM4 fibre Grades
- > 8x fibres Microcable 4.5mm OD Trunk & 3mm OD patch cord options
- > LSZH, OFNP, OFNR Cable Jacket
- > Loose Tube, Loose Tube Armoured and Universal Microcable selection available
- > Female/Un-Pinned and Male/ Pinned MPO/MTP connectors
- > Polarity B
- > Factory terminated and tested
- > MPO/MTP Interface - QSFP+ 40Gbase-SR transceivers are using MPO/MTP interface
- > Optimised Performance - Low loss MPO/MTP Elite and

- OM4 fibre selection assures low insertion losses and power penalties in tight power budget high speed network environment
- > High Density - Multifibre connector and compact dimension of ruggedised Microcable ease space in costly data centre environments
- > Rapid Deployment - Factory terminated modular system saves installation and reconfiguration time during moves, adds and changes
- > Reliability - 100% tested - Combination of high quality components and manufacturing quality control guarantees product to the highest standard

Applications

- > Data Centre Infrastructure
- > Assemblies for QSFP+ 40GBase-SR Transceivers
- > Parallel Optics
- > Infiniband

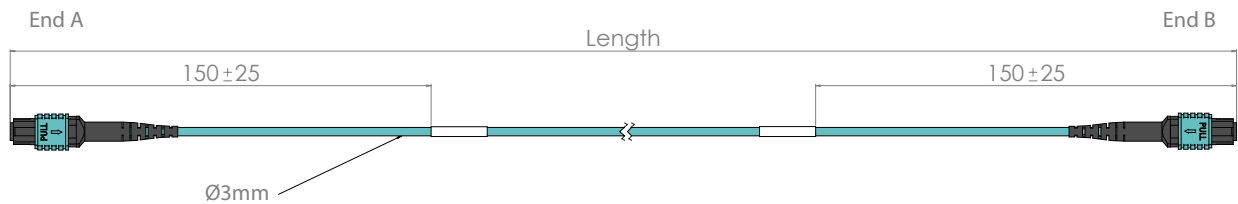
Standards Compliance

- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5 NFPA 262 (OFNP) or IEC 60332 (LSZH)
- > IEC-61754-20 (LC) & IEC-61754-14 (SC)
- > Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- > IEC-60793

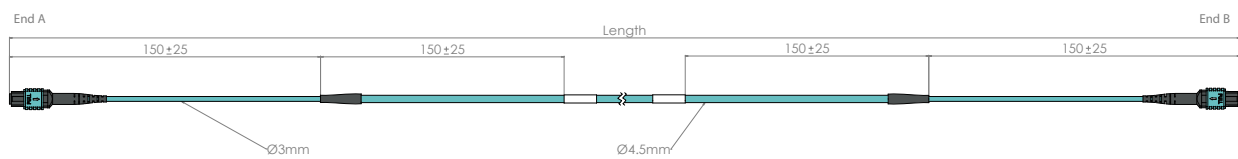


Drawing

Assembly MPO/MTP - MPO/MTP 8 Fibre MicroCable 2.9mm OD Patch Cord - Single Jacket



Assembly MPO/MTP - MPO/MTP 8 Fibre MicroCable 4.5mm OD Trunk - Double Jacket



Part Number Generator

CONNECTOR END A		GENDER A		CONNECTOR END B*		GENDER B		FIBRE TYPE		FIBRE COUNT		CABLE LENGTH		CABLE TYPE		COLOUR		JACKET TYPE	
MTP	M	Female	F	MTP	M	Female	F	OM3	OM3	8	8	1 Metre	1	MicroCable 2.9mm OD patch cord - Single Jacket	QSP	Aqua	Leave Blank**	LSZH	Leave Blank
MTP ELITE	ME	Male	M	MTP	M	Male	M	OM4	OM4			5 Metre	5			Erika Violet (OM4)	EV***	OFNP	PL
												10 Metre	10					OFNR	RI
												Specify	xx	MicroCable 4.5mm OD patch cord - Double Jacket	QST				

Example Part Number: **M F M M OM3 8 1 QSP - PL**

M F M M OM3 8 1 QSP PL will configure a MTP Female - MTP Male OM3 8 fibre, 1 metre MicroCable 2.9mm OD Patch Cord - Single jacket aqua OFNP

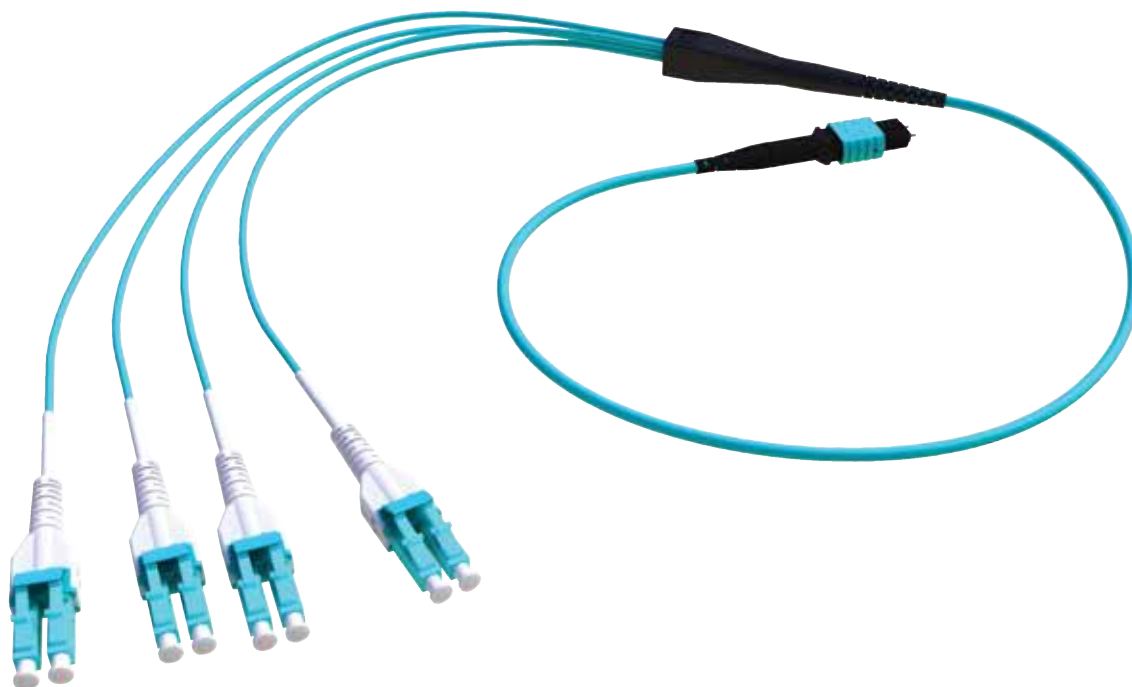
*Specify only when different from End A

** Applicable for OM3 and OM4

*** Applicable only to OM4



40G QSFP+ (MPO/MTP) to QSFP+ Assembly



40G parallel optics transceivers (40GBASE-SR4) can support 4x10G modes– this feature allow new parallel optics active equipment being compatible with existing 10G transceivers. MPO/MTP QSFP+ to SFP+ Fan-out Assemblies provide connections between single QSFP+ (40G transceiver with MPO/MTP interface) and 4 x SFP+ (10G transceivers with LC(DX)

Interface). Parallel optics 40GBASE-XR4 uses 8 out of 12 MPO/MTP interface fibres transmitting 4 x Duplex (DX) channels (4 x Transmit and 4 x Receive). QSFP+ to SFP+ Fanout is 8 x Fibres MTP to LC(DX) Ruggedized Fan-out assembly. Assembly utilizes new miniature version of breakout module saving fibre management space and providing secure transition between cable and tails.

Features

- > New miniature Breakout Module – saving space within patching management area the same time providing robust and safe transition between cable and tails
- > Female MPO/MTP connectors for direct connection into QSFP+ transceiver
- > 4 x 2mm Tails Uniboot DX version available improving rack patching management
- > OM3, OM4, OS1/2, fibre versions
- > 3mm OD Patch/ 4.5mm OD Trunk MicroCable Versions
- > LSZH, OFNP, OFNR cable jacket types selection
- > Factory terminated and tested
- > Optimized performance - Low loss MPO/MTP Elite and discrete LC Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment
- > Rapid deployment Factory terminated modular system saves installation and reconfiguration time during moves, ads and changes
- > Reliability 100% tested - combination of high quality components and manufacturing quality control guarantees product to the highest standards

Applications

- > Data Centre Infrastructure
- > Parallel Optics
- > 40GBASE-SR4 to 4x10GBASE-SR Transceivers

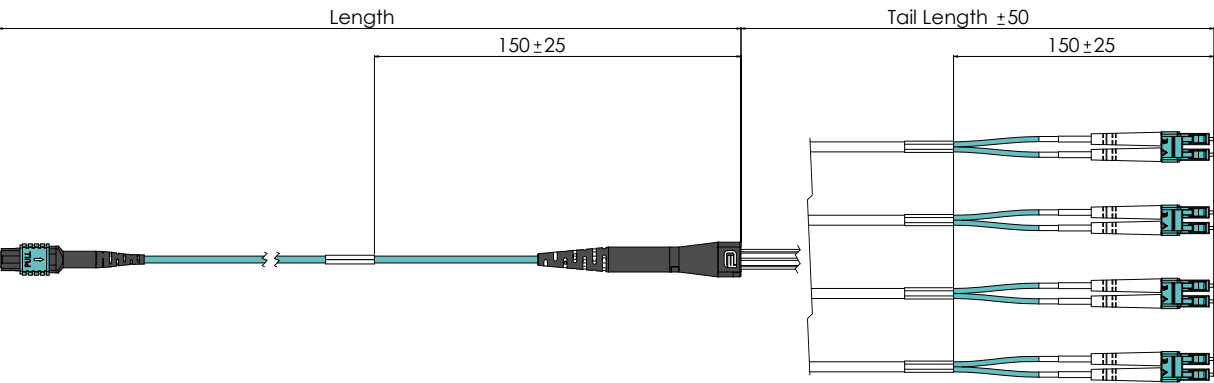
Standards Compliance

- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > NFPA 262 or IEC 60332
- > IEC-61754-20 & IEC-61754-14
- > Compliant to Directive 2002/95/EC (RoHS) & REACH SvHC
- > IEC-60793



Drawing

QSFP+to SFP+ MTP to LC (DX) Patch 3mm OD Fanout



For further product drawings please view the online datasheet

Part Number Generator

CONNECTOR END A	FIBRE COUNT	CONNECTOR END B	FIBRE TYPE	CABLE TYPE	CABLE LENGTH	ASSEMBLY TYPE	JACKET COLOUR	JACKET TYPE	PREMIUM*
MTP Female MF	8 8	LC LC	OM3 OM3	3mm OD patch MicroCable - Single Jacket QSP	1 Metre 1	QSFP Assembly fanout design A	Aqua (OM3/OM4)	LSZH	LC Premium or LC Uniboot Premium /P
MTP Low Loss Elite Female MEF		LC Uniboot LCSB	OM4 OM4	4.5mm OD trunk MicroCable - Double Jacket QST	5 Metre 5		Erika Violet (OM4) EV	OFNP	
				4.5mm OD trunk MicroCable Universal QSTU	10 Metre 10	QSFP Assembly stagger design B		OFNR	
					Specify xx				

Example Part Number: MEF 8 LCSB OM4 QSP 5 A -- /P
MEF8LCSBOM4QSP5A/P will configure
a 8xFibres MTP(Elite) Female-LC(Uni)
Premium OM4 Aqua 3mm OD Patch
MicroCable 5mtr QSFP Fanout LSZH

*Leave blank if premium is not required



Innovative Design Features Improve Optical Performance And Reliability

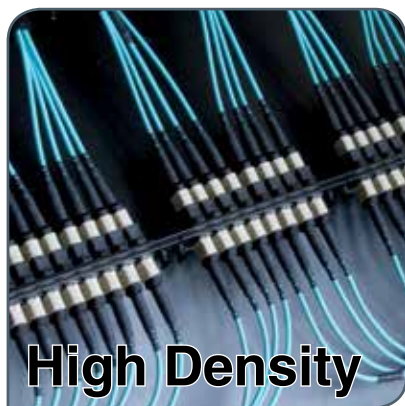
The Optronics MPO/MTP connector is a high quality low insertion loss version of the MPO (Multifibre Push On) connector. It features a multifibre ferrule that provides rapid mating of 12 and 24 fibres. Its precision alignment is achieved by using guide pins to accurately align the fibres. We also use the highest quality ferrules making the MPO/MTP superior to its standard MPO/MTP counterparts.

The MPO/MTP connector family is defined by two existing standards. Internationally the MPO/MTP is defined by IEC-61754-7. In North America the MPO/MTP is defined by TIA-604-5 (also called FOCIS 5). The MPO/MTP multi-fibre connector is the trademarked name for Optronics MTP connector. The MPO/MTP connector is fully compliant with both FOCIS 5, IEC-61754-7.

Why MPO/MTP?

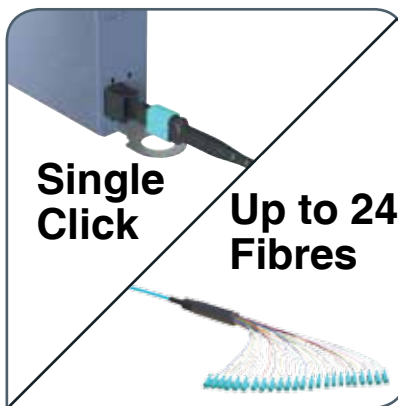
SPACE

MPO/MTP interface is the choice for high density environment of Data Centres or Telco infrastructure where large number of connectors can no longer be covered with conventional individual connectors fibre management.



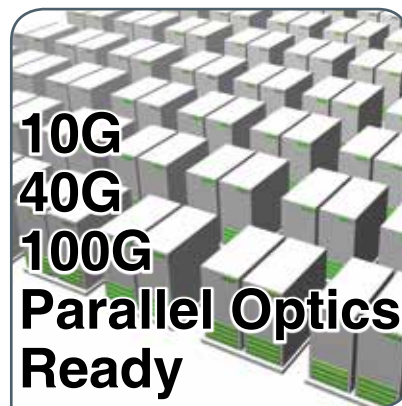
TIME

Pre-assembled MPO/MTP trunks and modular system makes installation time efficient. MPO/MTP interface allows for connection of 12/24 fibres during single mating action significantly saving installation time on site.



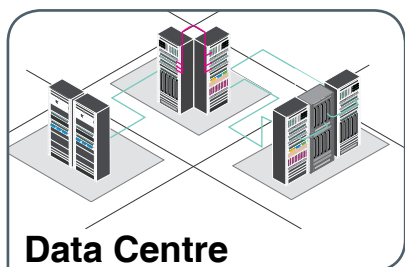
FUTURE PROOFING

MPO/MTP interface applied currently in Ethernet and Fibre Channel Networks are fully compatible with next generation parallel optics networks allowing for future proofing on installed networks in expected 40/100Gb networks

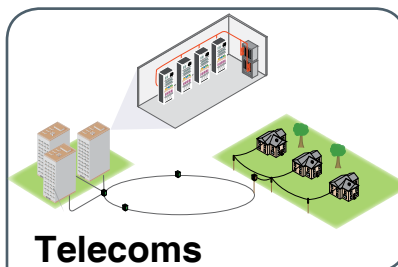


MPO/MTP Applications

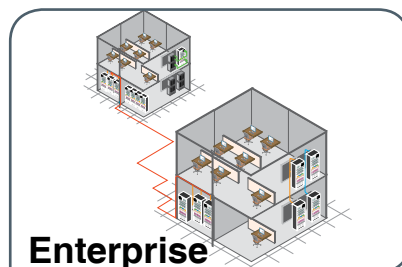
Data Centres - MPO/MTP is now a core product in the high-end, high-density data centre environment, where space saving design and high speed installation have accelerated the uptake of pre-configured, plug and play solutions.



Telecoms - MPO/MTP has become the accepted solution for telecommunications networks, where traditional ODF splicing is being replaced with MPO/MTP based pre-terminated systems.

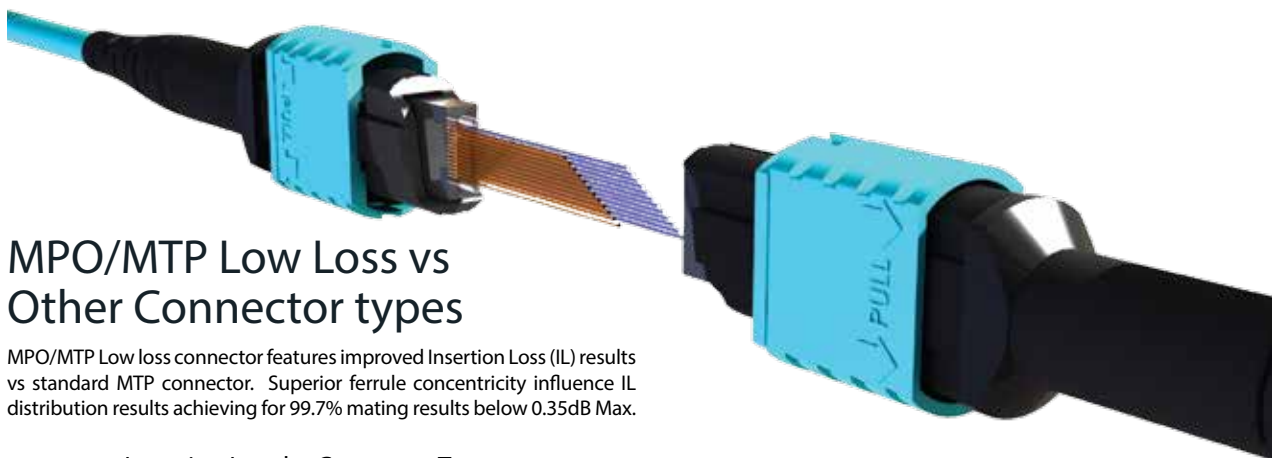


Enterprise - While MPO/MTP is at the forefront of high density networks, by leveraging its rapid installation and simplified cable management capabilities it is now emerging as a credible contender in lower density, high-end data premise environments.



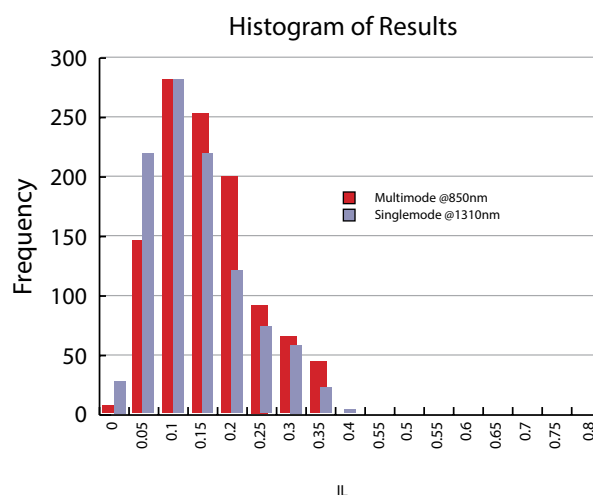
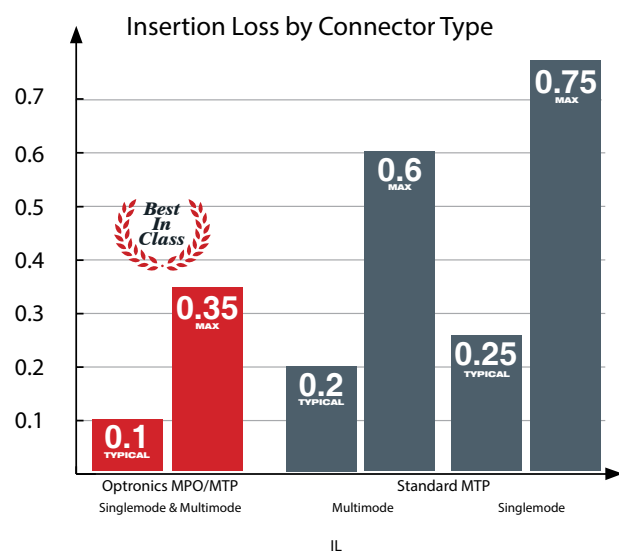
Why High Performance Matters

Mating 12 / 24 Fibres is difficult, Optronic's high precision MPO/MTP Connectors leverage the latest technology and high quality manufacturing techniques to create a high quality, low loss connection system that outstrips the performance of standard MTP connectors.



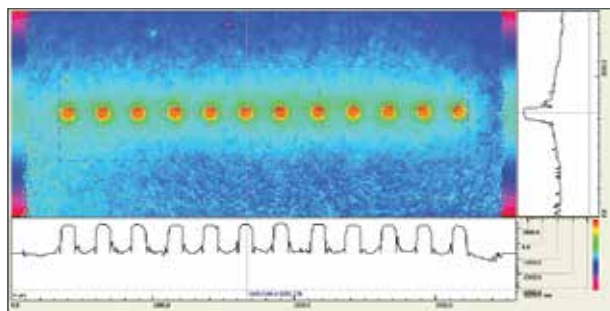
MPO/MTP Low Loss vs Other Connector types

MPO/MTP Low loss connector features improved Insertion Loss (IL) results vs standard MTP connector. Superior ferrule concentricity influence IL distribution results achieving for 99.7% mating results below 0.35dB Max.

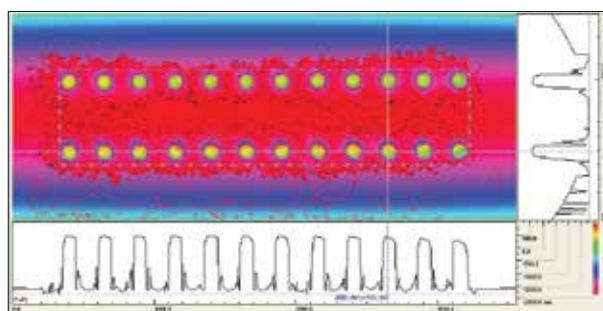


MPO/MTP End Face Analysis

12 Fibre MPO/MTP



24 Fibre MPO/MTP



The IL results are dependent on quality of fibre contact area. Within MPO/MTP technology these are 12 and 24 fibres which are mated the same time thereafter the demand for quality control is much increased comparing to single fibre ferrule connectors. Parameters like fibre concentricity, fibre height, core dip and angle error are essential to be controlled. Assemblies undergo 100% Interferometric check as per EN 50377-15-1 standard test.



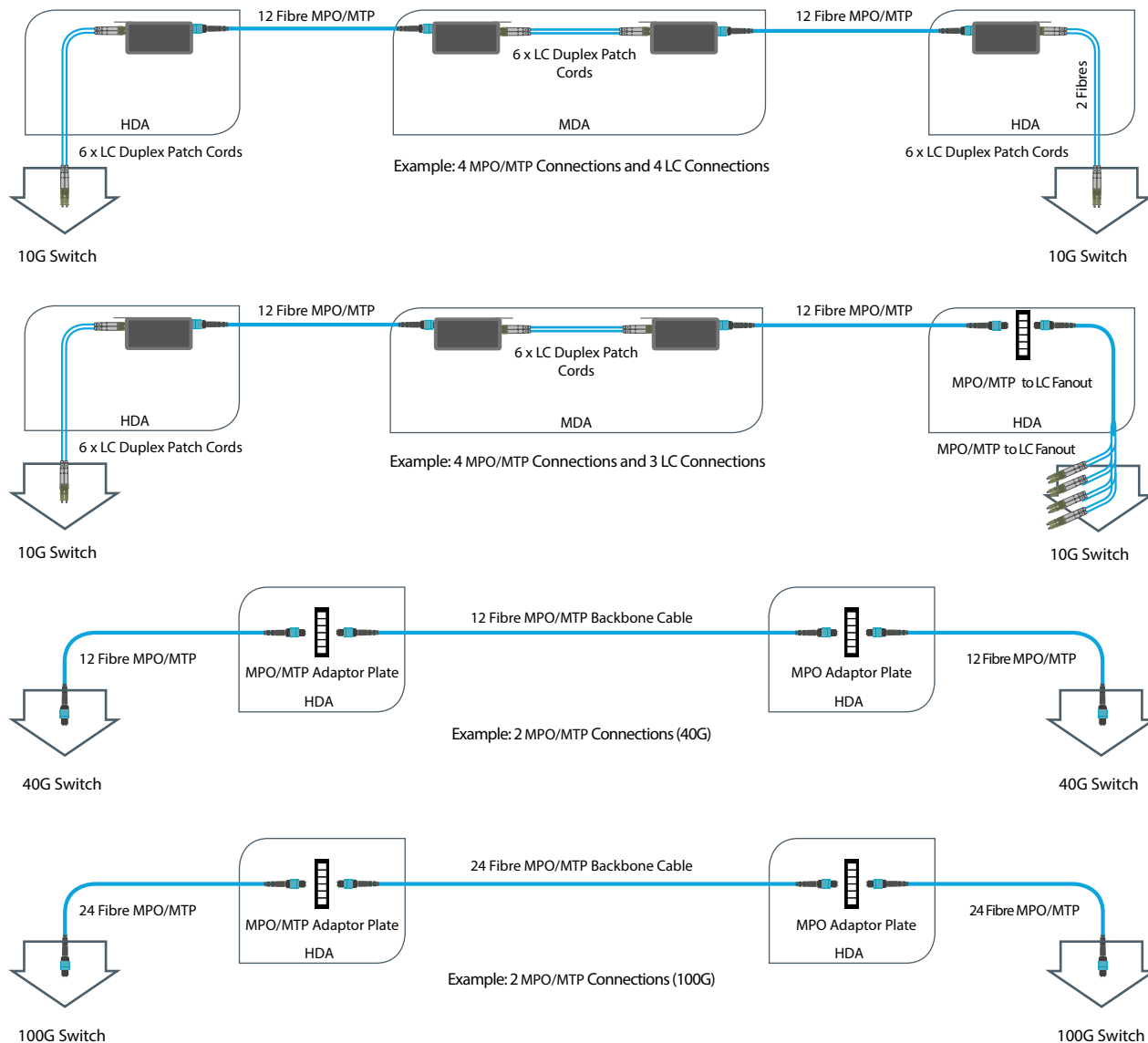
Why is Low Loss So Important?

The power budget in networks like 8/10/16Gbps Fibre Channel or 10Gbps Ethernet networks needs to be carefully controlled. 40/100GbE parallel optics protocols require even tighter control of losses, as allowable channel IL losses are even more limited.

FIBRE TYPE	MAX DISTANCE	MAX CHANNEL INSERTION LOSS	MAX CHANNEL CONNECTOR INSERTION LOSS
10G OM3	300m	2.6dB	1.5dB
10G OM4	550m	2.6dB	1.5dB
40/100G OM3	100m	1.9dB	1.5dB
40/100G OM4	150m	1.5dB	1.0dB

High Number of Interconnections in High End Applications

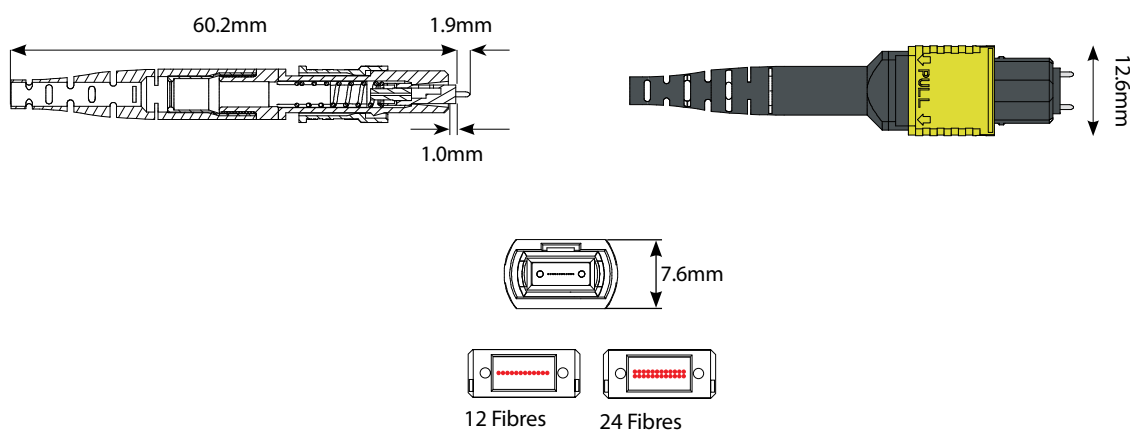
Data Centre cabling infrastructure guidance was introduced by standards bodies in Europe (EN50173-5) and America (TIE/EIA-942). According to these standards channels within data centres can contain multiple patching points which affect the number of interconnections and available power budget












12 and 24 Fibre MPO/MTP Specifications










RETURN LOSS	12	24	12	24
				
	MPO/MTP Singlemode	MPO/MTP Singlemode	MPO/MTP Multimode	MPO/MTP Multimode
INSERTION LOSS	0.10dB Typical 0.35dB Max	0.25dB Typical 0.75dB Max	0.10dB Typical 0.35dB Max	0.10dB Typical 0.35dB Max
	>60dB (Angle Polish)	>60dB (Angle Polish)	>25dB	>25dB

Dimensions



Ordering Information

	DESCRIPTION	FIBRES	PART NO.
	Optronics MPO/MTP Connector 12f MM Male Low Loss Aqua Ribbon Boot	12	OMPMML12A0
	Optronics MPO/MTP Connector 12f MM Female Low Loss Aqua 3mm Boot (Black)	12	OMPFML12A3B
	Optronics MPO/MTP Connector 12f MM Male Low Loss Aqua 3mm Boot (Black)	12	OMPMML12A3B
	Optronics MPO/MTP Connector 24f MM Male Low Loss Aqua Ribbon Boot	24	OMPMML24A0
	Optronics MPO/MTP Connector 24f MM Female Low Loss Aqua 3mm Boot (Red)	24	OMPFML24A3R
	Optronics MPO/MTP Connector 24f MM Male Low Loss Aqua 3mm Boot (Red)	24	OMPMML24A3R
	Optronics MPO/MTP Connector 12f MM Male Low Loss Erica Violet Ribbon Boot	12	OMPMML12E0
	Optronics MPO/MTP Connector 12f MM Female Low Loss Erica Violet 3mm Boot (Black)	12	OMPFML12E3B
	Optronics MPO/MTP Connector 12f MM Male Low Loss Erica Violet 3mm Boot (Black)	12	OMPMML12E3B

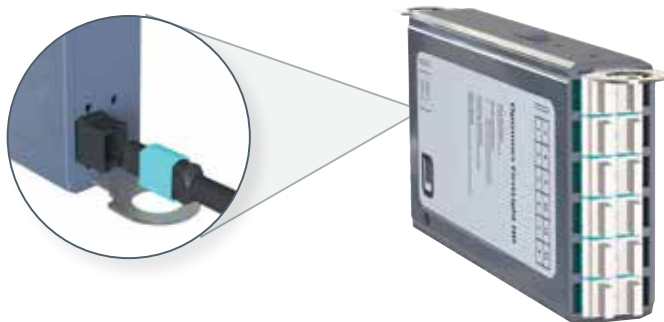
	DESCRIPTION	FIBRES	PART NO.
	Optronics MPO/MTP Connector 24f MM Male Low Loss Erica Violet Ribbon Boot	24	OMPMML24E0
	Optronics MPO/MTP Connector 24f MM Female Low Loss Erica Violet 3mm Boot (Red)	24	OMPFML24E3R
	Optronics MPO/MTP Connector 24f MM Male Low Loss Erica Violet 3mm Boot (Red)	24	OMPMML24E3R
	Optronics MPO/MTP Connector 12f SM Female Low Loss Yellow 3mm Boot	12	OMPFSL12Y3B
	Optronics MPO/MTP Connector 12f SM Male Low Loss Yellow 3mm Boot	12	OMPMSL12Y3B
	Optronics MPO/MTP Connector 12f SM Male Low Loss Yellow Ribbon Boot	12	OMPMSL12Y0
	Optronics MPO/MTP Connector 24f SM Female Yellow 3mm Boot	24	OMPFSL24Y3B
	Optronics MPO/MTP Connector 24f SM Male Yellow 3mm Boot	24	OMPMSL24Y3B
	Optronics MPO/MTP Connector 24f SM Male Yellow Ribbon Boot	24	OMPMSL24Y0



MPO/MTP is Intermatable and Interchangeable with all well known MTP Systems

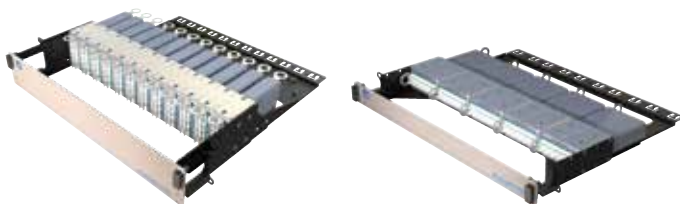


LGX MPO/MTP Cassettes



FirstLight™ Ultra High Density MPO/MTP Module

FirstLight™ Ultra High Density Modules provide an interface between MTO™ Trunks and LC interface of active equipment. Pre-assembled MPO/MTP modules improve the speed of installation.

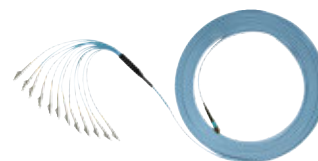


FirstLight™ Ultra High Density 1U/2U Chassis System

FirstLight™ Ultra High Density Chassis are available in 1U, 2U or Zero U options. The system density is industry leading with capacity to house up to 288 LC ports and 1152 fibres using 12 fibre MPO/MTP interface in a 2U space.

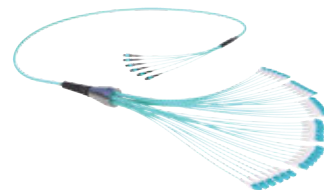


MPO/MTP Trunk Cables



MPO/MTP Fan Out Assemblies

Our MPO/MTP trunk micro cable assembly facilitates rapid deployment of high density backbone cabling, in data centres and other high-fibre environments,



FirstLight™ Prime Loose Tube MPO/MTP Trunk Cables

The FirstLight™ Prime LT is a special design platform for loose tube multifibre optical cable assemblies. It utilises the patented FirstLight™ Prime transition module which guarantees superior tensile strength and crushing resistance.



Nano Ruggedised MPO/MTP Trunk Cable Assemblies

The FirstLight™ Nano MPO/MTP trunk assembly features the small, compact size of Nano Cable providing a flexible yet ruggedised product with the improved optical performance of the Nano Cable structure.



FirstLight™ Ultra High Density MPO/MTP UltraSlim Panels

The MPO/MTP UltraSlim Panel provides secure transitions between MPO/MTP and LC or SC discreet connector interfaces. They are used to connect MPO/MTP backbones with LC or SC patching and active equipment.

sales@optronicsnet.com

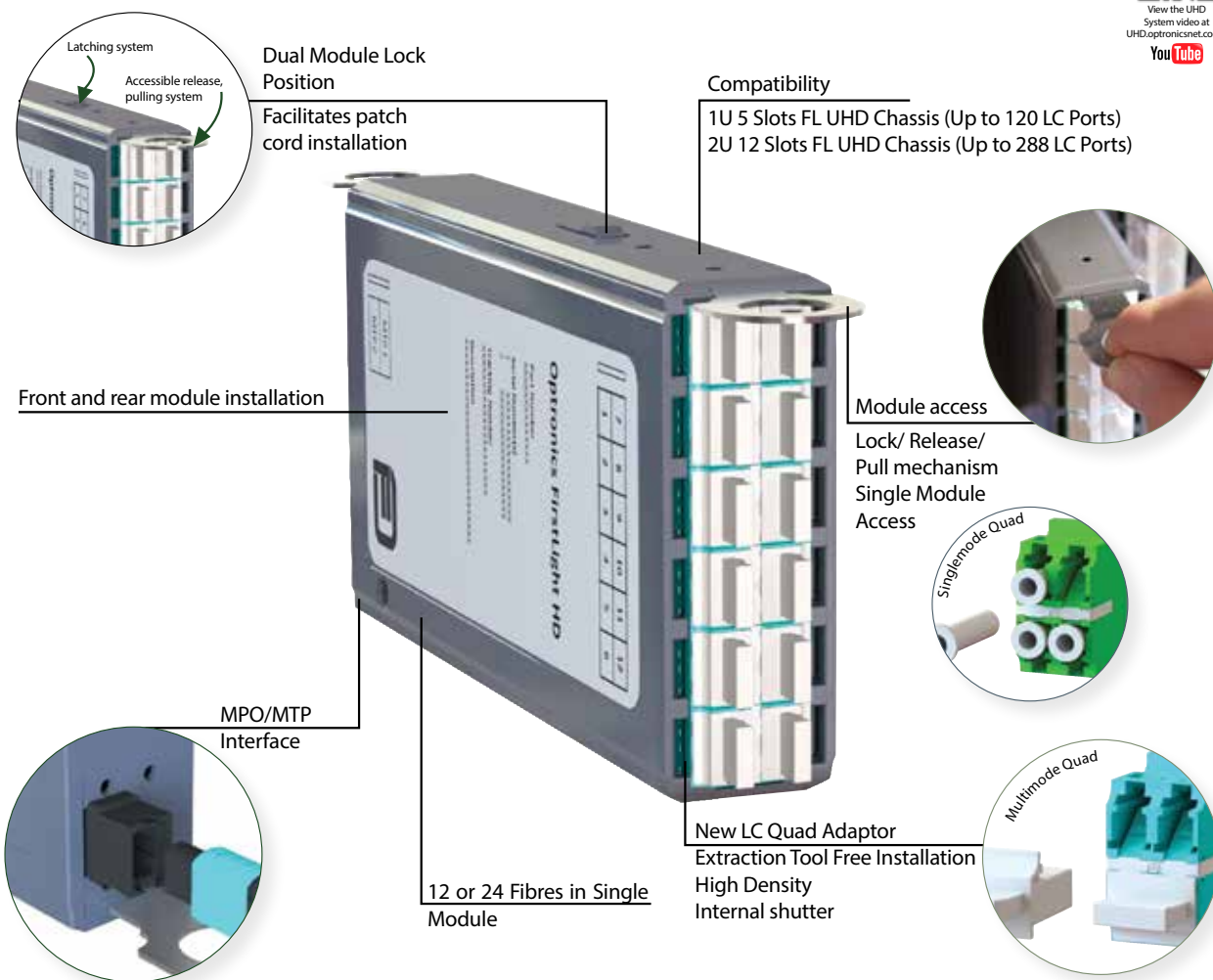


Data Centre Solutions

FirstLight™ Ultra High Density Solutions

FirstLight™ Ultra High Density MPO/MTP Module	61
FirstLight™ Ultra High Density Splice Module	63
FirstLight™ Ultra High Density Pre-Terminated Module	65
FirstLight™ Ultra High Density MPO/MTP Adaptor Module	67
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FirstLight™ Ultra High Density 2U Chassis	71
FirstLight™ Ultra High Density Accessories	73

FirstLight™ Ultra High Density MPO/MTP Module



FirstLight™ Ultra High Density Modules provide an interface between MPO/MTP Trunks and LC interface of active equipment. Pre-assembled MPO/MTP modules improve the speed of installation. Modules with external MPO/MTP ports can be easily connected to trunks. Single MPO/MTP port connection typically provides mating for 12 or 24 fibres at one time. Modules are

compact improving space management in a high fibre density environment. Modular systems can be easily disconnected and reconfigured for fast add ons or system change reconfigurations. A New Adaptor footprint design is implemented for the handling of ultra high density infrastructure.

Features

- > 12 and 24 fibres modules
- > Compatible with 1U 5 x Modules Chassis and 2U 12 x Modules Chassis
- > Premium LC, SC premium interface
- > Premium MPO/MTP ELITE interface
- > SM and MM (OM3/OM4) Versions
- > Polarity A, B or C

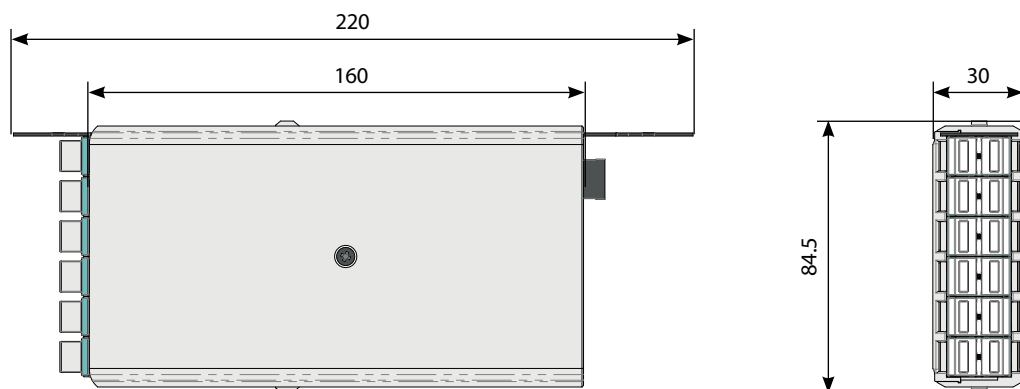
Applications

- > TIA/EIA-568-C.3 and IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC
- > IEC-60793

For the 1U and 2U FirstLight™
Ultra High Density System Chassis
See pages 69-72



Drawing



All dimensions in mm

Standards Compliance

- > TIA/EIA-568-C.3 and IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > Compliant to Directive 2002/95/EC, REACH SvHC
- > IEC-60793

Termination Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP Elite (MM)	0.10dB	0.35dB	NA
LC, SC Premium (MM)	0.08dB	0.15dB	NA
MTP Elite (SM)	0.10dB	0.35dB	>60dB
LE, SC Premium (SM)	0.12dB	0.15dB	>55/65dB

Technical Specification

DESCRIPTION	
Fibre	SM: G.652D, MM: OM3/OM4 (ISO/IEC 60793)
Adaptors	MPO/MTP IEC-61754 & EIA/TIA-604-5 Body Colour: Black Polarity: Keyway up- Keyway down Grey: Polarity B Keyway up- Keyway up LC QUAD (IEC 61754-20) Body Colour: AQUA (MM- OM3/OM4), Blue (SM/UPC), Green (SM/APC) SC DX (IEC-61754-14) Body Colour: Beige (MM- OM3/OM4), Blue (SM/UPC), Green (SM/APC)
Module material	ABS
Module colour	RAL7015
Operating temperature	-20oC to +60oC
Storage temperature	-40oC to +70oC



FirstLight™ Ultra High Density Splice Module



FirstLight™ High Density modules can feature internal splice management housing up to 12 x splice positions. 2U chassis is the platform to house 288 splices in 2U size.

Features

- > SC/LC interface
- > Up to 12 splices per module

Applications

- > Enterprise/ Campus networks
- > LAN
- > Central office/ POP

Technical Specification

DESCRIPTION	
Adaptors	LC QUAD (IEC 61754-20) Body Colour: AQUA (MM), Blue (SM/UPC), Green (SM/APC) SC DX (IEC-61754-14) Body Colour: Beige (MM), Blue (SM/UPC), Green (SM/APC)
Module material	ABS
Module colour	RAL7015

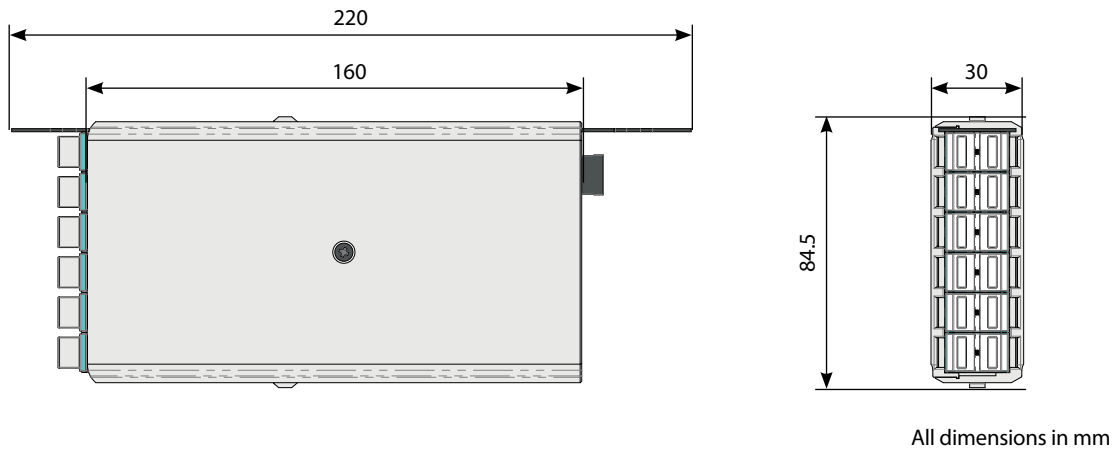
Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP Elite (MM)	0.10 dB	0.35 dB	NA
MTP (MM)	0.20 dB	0.60 dB	NA
LC, SC (MM)	0.15dB	0.30dB	NA
LC, SC Premium (MM)	0.08dB	0.15dB	NA
MTP Elite (SM)	0.10 dB	0.35 dB	>60dB
MTP (SM)	0.25 dB	0.75 dB	>60dB
LC, SC (SM)	0.18dB	0.25dB	>55/65dB*
LC, SC Premium (SM)	0.12dB	0.30dB	>55/65dB*

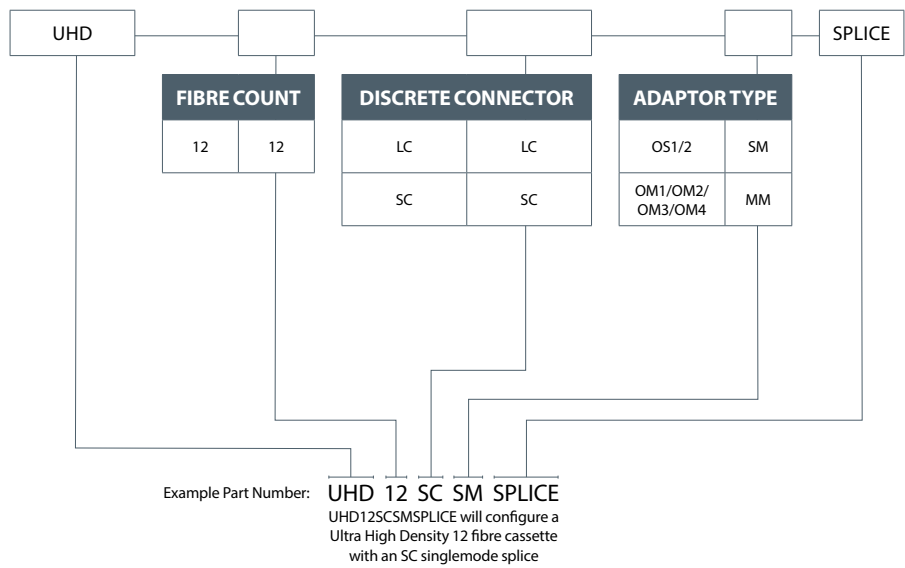
* UPC/APC



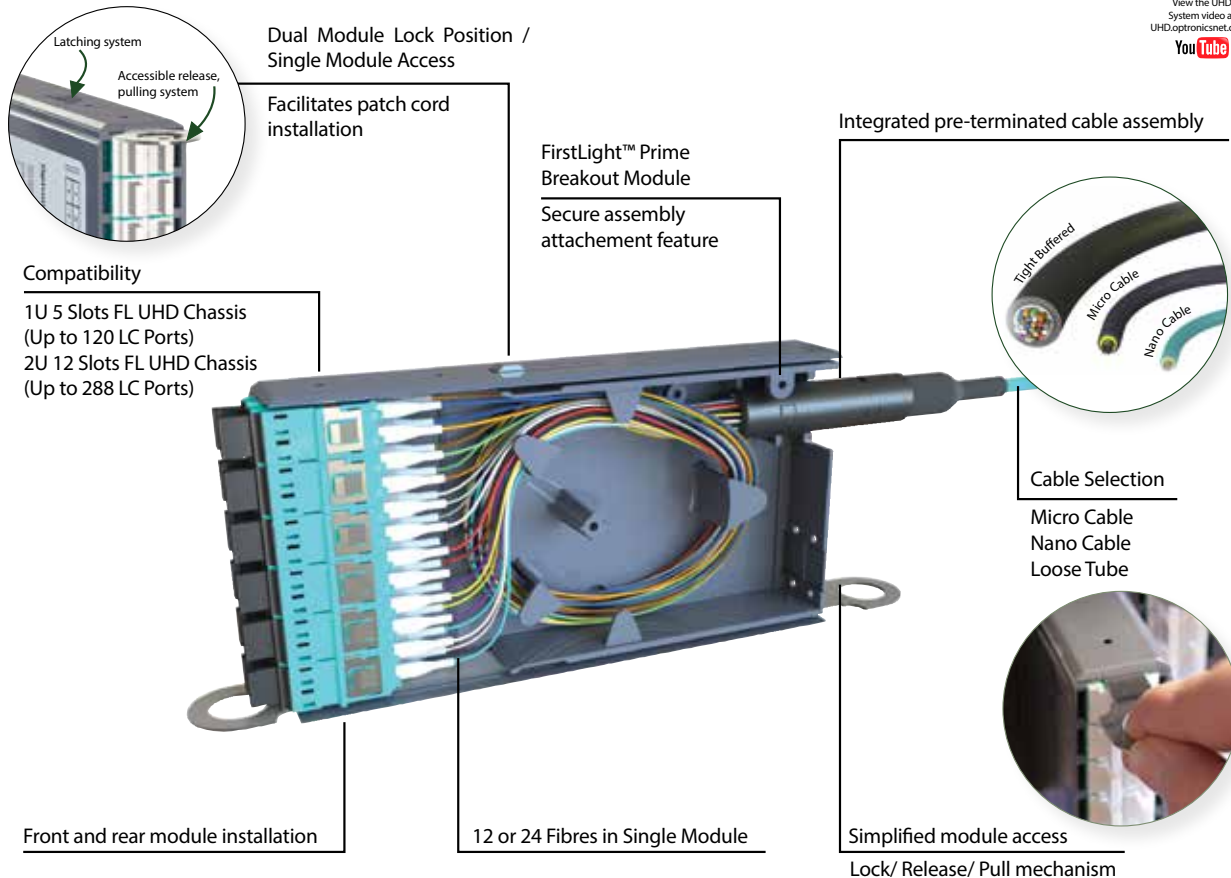
Drawing



Part Number Generator



FirstLight™ Ultra High Density Pre-Terminated Module



FirstLight™ Ultra High Density Modules are the platform for hosting pre-terminated cable assemblies. Solution brings advantage of speed installation, improved power budget as well as improved economics (lower amount of interconnections). Assemblies can be pre-installed inside modules in the factory and supplied to the installation site for instant deployment

ready to operate. Alternatively if required pre-terminated cables can be fitted inside module post installation in the field. Variety of configuration is available intermixing "No plug, just play" modules with MPO/MTP trunks and modules, splice modules and variety of multifibre cable assemblies.

Features

- > Factory made and tested modules
- > Up to 24 fibres
- > High performance
- > Reduced amount of interconnections
- > Improved power budget
- > Improved economics
- > 12 and 24 fibres modules
- > Compatible with 1U 5 x Modules Chassis and 2U 12 x Modules Chassis Premium LC, SC premium interface Premium MPO/MTP ELITE interface

Applications

- > Data centre
- > Storage area network
- > Enterprise/Campus
- > Central office/ POP

Standards Compliance

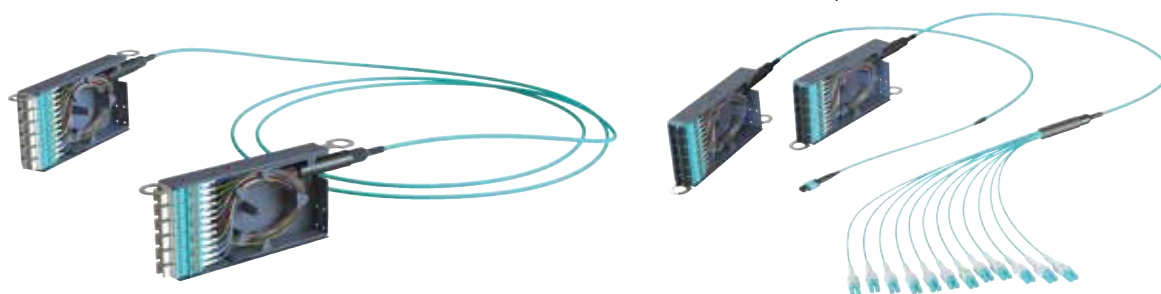
- > TIA/EIA-568-C.3 and IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC
- > IEC-60793

For the 1U and 2U FirstLight™
Ultra High Density System Chassis
See pages 69-72

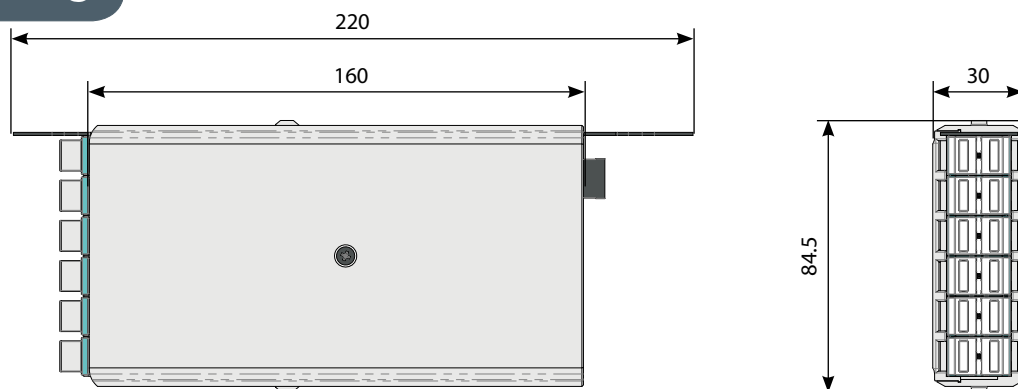


Multiple Configuration Scenarios

Module to Module, Module to MTP Trunk, Module to Discrete Trunks, Module to MTP assembly, Module to Fan Out



Drawing



All dimensions in mm

Technical Specification

DESCRIPTION	
Fibre	SM: G.652D, MM: OM3/OM4 (ISO/IEC 60793)
Adaptors	LC QUAD (IEC 61754-20) AQUA (MM), Blue (SM/UPC), Green (SM/APC) SC DX (IEC-61754-14) Beige (MM), Blue (SM/UPC), Green (SM/APC)
Cable types	Micro Cable, Nano Cable, Loose Tube
Module material	ABS
Module colour	RAL7015
Operating temperature	-20oC to +60oC
Storage temperature	-40oC to +70oC

Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP Elite (MM)	0.10 dB	0.35 dB	NA
MTP (MM)	0.20 dB	0.60 dB	NA
LC, SC (MM)	0.15dB	0.30dB	NA
LC, SC Premium (MM)	0.08dB	0.15dB	NA
MTP Elite (SM)	0.10 dB	0.35 dB	>60dB
MTP (SM)	0.25 dB	0.75 dB	>60dB
LC, SC (SM)	0.18dB	0.25dB	>55/65dB*
LC, SC Premium (SM)	0.12dB	0.30dB	>55/65dB*

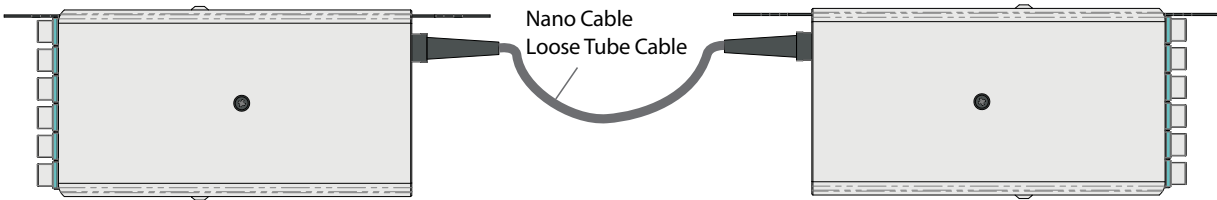
* UPC/APC

For the 1U and 2U FirstLight™
Ultra High Density System Chassis
See pages 69-72

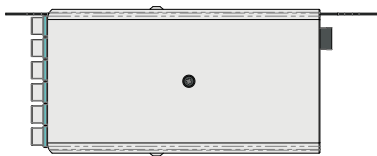


Configurations

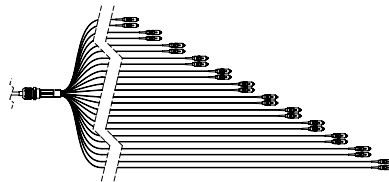
Module to Module



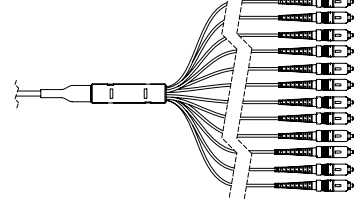
Module to Assembly



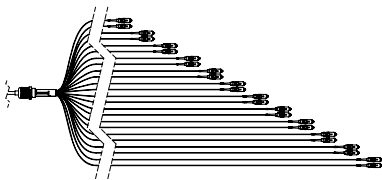
Micro Cable 900um tails



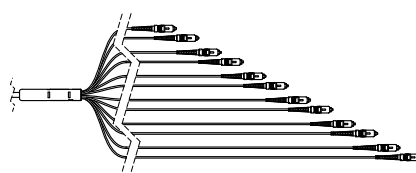
Micro Cable 2mm tails



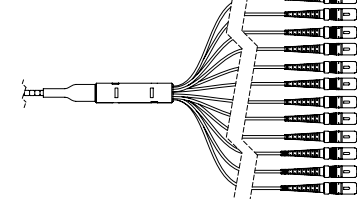
Loose Tube 900um tails



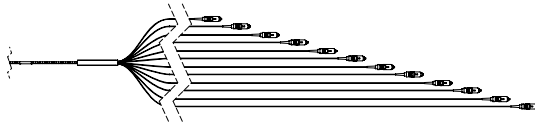
Loose Tube 2mm tails



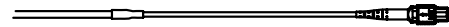
Nano Cable 2mm tails



Nano Cable 900um tails



MTP



Part Number Generator

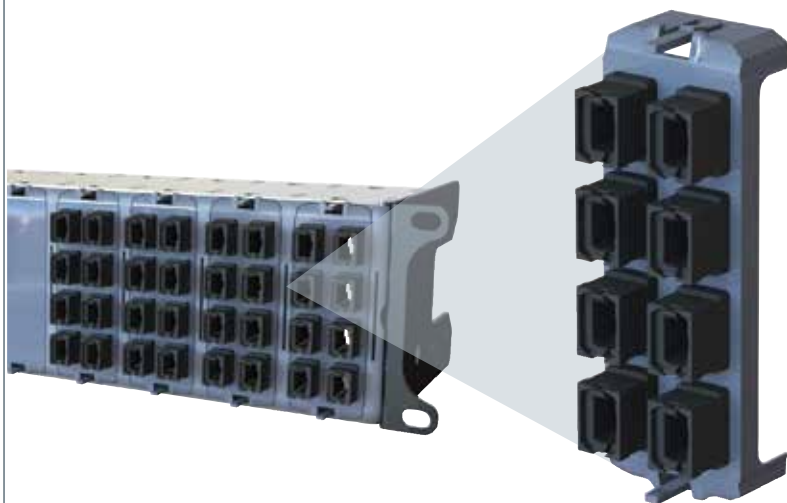
UHD	Fibre Count	End A Module Interface	End B Interface	End B Style	Fibre Type	Cable Type	Jacket Type	Cable Length (m)
	12	LC	LC	Module MD	OS1/OS2 09	Loose Tube 900um LT	LSZH Leave Blank	xx
	24	SC	SC	Pre-term PR	OM1 62	Loose Tube 2mm LTR	PE PE	
		LC/APC	LC/APC	Open XX	OM2 50	Micro Cable 2mm MC	OFNR RI	
		SC/APC	SC/APC		OM3 OM3	Micro Cable 900um M9C	OFNP PL	
					OM4 OM4	Nano Cable 900um NC		
					G.657/A1 A1	Nano Cable 2mm NCR		

Example Part Number: UHD 12 LC LC MD 09 LT - 10

UH12LCLCMD09PRE10TB will configure assembly - LC Singlemode 12 fibre module to LC module loose tube LSZH cable at 10 meter.



FirstLight™ Ultra High Density MPO/MTP Adaptor Module



Description

MPO/MTP adaptor modules are used to interconnect MPO/MTP trunks, pigtails, patch cords or ruggedised MPO/MTP fanouts. MPO/MTP adaptor interface reduces rack space usage. Substituting MPO/MTP module with adaptor plate reduces amount of interconnections and improves power budget and network economics.

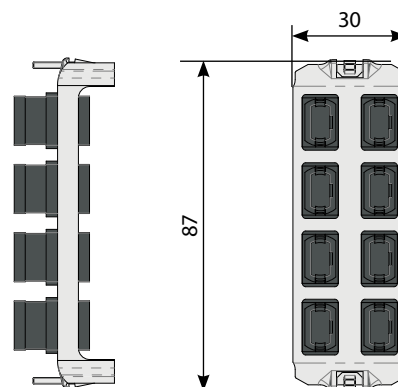
Features

- > MPO/MTP adaptor plates
- > Up to 8 MPO/MTP adaptors per plate
- > Key-Up Key-Down adaptors option (Standard ploarity A/C)
- > Key-Up Key-Up adaptors option (Polarity B)
- > 5 adaptor plates in 1U, 12 adaptor plates in 2U

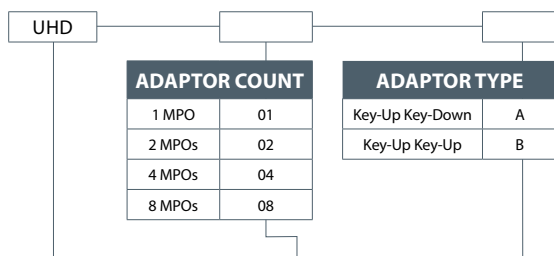
Applications

- > Data centre
- > Storage area network
- > Director switch cabling solution

Drawing



Part Number Generator



Example Part Number: **UHD 01 A**

UHD01B will configure an ultra high density single adaptor Key-Up Key-Down module

For the 1U and 2U FirstLight™
Ultra High Density System Chassis
See pages 69-72

FirstLight™ Ultra High Density 1U Chassis



Compatible with FirstLight™ Ultra High Density Modules

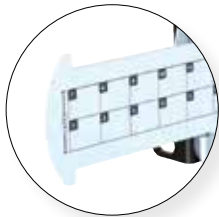
MPO/MTP Module
Pre-terminated Assembly Module
Splice Module

Front and rear module installation

Host up to 5 FirstLight™ Ultra High Density Modules

1U rear cable management accessory

Shallow depth
Direct access open chassis

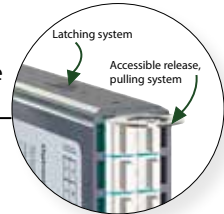


Slot for label card

1U front door accessory with port labelling

Integrated front side patch cord management accessory

2 position Module lock mechanism



FirstLight™ 1U Ultra High Density (FL UHD) Chassis is the part of the system for high density fibre optics infrastructure management in Data Centres, Telecommunication and

Enterprise environment. 1U chassis can house up to 5 x FL UHD Modules- design allows to scale up to 120x LC ports and 960 fibres using MPO/MTP Interface.

Features

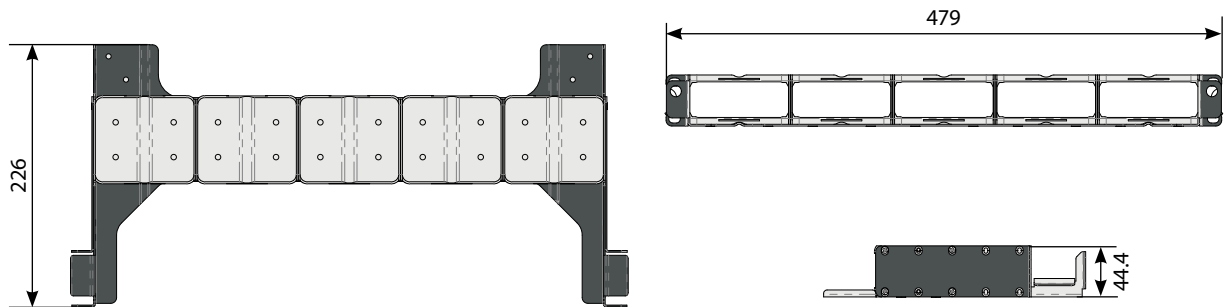
- > Ultra High Density
- > Up to 120 LC ports in 1U
- > Up to 960 fibres using MPO/MTP Interface
- > Compact size for installation inside shallow depth racks
- > Open chassis free access module installation
- > Secure easy access lock/release mechanism
- > Front and rear module access
- > Facilitated patch cord installation
- > Cable management accessories

Applications

- > Data centre storage area networks
- > Central office, POP
- > LAN
- > Enterprise campus



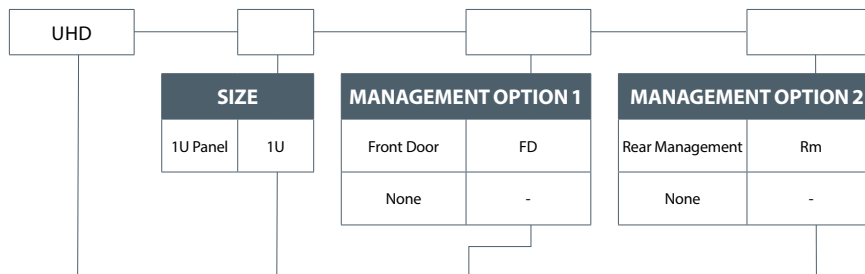
Drawing



Technical Specification

DESCRIPTION	VALUE
Height	44.4mm 1U
Width	479mm
Depth (Base including brackets)	226mm
Maximum Number of UHD Modules	5
Operating Temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2 , Reach/ SVHC
External Chassis - Side wall	
Material	ABS
Colour	RAL 7015
1U Side brackets and Rear Cable Management	
Material	Cold Rolled Steel
Material Thickness	1.5mm
Colour	RAL 9004
1U Front Door	
Material	Aluminium

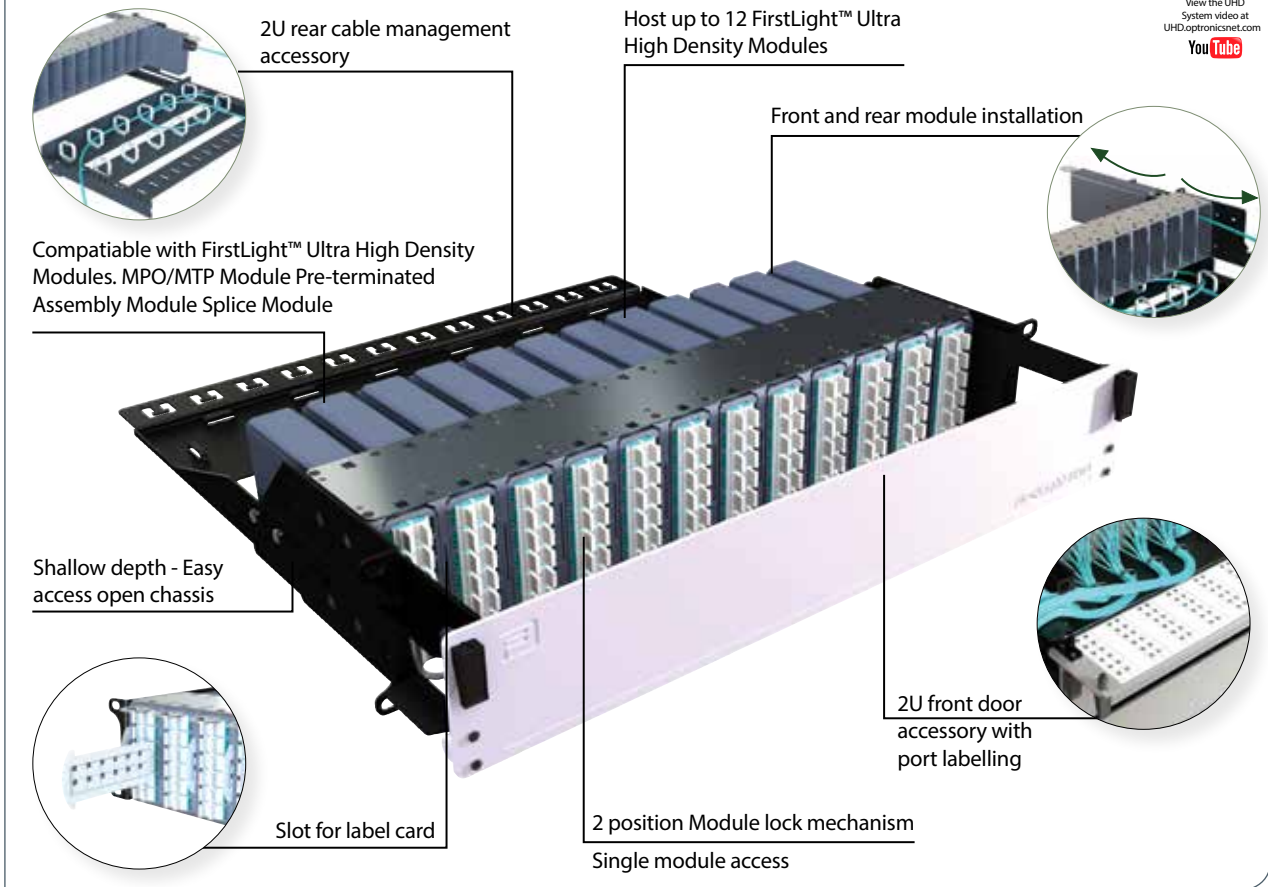
Part Number Generator



Example Part Number: **UHD 1U FD RM**
 UHD1UFD RM will configure an ultra high density 1U panel with front door and rear management



FirstLight™ Ultra High Density 2U Chassis



FirstLight™ 2U Ultra High Density (FL UHD) Chassis is the part of the system for high density fibre optics infrastructure management in Data Centers, Telecommunication and

Enterprise network environment. 1U chassis can house up to 12 x FL UHD Modules- design allows to scale up to 288x LC ports and 2304 fibres using MPO/MTP Interface.

Features

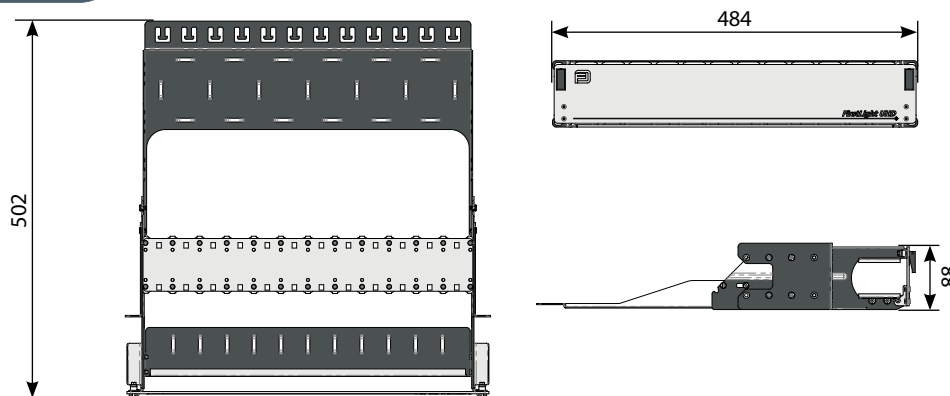
- > Ultra High Density
- > Up to 288 LC ports in 2U
- > Up to 2304 fibres using MPO/MTP Interface
- > Compact size for installation inside shallow depth racks
- > Open chassis free access module installation
- > Secure easy access lock/release mechanism
- > Front and rear module access
- > Facilitated patch cord installation
- > Cable management accessories

Applications

- > Data centre storage area networks
- > Central office, POP
- > LAN
- > Enterprise campus



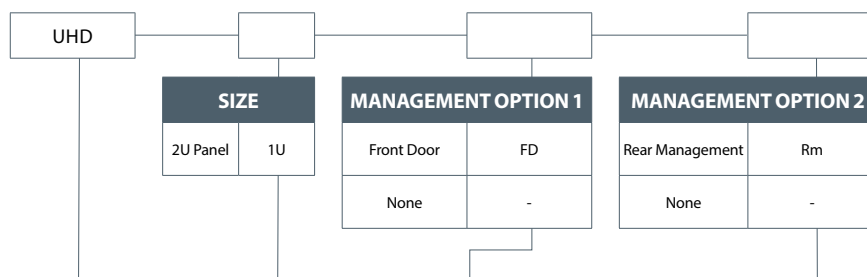
Drawing



Technical Specification

DESCRIPTION	VALUE
Height	889mm 2U
Width	484mm
Depth (Full Configuration)	502mm
Maximum Number of UHD Modules	12
Operating Temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach/SVHC
External Chassis - Side wall	
Material	ABS
Colour	RAL 7015
External Chassis Top and Bottom plate	
Material	Aluminium
Thickness	1.5mm
2U Side brackets and Rear Cable Management	
Material	Cold Rolled Steel
Material Thickness	1.5mm
Colour	RAL 9004
2U Front Door	
Material	Aluminium

Part Number Generator

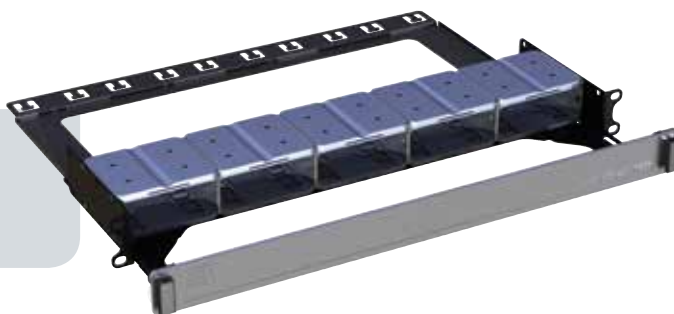


Example Part Number: **UHD 2U FD RM**
 UHD2UFD RM will configure an ultra high density 2U panel with front door and rear management

FirstLight™ Ultra High Density 1U Chassis System and Accessories

FirstLight™ Ultra High Density 5 Module
Chassis 19" 1U with Front Door and Rear
Management

Part Number: UHD1UFDRM



FirstLight™ Ultra High Density 5 Module
Chassis 19" 1U

Part Number: UHD1U



1U Front Door
Accessory

Part Number: UHDDR03



FirstLight™ Ultra
High Density 1U
Front Management Bar

Part Number: 1UCABLEBAR01



2U Door Mounting
Bracket

Part Number: DDM03



1U Rear
Management
Bar Accessory

Part Number: UHDRM1U03



FirstLight™ Ultra
High Density Blank Module

Part Number: UHDBL01



FirstLight™ Ultra High Density 2U Chassis System and Accessories

FirstLight™ Ultra High Density 12 Module Chassis 19" 2U with Front Door and Rear Management

Part Number: UHD2UFDRM



FirstLight™ Ultra High Density 12 Module Chassis 19" 2U

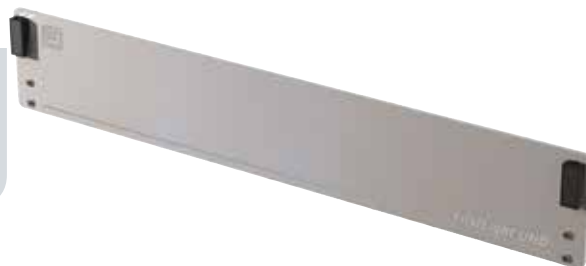
Part Number: UHD2U



2U Front Door Accessory side brackets included only when purchased without a chassis

Part Number: UHDDR01

Requires DDM03



2U Rear Management Bar Accessory side brackets included only when purchased without a chassis

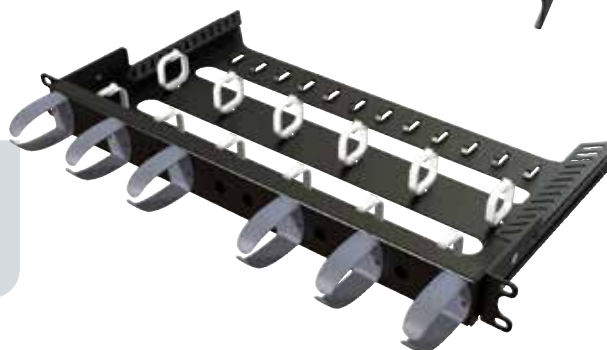
Part Number: UHDIM2U03

Requires DDM03



FirstLight™ Ultra High Density 1U Sliding Management Tray

Part Number: SLM1U03



Optical Fibre Management

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Adaptor Plate Modules

	MTP L08 (8 port/Adaptors) L08MTP08/Z		LC MULTIMODE DUPLEX L01 (8 ports/Adaptors) L01LCM08/Z Adaptor only Part No. LCDPXBEIGE
	SC MULTIMODE SIMPLEX L01 (8 ports/Adaptors) L01SCM08/Z Adaptor only Part No. SCUSPHBRBEIGE		LC SINGLEMODE DUPLEX L01 (8 ports/Adaptors) L01LCS08/Z Adaptor only Part No. LCDPXBLUE
	SC SINGLEMODE SIMPLEX L01 (8 ports/Adaptors) L01SCS08/Z Adaptor only Part No. SCUSZR02		LC-APC DUPLEX L01 (8 ports/Adaptors) L01LCA08/Z Adaptor only Part No. LCAPCUDGREEN
	SC-APC SINGLEMODE SIMPLEX L01 (8 ports/Adaptors) L01SCA08/Z Adaptor only Part No. SCAPCUGREEN		LC QUAD MULTIMODE L03 (6 ports/Adaptors) L03LQM06/Z Adaptor only Part No. LCQUADBEIGE
	SC MULTIMODE DUPLEX L03 (6 ports/Adaptors) L03SCM06/Z Adaptor only Part No. SCUDPHBRBEIGE		LC QUAD SINGLEMODE L03 (6 ports/Adaptors) L03LQS06/Z Adaptor only Part No. LCQUADBLUE
	SC SINGLEMODE DUPLEX L03 (6 ports/Adaptors) L03SCS06/Z Adaptor only Part No. SCUDZR02BLUE		MJ L01 (8 ports/Adaptors) L01MTM08/Z Adaptor only Part No. MJUNITER
	SC-APC SINGLEMODE DUPLEX L03 (6 port/Adaptors) L03SCA06/Z Adaptor only Part No. SCAPCUDGREEN		E2000 MULTIMODE L01 (8 port/Adaptors) L01E2M08/Z Adaptor only Part No. E2UBEIGE
	ST MULTIMODE L02 (8 port/Adaptors) L02STM08/Z Adaptor only Part No. STUPHBR		E2000 SINGLEMODE L01 (8 port/Adaptors) L01E2S08/Z Adaptor only Part No. E2UBLUE
	ST SINGLEMODE L02 (8 port/Adaptors) L02STS08/Z Adaptor only Part No. STUZR02		E2000-APC SINGLEMODE L01 (8 port/Adaptors) L01E2A08/Z Adaptor only Part No. E2APCUGREEN
	FC SINGLEMODE L02 (8 port/Adaptors) L02FCS08/Z Adaptor only Part No. FCUPHBR-DD		BLANK PLATE L04/Z
	FC MULTIMODE L02 (8 port/Adaptors) L02FCM08/Z Adaptor only Part No. FCUZR02-DD	Also available in grey Adaptor plates are also available in grey, to order please add "G" to the part number for the correspondingly back version (above) E.G. L01LCM08/G/Z	
	FC-APC SINGLEMODE L02 (8 port/Adaptors) L02FCA08/Z Adaptor only Part No. FCAPCUZR02-DD		



S13 1U 3 Slot High Density Chassis for use with MTP Cassette modules



1U Chassis
scaling up to
72 discrete fibres
Part Number: S13XXX00

Optronics offers an innovative, robust 1U sliding patch panel. This panel has been designed to accept up to 3 MTP cassettes within a 1U space. The ability to use a full array of adaptor types offers a flexible solution to the end user, enabling them to incorporate a multi functional panel which allow easy access

during installation or re-work with no disturbance of the existing cable or fibres. In addition to the array of adaptors the panel also offers multiple cable entry solutions, up to 6 standard cable entry points for, loose tube, tight buffer, steel tape armoured cable or pre-terminated assembly.

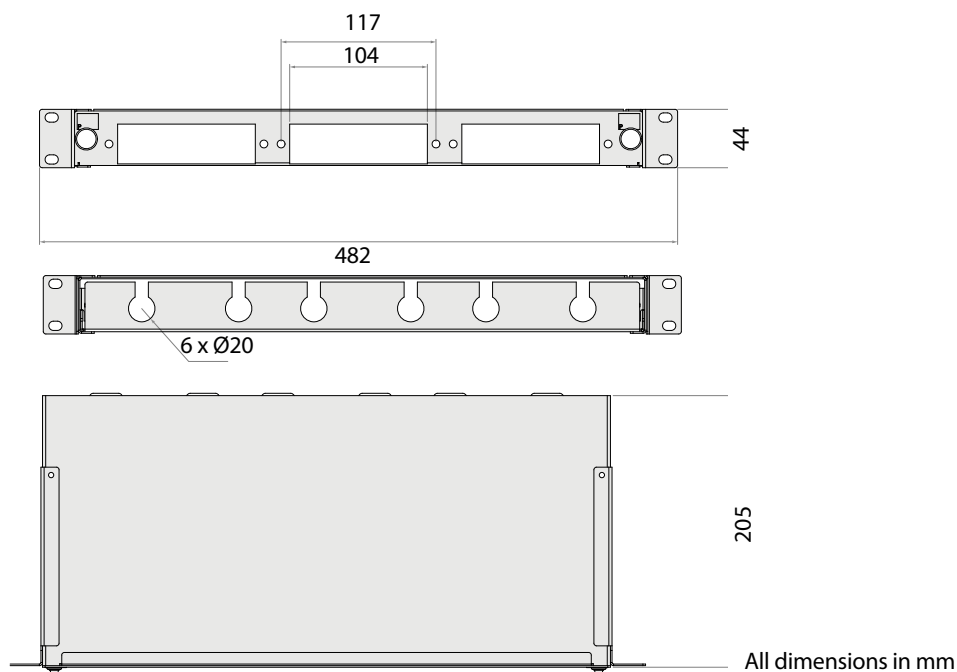
Features

- > Up to 3 LGX/MTP modules in 1U
- > Multiple adaptor options available
- > Individually labelled ports
- > 45° open working angle
- > Accepts loose tube, distribution and pre-terminated cables
- > REACH/SvHC and UL rated
- > Fits standard 19" cabinet

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Drawing



All dimensions in mm

Ordering Information

DESCRIPTION	PART NUMBER
1U 3 Port Modular Patch Panel for use with MTP Cassette Modules or Adaptor Plates	S13XXX00



FIBRE MANAGEMENT | 3U 14 SLOT HIGH DENSITY CHASSIS

3U 14 Slot High Density Chassis for use with MTP Cassette modules & LGX Style Splice Cassettes



3U Chassis
scaling up to
336 discrete fibres
Part Number: LGXCHASSIS

Optronics offers this innovative and robust, high density 3U chassis, designed to accept up to 14 LGX style cassettes. The ability to use a full array of adaptor types offers a flexible solution to the end user, enabling them to incorporate a multi functional chassis which allows easy access during installation or re-work with no disturbance of the existing cable or fibres. In addition to the array

of adaptors, the chassis also offers multiple cable entry solutions including loose tube cable connecting to 14 individual extended cassettes to allow standard splicing or 14 LGX style modules for pre-terminated solutions, also MTP trunk cables connected to 14 individual MTP cassettes with up to 24 fibres in each. This flexibility makes this chassis one of the most flexible on the market.

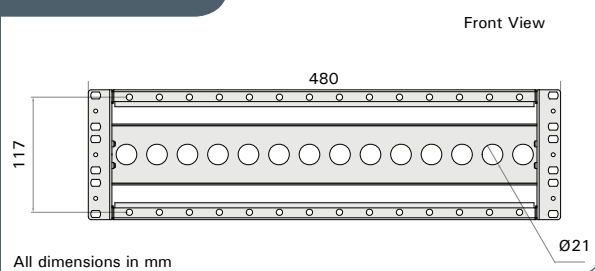
Features

- > Up to 14 x 24 fibre MTP cassettes
- > Up to 14 LGX style adaptor plates/cassettes
- > Multiple adaptor options available
- > Fully integrated fibre management
- > Splicing option available
- > Flat pack for easy shipment
- > Patch cord exit retrofit cable management available
- > 30mm bend radius maintained throughout
- > Accepts loose tube, distribution cable and MTP trunk cable
- > REACH/SvHC and UL rated
- > Fits standard 19" cabinet
- > Rear cable management bar as standard

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Drawing



Technical Specification

3U 14 SLOT HIGH DENSITY CHASSIS	
U Size	3U (133.2mm)
Width	480mm
Depth	335mm
Net weight	2.76 kgs
Packaged weight	3.24 kgs
Packaged dimensions (WxLxH)	490mm x 110mm x 240mm
IP rating	N/A
Suitable for Adaptor type	LGX / MTP Cassettes
Number of Module Positions	14
Mounting Adjustment range	64mm
Material	Cold-rolled steel
Material thickness	1.5mm
Material coating	Powder coating
Colour	RAL 9004 / RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

Ordering Information

DESCRIPTION	PART NUMBER
3U 14 Port Modular Patch Panel for use with MTP Cassette Modules	LGXCHASSIS/Z

LGX Style Splice Cassette



This cassette offers a robust case to house the LGX modules used in patch panels with LGX footprints and the LGX 3U chassis. The case allows for up to 24 splices from pigtails to incoming fibre from a cable,

it also includes a hole for a cable entry and cable gland plus strain tie locations as standard. The interchangeable LGX modules provide a flexible solution to the user allowing a range of different adaptor types.

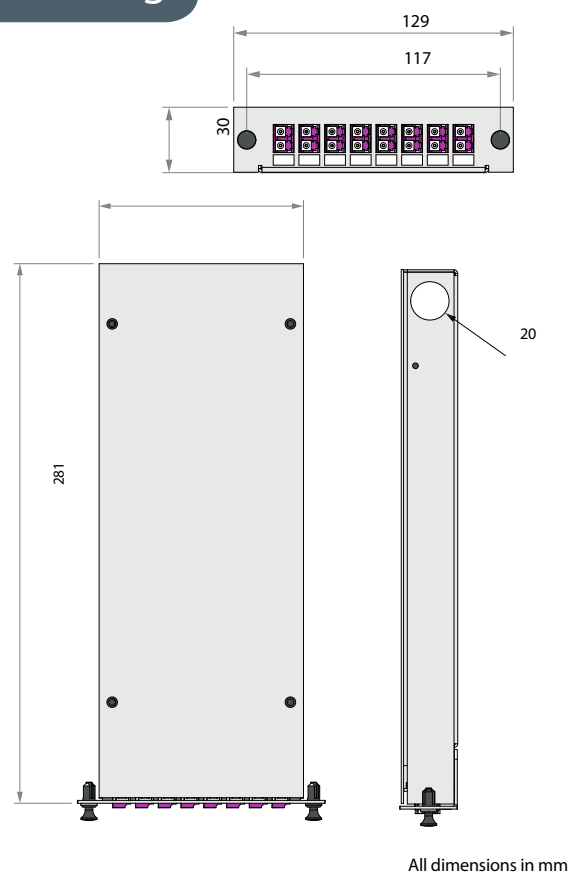
Features

- > Interchangeable LGX modules
- > Lightweight aluminium design
- > Multiple cable entry points
- > Strain tie Locations
- > Screw in LGX plates offer flexible solution
- > Wide range of adaptor types
- > Bend protected at all time

Technical Specification

LGX STYLE SPLICE CASSETTE	
Height	30mm
Width	107mm
Length	280mm
Net weight	270g
Packaged weight	370g
Packaged dimensions (WxLxH)	34mm x 166mm x 312mm
Cable Entry 13mm	1
Cable Entry 20mm	1
Material	Sheet Aluminium
Material thickness	1.2mm
Material finish	Electrostatic Powder coating
Colour	Black RAL 9004
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

Drawing



LGX Style Splice Cassette Variations

	MTP L08 (8 port/Adaptors) L08MTP08/CAS/Z		LC MULTIMODE DUPLEX L01 (8 ports/Adaptors) L01LCM08/CAS/Z Adaptor only Part No. LCDPXBEIGE
	SC MULTIMODE SIMPLEX L01 (8 ports/Adaptors) L01SCM08/CAS/Z Adaptor only Part No. SCUSPHBRBEIGE		LC SINGLEMODE DUPLEX L01 (8 ports/Adaptors) L01LCS08/CAS/Z Adaptor only Part No. LCDPXBLUE
	SC SINGLEMODE SIMPLEX L01 (8 ports/Adaptors) L01SCS08/CAS/Z Adaptor only Part No. SCUSZR02		LC-APC DUPLEX L01 (8 ports/Adaptors) L01LCA08/CAS/Z Adaptor only Part No. LCAPCUDGREEN
	SC-APC SINGLEMODE SIMPLEX L01 (8 ports/Adaptors) L01SCA08/CAS/Z Adaptor only Part No. SCAPCUGREEN		LC QUAD MULTIMODE L03 (6 ports/Adaptors) L03LQM06/CAS/Z Adaptor only Part No. LCQUADBEIGE
	SC MULTIMODE DUPLEX L03 (6 ports/Adaptors) L03SCM06/CAS/Z Adaptor only Part No. SCUDPHBRBEIGE		LC QUAD SINGLEMODE L03 (6 ports/Adaptors) L03LQS06/CAS/Z Adaptor only Part No. LCQUADBLUE
	SC SINGLEMODE DUPLEX L03 (6 ports/Adaptors) L03SCS06/CAS/Z Adaptor only Part No. SCUDZR02BLUE		MJ L01 (8 port/Adaptors) L01MTM08/CAS/Z Adaptor only Part No. MJUNITER
	SC-APC SINGLEMODE DUPLEX L03 (6 port/Adaptors) L03SCA06/CAS/Z Adaptor only Part No. SCAPCUDGREEN		E2000 MULTIMODE L01 (8 port/Adaptors) L01E2M08/CAS/Z Adaptor only Part No. E2UBEIGE
	ST MULTIMODE L02 (8 port/Adaptors) L02STM08/CAS/Z Adaptor only Part No. STUPHBR		E2000 SINGLEMODE L01 (8 port/Adaptors) L01E2S08/CAS/Z Adaptor only Part No. E2UBLUE
	ST SINGLEMODE L02 (8 port/Adaptors) L02STS08/CAS/Z Adaptor only Part No. STUZR02		E2000-APC SINGLEMODE L01 (8 port/Adaptors) L01E2A08/CAS/Z Adaptor only Part No. E2APCUGREEN
	FC SINGLEMODE L02 (8 port/Adaptors) L02FCS08/CAS/Z Adaptor only Part No. FCUPHBR-DD		BLANK PLATE L04/CAS/Z
	FC MULTIMODE L02 (8 port/Adaptors) L02FCM08/CAS/Z Adaptor only Part No. FCUZR02-DD	Also available in grey LGX Style adaptor modules are also available in grey, to order please add "/G" to the part number for the correspondingly back version (above) E.G. L01LCM08/G/Z	
	FC-APC SINGLEMODE L02 (8 port/Adaptors) L02FCA08/CAS/Z Adaptor only Part No. FCAPCUZR02-DD		



MTP Cassette Module



MTP Cassette Modules provide secure transition between MTP and LC or SC discrete connectors. They are used to interconnect MTP backbones with LC or SC patching.

Modular system allows for rapid deployment of high density data centre infrastructure as well as improved troubleshooting and re-configuration during moves, adds and changes. Cassettes

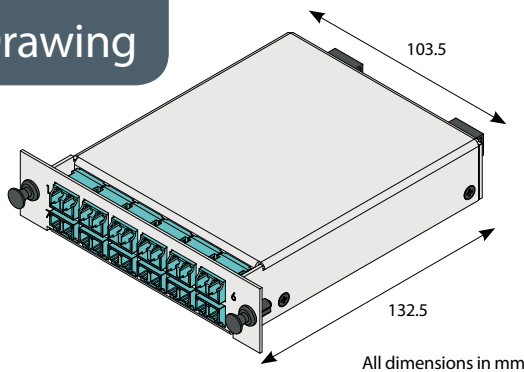
can be mounted in 1U or 3U 19" multislots chassis.

MTP Cassettes contain factory controlled and tested MTP-LC fan outs to deliver optical performance and reliability. Premium versions of low loss MTP Elite and LC or SC connectors are offered featuring low insertion loss for demanding power budget high speed networks.

Features

- > MTP (US Conec) brand MPO standard compliant multifibre connector
- > LC (SFF Data Centre standard), SC discrete interface
- > OS1/2, OM3, OM4 fibre grades (OM1 and OM2 available)
- > 12 and 24 fibre versions - 12 LC (Duplex) / SC (Simplex) adaptors
- > Polarity A (standard), B or C
- > Factory terminated and tested
- > High performance zirconia sleeve adaptors

Drawing



Benefits

- > Rapid Deployment - factory terminated modular system saves installation and re-configuration time during moves, adds and changes
- > MTP Interface - MTP US Conec brand components feature superior optical and mechanical properties
- > Optimised Performance - low loss MTP Elite, discrete Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment
- > High Density - 12 or 24 fibre cassettes can be mounted in 1U scaling up to 72 or in 3U scaling up to 336 discrete connectors
- > Reliability - 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards

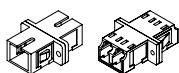
Applications

- > Data Centre Infrastructure
- > Storage Area Network- Fibre Channel
- > Parallel Optics

Ordering Information

24 POSITION SC/LC MPO/MTP CASSETTE MODULE

PART NO.		FIBRE TYPE (ADD TO PART NO. TO SPECIFY)				
		OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
LC to Standard Male MPO/MTP	MPOM24LCCASS	09	62	50	OM3	OM4
LC to Low Loss Male MPO/MTP	MPOEM24LCCASS	09	62	50	OM3	OM4
SC to Standard Male MPO/MTP	MPOM24SCCASS	09	62	50	OM3	OM4
SC to Low Loss Male MPO/MTP	MPOEM24SCCASS	09	62	50	OM3	OM4



NOTE: The Cassettes are supplied as standard as Polarity A/C, Add B1 or B2 to the end of the Part No. to specify polarity B



FIBRE MANAGEMENT | HIGH DENSITY ULTRASLIM PANEL

UltraSlim Panel



MTP UltraSlim Quick Panels provide secure transitions between MTP and LC or SC discreet connector interfaces. They are used to interface MTP backbones with LC or SC patching and active equipment connections.

The pre-populated panel allows rapid deployment of high density data centre infrastructure as well as improved trouble shooting and re-configuration during moves, adds and changes.

Features

- > Available in OS1/2, OM1, OM2, OM3 and OM4 fibre grades.
- > Up to 8 MTP (US Conec) brand MPO standard compliant multifibre connector rear entry ports
- > Front LC (SFF Data Centre standard), SC discreet interface
- > Up to 48 (LC DX) or 96 (LC Quad) fibres panel capacity
- > Factory terminated and tested

Benefits

- > Rapid Deployment- factory terminated modular system saves installation and re-configuration time during moves, adds and changes
- > Easy Installation- open rear entry MTP ports guarantee easy cabling access and facilitate connection to MTP backbone trunks system
- > Compact 1U Size- short depth make panel compatible with low dimension copper racking system
- > MTP Interface- MTP US Conec brand components feature superior optical and mechanical properties

The shallow depth of the UltraSlim Panel makes it suitable for copper racking systems.

The MTP UltraSlim Panels contain factory controlled and tested MTP-LC/SC fan outs to deliver optical performance and reliability. Low loss MTP Elite and LC/SC Premium versions are offered featuring significantly improved low insertion losses for demanding low power budget high speed networks.

Applications

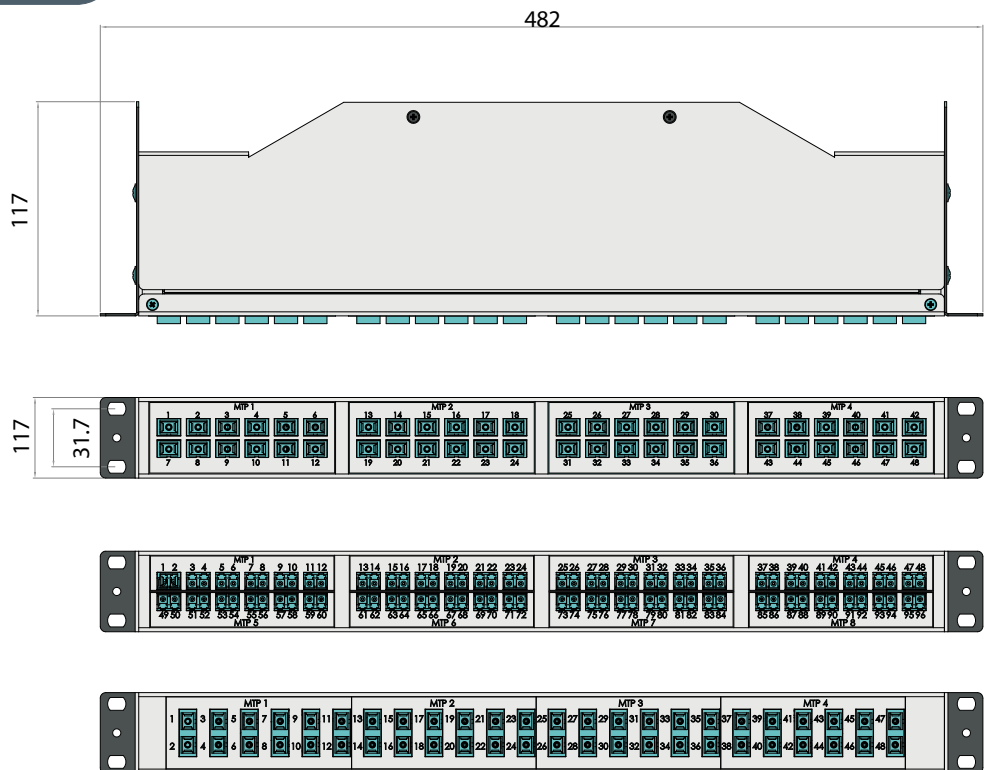
- > Data communication applications
- > Data Centre infrastructure
- > Storage Area Network- Fibre Channel
- > Emerging 40 and 100Gbps Protocols

Technical Specification

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Adaptors	MPO/MTP (IEC-61754-7 & EIA/TIA-604-5) Body Colour: Black Polarity: Keyway up-Keyway down, Body Colour: Grey Polarity: Keyway up-Keyway up LC duplex, SC Simplex, SC duplex Body Colour: Beige (MM), Aqua (MM), Blue (SM/UPC), Green (SM/APC)
Connectors	MPO/MTP (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black Body Sleeve Colour: MM (Beige), MM Low Loss (Aqua), SM (Green), SM Low Loss (Yellow) LC (IEC 61754-20), SC (61754-4) Boot Colour: White (MM and SM/UPC), Green (SM /APC) Housing Colour: Beige (MM), Blue (SM), Green (SM/APC)
Operating Temperature	-20°C ~ +60°C
Storage Temperature	-40°C ~ +70°C
Standard Compliance	TIA/EIA-568-C.3 and ISO/IEC 11801 EC-61754-7 & EIA/TIA-604-5 REACH / SvHC IEC-60793



Drawing

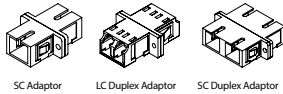


All dimensions in mm

Ordering Information

48 POSITION SC/LC MPO/MTP ULTRASLIM PANEL

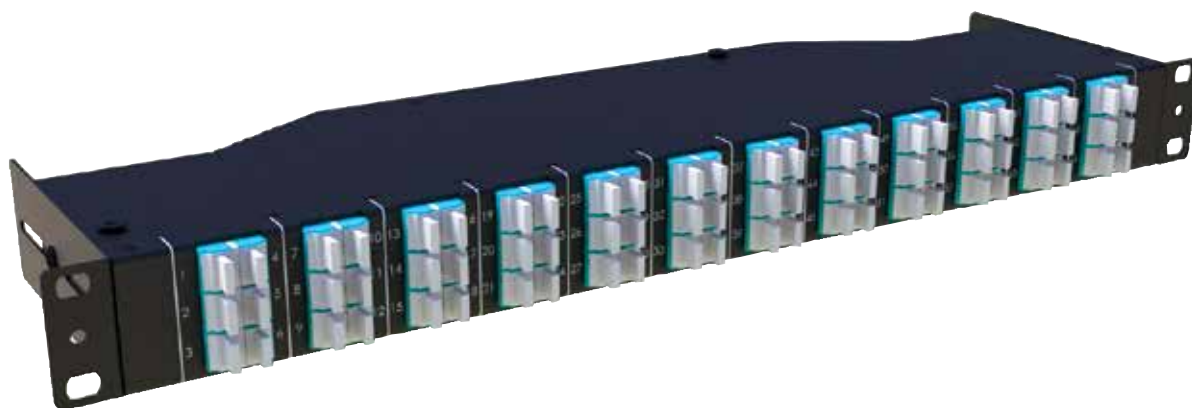
		FIBRE TYPE (ADD TO PART NO. TO SPECIFY)						
		PART NO.	OS1/OS2	OM1	OM2	OM3	OM4	FIBRE COUNT
			9/125	62.5/125	50/125	50/125	50/125	
			SINGLEMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	
48 LC Duplex Adaptors to 4 x 24 Fibre Male MPO/MTP Adaptors		USLCDMM	09	62	50	OM3	OM4	96
48 LC APC Duplex Adaptors to 4 x 24 Fibre Male MPO/MTP Adaptors		USLCAMM	09	62	50	OM3	OM4	96
48 SC Simplex Adaptors to 4 x 12 Fibre Male MPO/MTP Adaptors		USSCSMM	09	62	50	OM3	OM4	48
48 SC APC Simplex Adaptors to 4 x 12 Fibre Male MPO/MTP Adaptors		USSCASMM	09	62	50	OM3	OM4	48
48 SC Duplex Adaptors to 4 x 12 Fibre Male MPO/MTP Adaptors		USSCDMM	09	62	50	OM3	OM4	48
48 SC APC Duplex Adaptors to 4 x 12 Fibre Male MPO/MTP Adaptors		USSCADMM	09	62	50	OM3	OM4	48



NOTE: The Cassettes are supplied as standard as Polarity A/C, Add B1 or B2 to the end of the Part No. to specify polarity B



144 Fibre FirstLight™ Ultra High Density UltraSlim Panel



The FirstLight™ Ultra High Density UltraSlim Panel is specially designed to accommodate high density cabling in high end Data Centre and Telecommunication central office environment. The shallow depth of the FirstLight™ UHD UltraSlim Panel makes it suitable for copper racking systems or Telecommunications ODFs.

Design accommodates extraction free shuttered LC QUAD adaptors allowing for smooth patching and easy LC port

access. The 144 fibre MPO/MTP UltraSlim Panel contains factory controlled and tested MPO/MTP - LC to deliver optical performance and reliability. Low loss MPO/MTP Elite® and LC Premium versions are offered featuring significantly improved low insertion losses for demanding low power budget, high speed networks.

Front and rear cable management facilitates provides a neat and tidy solution for managing incoming and exiting cables.

Features

- > Available in OS1/2 & OM3/OM4 fibre grades
- > Up to 12 MPO/MTP standard connectors
- > Designed around our new LC square quad adaptor
- > Compliant multifibre connector rear entry ports
- > Up to 144 fibres
- > Factory Terminated and Tested
- > Only 11.7cm deep

Applications

- > Data communication applications
- > Data Centre infrastructure
- > Storage Area Network - Fibre Channel
- > Emerging 40 and 100Gbps Protocols compatible

Standards Compliance

- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > EC-61754-7 & EIA/TIA-604-5
- > This product conforms to the materials requirements of RoHS2
- > REACH and SvHC
- > IEC-60793

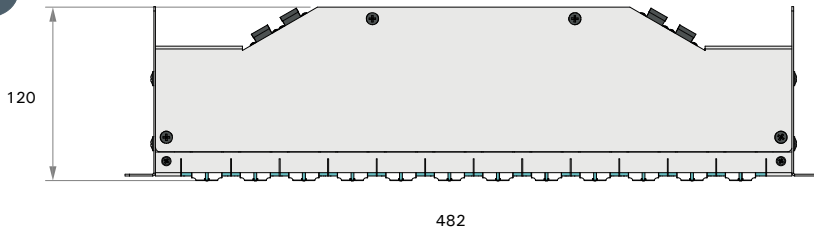
Benefits

- > **Ultra High Density** - 1U panel can scale up to 144 discrete LC connectors and up to 12 MPO/MTP rear interfaces
- > **Rapid Deployment** - Factory terminated modular system saves installation and reconfiguration time during moves, adds and changes.
- > **Easy Installation** - Open rear entry MPO/MTP ports guarantee easy cabling access and facilitates connection to MPO/MTP backbone trunks system.
- > **Compact 1U Size** - 11.7cm depth saves space and makes the panel compatible with copper racking system.
- > **MPO/MTP Interface** - MPO/MTP components feature superior optical and mechanical properties.
- > **Optimised Performance** - Low loss MPO/MTP Elite®, discrete premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget, high speed network environments.
- > **Reliability - 100% Tested** - Combination of high quality components and manufacturing quality control guarantees product to the highest standards.

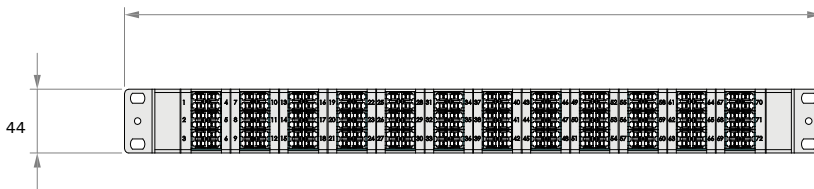


Drawing

Top View



Front View



All dimensions in mm

Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS	CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
Multimode				Singlemode			
MPO/MTP Elite®	0.10dB	0.35dB	NA	MPO/MTP Elite®	0.10dB	0.35dB	>60dB
LC Premium	0.08dB	0.15dB	NA	LC Premium	0.12dB	0.15dB	>55/65dB*

*UPC/APC

Technical Specification

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM3, OM4 (ISO/IEC 60793)
Adaptors	MPO/MTP (IEC-61754-7 & EIA/TIA-604-5) Body Colour: Black - Polarity: Keyway up-Keyway down Body Colour: Grey - Polarity: Keyway up-Keyway up LC Quad Body Colour: Aqua (MM), Blue (SM/UPC), Green (SM/APC)
Connectors	MPO/MTP (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black Body Sleeve Colour: MM Elite® (Aqua), SM Elite® (Yellow) LC (IEC 61754-20) Boot Colour: White (MM and SM/UPC), Green (SM /APC) Housing Colour: Beige (MM), Blue (SM), Green (SM/APC)
Operating Temperature	-20 ~ +60°C
Storage Temperature	-40 ~ +70°C

Ordering Information

36 POSITION LC TO MPO/MTP ULTRASLIM PANEL

144 FIBRE ULTRASLIM QUICK PANEL	PART NO.
FL UHD Ultra Slim Panel Mm 120 Cores 30Xlc(Quad)-10 X MPO/MTP Low Loss Om3/Om4 19" Black Polarity A/C	USLCQMOMOM4120
FL UHD Ultra Slim Panel Mm 144 Cores 36Xlc(Quad)-12 X MPO/MTP Om3/Om4 Low Loss 19" Black Polarity A/C	USLCQMOMOM4144
FL UHD Ultra Slim Panel Sm 120 Cores 30Xlc/Apc(Quad)-10 X MPO/MTP Low Loss Sm 19" Black Polarity A/C	USLCAQMEM09120
FL UHD Ultra Slim Panel Sm 144 Cores 36Xlc/Apc(Quad)-12 X MPO/MTP Low Loss Sm 19" Black Polarity A/C	USLCAQMEM09144
FL UHD Ultra Slim Panel Sm 120 Cores 30Xlc(Quad)-10 X MPO/MTP Low Loss Sm 19" Black Polarity A/C	USLCQMEM09120
FL UHD Ultra Slim Panel Sm 144 Cores 36Xlc(Quad)-12 X MPO/MTP Low Loss Sm 19" Black Polarity A/C	USLCQMEM09144

NOTE: The Cassettes are supplied as standard as Polarity A/C, Add B1 or B2 to the end of the Part No. to specify polarity B



LC Quad Square Adaptor



P05 1U High Density Dual Tray Pivot Panel



An innovative, high density pivot panel designed to accept 24 SC simplex footprint adaptors within each of two ½ U trays. Each tray fully manages the incoming fibres, pigtails and splices. The panel can pivot by up to 116° to allow easy access during installation or re-work with no disturbance of the existing cable or fibres. Angled adaptors route exiting patch cords directly into

the cabinet side management. An optional bracket maintains the minimum bend radius in any direction. The panel can be assembled to pivot in either direction, facilitating cable entry from either side. Ventilation tracts allow free flow of air through the panel, providing highly efficient cooling for active equipment.

Features/Benefits

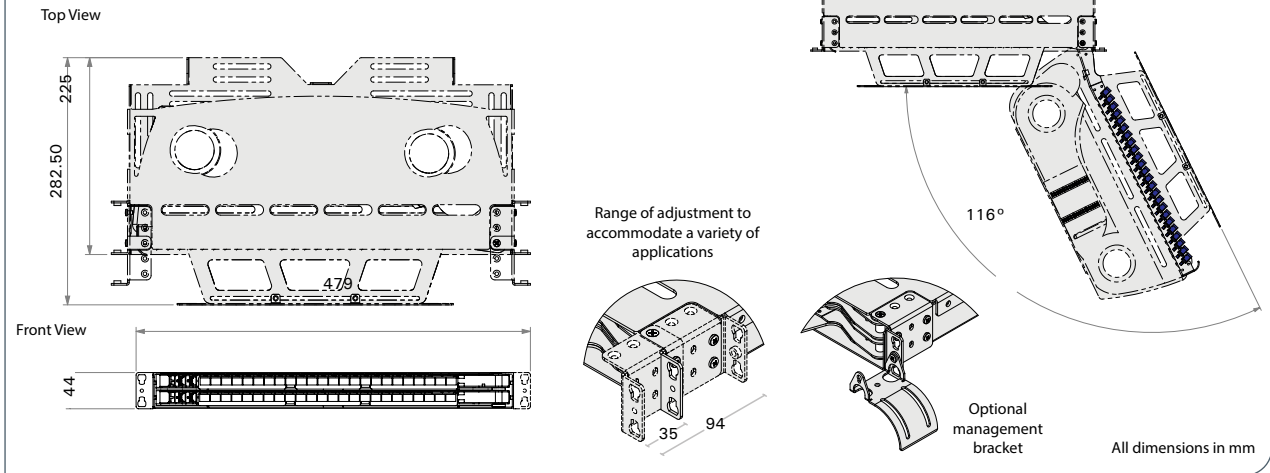
- > 48 SC simplex or LC duplex connections
- > Flangless angled adaptors for reduced bend losses
- > Fully integrated fibre management
- > 1U overall with ½U individual trays
- > High flow ventilation
- > Side cable entry
- > Retrofit cable management for patch cord exit available
- > 30mm bend radius maintained throughout
- > Single layer interleaved splicing area
- > Individually labelled ports
- > REACH/SvHC
- > Available in standard colours and standard packaging
- > Fits standard 19" rack with adjustable positioning
- > Adjustable position with respect to frame
- > Individual cable tie and strength member tie points in each tray
- > Individual PG13.5 gland entry point for each tray
- > Cable entry from both sides dependant upon direction of pivot

Technical Specification

1U DUAL TRAY PIVOTING PATCH PANEL	
Height	1U
Width	444mm
Depth	282.5mm
Net weight	3.0kg
IP rating	N/A
Suitable for Adaptor type	SC Simplex, LC Duplex
Number of Adaptor Positions	48
Mounting Adjustment range	64mm
Material	Cold-rolled steel
Material thickness	1.5mm
Material coating	Powder coating
Colour	Grey RAL7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

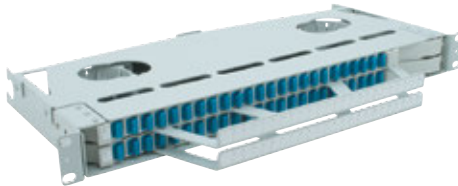


Drawing



Ordering Information

P05 - Adaptors Only



SC Adaptor (Flangeless)



E2000 Adaptor (Flangeless)



LC Duplex Adaptor (Flangeless)

P05 1U 48 POSITION SC/LC/E2000 DUAL TRAY PIVOTING PANEL

1U Dual tray pivoting patch panel suitable for up to 48 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 96 fibres.

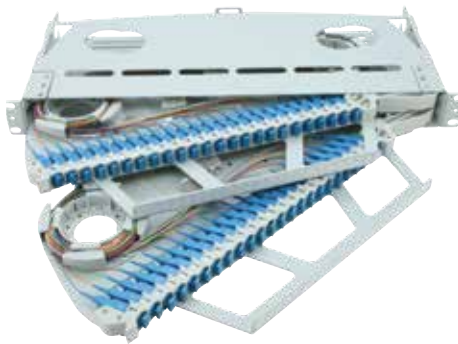
	PART NO.		PART NO.
SC Simplex Multimode	P05SCM48RH	E2000 APC Singlemode	P05E2A48RH
SC Simplex Singlemode	P05SCS48RH	LC Duplex Multimode Beige	P05LCM48RH
SC APC Simplex Singlemode	P05SCA48RH	LC Duplex Multimode Erika Violet	P05LCV48RH
E2000 Multimode	P05E2M48RH	LC Duplex Singlemode	P05LCS48RH
E2000 Singlemode	P05E2S48RH	LC APC Duplex Singlemode	P05LCA48RH

NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

P05 - Adaptors and Pigtails

P05 1U 48 POSITION SC/LC/E2000 DUAL TRAY PIVOTING PANEL LOADED

1U Dual tray pivoting patch panel suitable for up to 48 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 96 fibres.



SC Adaptor (Flangeless)



E2000 Adaptor (Flangeless)



LC Duplex Adaptor (Flangeless)



SC Pigtail



E2000 Pigtail



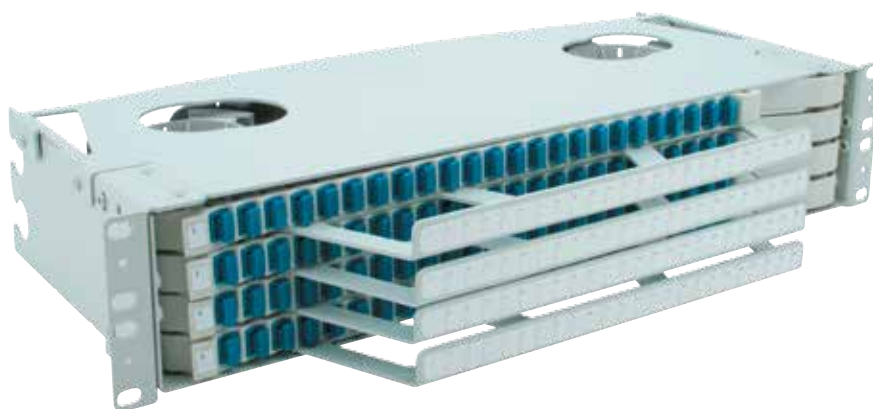
LC Duplex Pigtail

PART NO.	PIGTAILS				
	OS1/OS2 9/125 SM	OM1 62.5/125 MM	OM2 50/125 MM	OM3 50/125 MM	OM4 50/125 MM
SC Simplex Multimode	P05SCM48RH	-	P2	P3	P4
SC Simplex Singlemode	P05SCS48RH	P1	-	-	-
SC APC Simplex Singlemode	P05SCA48RH	P1	-	-	-
E2000 Multimode	P05E2M48RH	-	P2	P3	P4
E2000 Singlemode	P05E2S48RH	P1	-	-	-
E2000 APC Singlemode	P05E2A48RH	P1	-	-	-
LC Duplex Multimode Beige	P05LCM48RH	-	P2	P3	P4
LC Duplex Multimode Erika Violet	P05LCV48RH	-	-	-	P5
LC Duplex Singlemode	P05LCS48RH	P1	-	-	-
LC APC Duplex Singlemode	P05LCA48RH	P1	-	-	-

NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST



P06 High Density Pivot Panels



Optronics offers an innovative, high density pivot panel designed to accept 24 SC simplex footprint adaptors within each of the four ½U trays. Each tray fully manages the incoming fibres, pigtails and splices. The panel can pivot by up to 120° to allow easy access during installation or rework with no disturbance of the existing cable or fibres. Angled adaptors

route exiting patch cords directly into the cabinet side management. An optional bracket maintains the minimum bend radius in any direction. The panel can be assembled to pivot in either direction, facilitating cable entry from either side. Ventilation tracts allow free flow of air through the panel, providing highly efficient cooling for active equipment.

Features/Benefits

- > 96 SC simplex or LC duplex (pre-term only) connections
- > Flangless angled adaptors for reduced bend losses
- > Fully integrated fibre management
- > 2U overall with ½u individual trays
- > High flow ventilation
- > Side cable entry
- > 30mm bend radius maintained throughout
- > Single layer interleaved splicing area
- > Individually labelled ports
- > Accepts both loose tube and distribution cable
- > REACH/SvHC
- > Available in standard colours and standard packaging
- > Fits standard 19" or ETSI rack with adjustable positioning
- > Adjustable position with respect to frame
- > Individual cable tie and strength member tie points in each tray
- > Individual PG13.5 Gland entry point for each tray
- > Cable entry from both sides dependent upon direction of pivot

Applications

- > Telecom outside plant and ODF
- > Telecom CPE
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication ODF and distribution
- > Indoor and outdoor applications

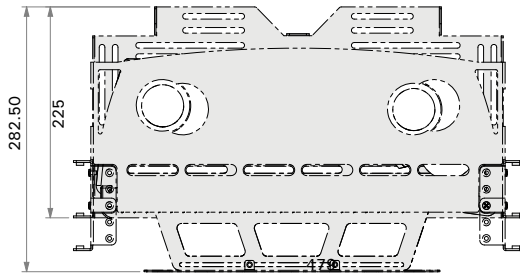
Technical Specification

DESCRIPTION	
Height	2U
Width	479mm
Depth	286.5mm
Net weight	5.8kg
IP rating	N/A
Suitable for adaptor type	SC Simplex, LC Duplex (Pre-term only)
Number of adaptor positions	96
Mounting Adjustment range	64mm
Material	Cold-rolled steel
Material thickness	1.5mm
Material coating	Powder coating
Colour	Grey RAL7035
Operating temperature	-40°C to +60°C
Compliant to	REACH/SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1



Drawing

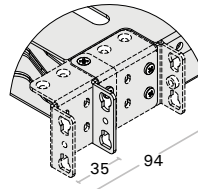
Top View



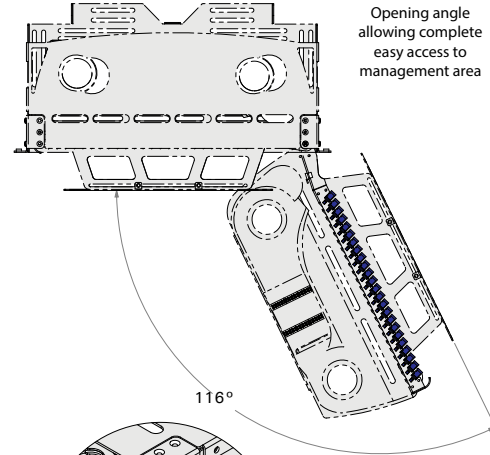
Front View



Range of adjustment to accommodate a variety of applications



Opening angle allowing complete easy access to management area



Optional management bracket

All dimensions in mm

Ordering Information

P06 - Adaptors Only



P06 1U 96 POSITION SC/LC/E2000 DUAL TRAY PIVOTING PANEL

1U Dual tray pivoting patch panel suitable for up to 96 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 192 fibres.

	PART NO.		PART NO.	
SC Simplex Multimode	P06SCM96RH	E2000 APC Singlemode	P06E2A96RH	
SC Simplex Singlemode	P06SCS96RH	LC Duplex Multimode Beige	P06LCM96RH	
SC APC Simplex Singlemode	P06SCA96RH	LC Duplex Multimode Erika Violet	P06LCV96RH	
E2000 Multimode	P06E2M96RH	LC Duplex Singlemode	P06LCS96RH	
E2000 Singlemode	P06E2S96RH	LC APC Duplex Singlemode	P06LCA96RH	

Note: Right Hand opening is supplied as standard Left Hand available on request



SC Adaptor (Flangeless)



E2000 Adaptor (Flangeless)



LC Duplex Adaptor (Flangeless)

P06 - Adaptors and Pigtails



P06 1U 96 POSITION SC/LC/E2000 DUAL TRAY PIVOTING PANEL LOADED

1U Dual tray pivoting patch panel suitable for up to 96 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 192 fibres.

PART NO.	PIGTAILS					
	OS1/OS2 9/125 SM	OM1 62.5/125 MM	OM2 50/125 MM	OM3 50/125 MM	OM4 50/125 MM	
SC Simplex Multimode	P06SCM96RH	-	P2	P3	P4	P5
SC Simplex Singlemode	P06SCS96RH	P1	-	-	-	-
SC APC Simplex Singlemode	P06SCA96RH	P1	-	-	-	-
E2000 Multimode	P06E2M96RH	-	P2	P3	P4	P5
E2000 Singlemode	P06E2S96RH	P1	-	-	-	-
E2000 APC Singlemode	P06E2A96RH	P1	-	-	-	-
LC Duplex Multimode Beige	P06LCM96RH	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	P06LCV96RH	-	-	-	-	P5
LC Duplex Singlemode	P06LCS96RH	P1	-	-	-	-
LC APC Duplex Singlemode	P06LCA96RH	P1	-	-	-	-

Note: Right Hand opening is supplied as standard Left Hand available on request



SC Adaptor (Flangeless)



E2000 Adaptor (Flangeless)



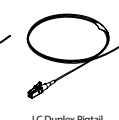
LC Duplex Adaptor (Flangeless)



SC Pigtail



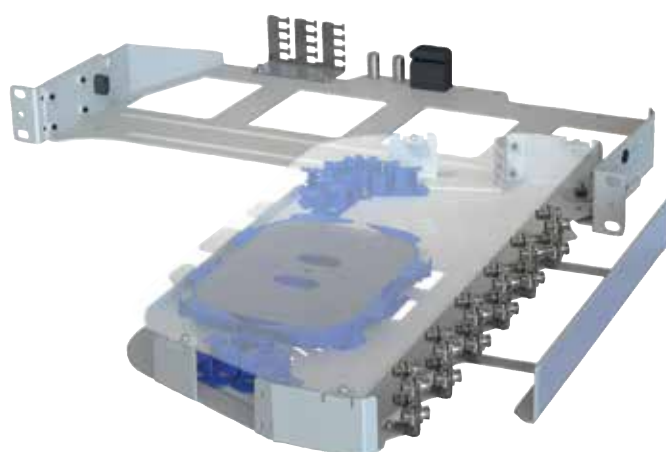
E2000 Pigtail



LC Duplex Pigtail



P07 1U Pivot Patch Panel



Adaptor plates available



FC/ST



SC simplex/LC duplex/ E2000

Optronics offers an innovative, robust 1U pivot patch panel. This panel has been designed to accept up to 48 fibres housed within a 1U space. With the ability to use a full array of adaptor types offering

a flexible solution to the end user, enabling them to incorporate a multifunctional panel which allows easy access during installation or re-work with no disturbance of the existing cable or fibres.

Features

- > Pivoting tray provides full access to adaptors and fibres whilst managing incoming cable length
- > Angled adaptor plates direct exiting patch cords to side management behind the removable front label plate
- > Holds up to 24 SC, LC, FC, ST or E2000 adaptors within 1U
- > Suitable for up to 4 incoming cables
- > The angled tray and minimal panel footprint increase airflow to aid equipment cooling
- > Tray can be assembled left or right handed, recessed or set forward to accommodate different racks
- > Tray secured by vibration dampening closing features
- > Splicing and fibre bend radius managed by the Optronics Speedway Splice Tray and Spool
- > Multiple adaptor options available
- > Accepts loose tube, distribution and pre-terminated cables
- > Shock and vibration tested
- > REACH/SvHC
- > Fits standard 19"

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor and outdoor applications

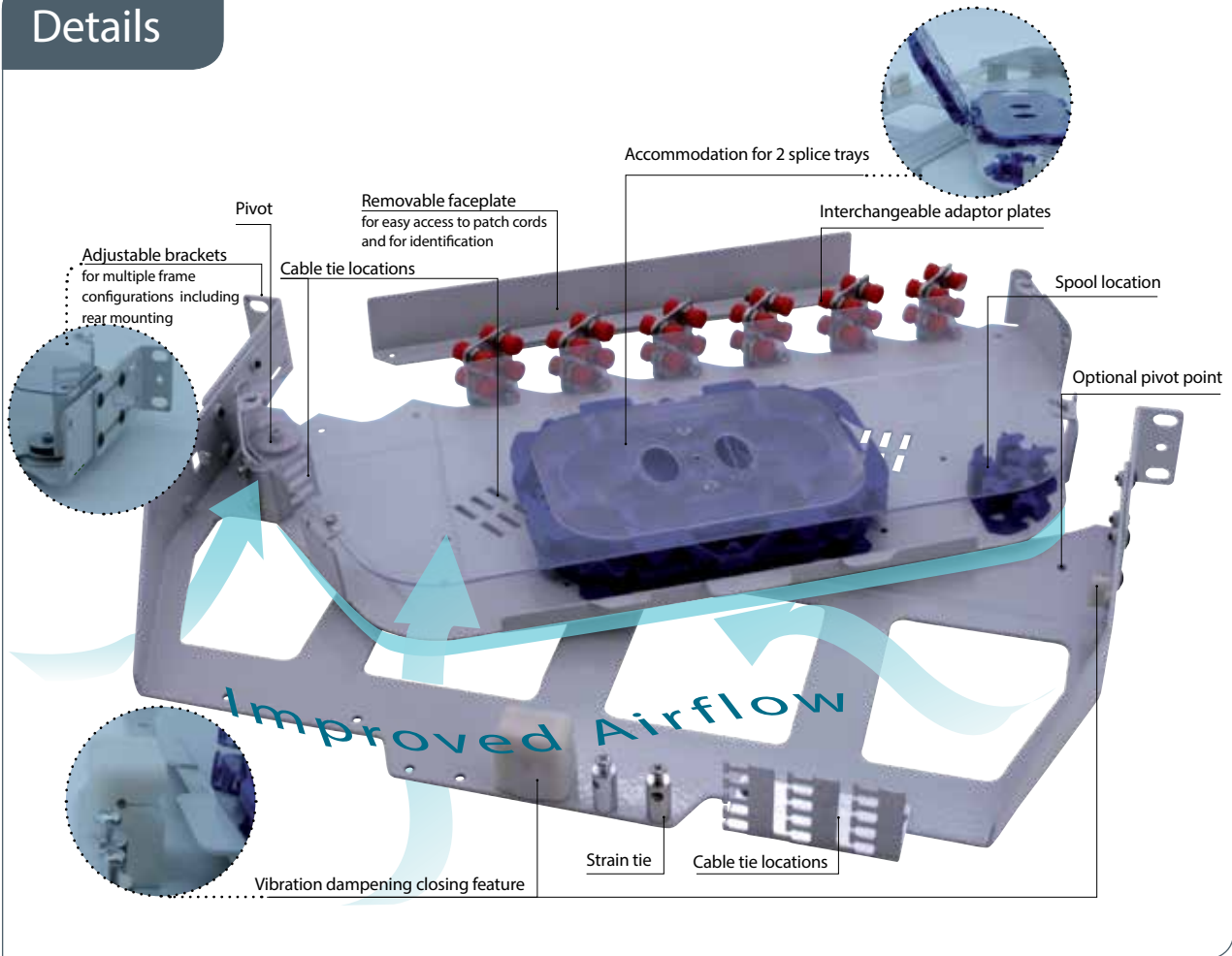
Technical Specification

PIVOT PANEL	
Height	1U (44.4mm)
Width	482mm
Depth	274mm
Net weight	2.5 kg
Packaged weight	3 kg
Packaged dimensions (WxLxD)	450mm x 55mm x 260mm
IP rating	IP20
Suitable for adaptor type	ST, FC, SC Simplex, LC Duplex, E2000
Number of fibres	24 to 48
Mounting Adjustment range	50mm
Material	Cold-rolled steel
Material thickness	Tray: 1.2mm - Frame: 2.0mm
Material coating	Powder coating
Colour	Grey RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

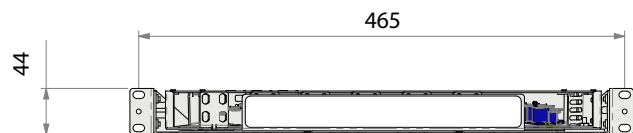
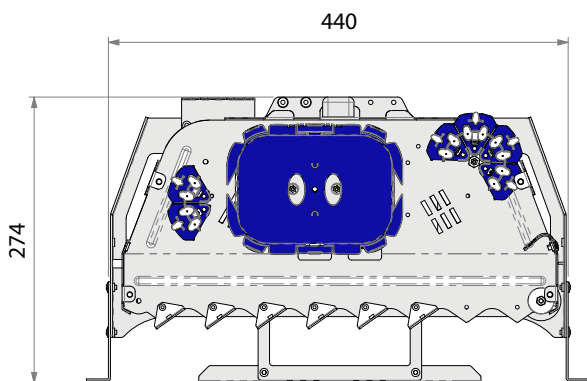
Adaptor Plates Available to Order as a Separate Item, Please Call for Details



Details



Drawing



All dimensions in mm



Ordering Information

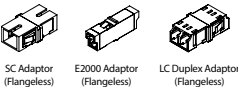
P07 Adaptors Only



P07 1U 24 POSITION SC/LC/E2000 PIVOTING PATCH PANEL

1U single tray pivoting patch panel suitable for up to 24 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	P07SCM24RH	E2000 APC Singlemode	P07E2A24RH
SC Simplex Singlemode	P07SCS24RH	LC Duplex Multimode Beige	P07LCM24RH
SC APC Simplex Singlemode	P07SCA24RH	LC Duplex Multimode Erika Violet	P07LCV24RH
E2000 Multimode	P07E2M24RH	LC Duplex Singlemode	P07LCS24RH
E2000 Singlemode	P07E2S24RH	LC APC Duplex Singlemode	P07LCA24RH



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

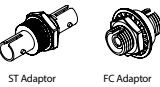
P07 Adaptors Only



P07 1U 24 POSITION ST/FC PIVOTING PATCH PANEL

1U single tray pivoting patch panel suitable for up to 24 ST or FC Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

PART NO.		PART NO.	
ST Singlemode	P07STS24RH	FC Multimode	P07FCM24RH
ST Multimode	P07STM24RH	FC APC Singlemode	P07FCA24RH
FC Singlemode	P07FCS24RH		



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

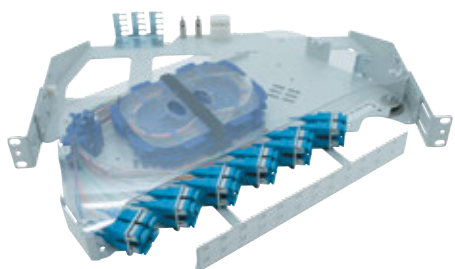


Ordering Information

P07 Adaptors and Pigtails

P07 1U 24 POSITION SC/LC/E2000 PIVOTING PATCH PANEL LOADED

1U single tray pivoting patch panel suitable for up to 24 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 48 fibres.



	PART NO.	PIGTAILS				
		OS1/OS2 9/125 SM	OM1 62.5/125 MM	OM2 50/125 MM	OM3 50/125 MM	OM4 50/125 MM
SC Simplex Multimode	P07SCM24RH	-	P2	P3	P4	P5
SC Simplex Singlemode	P07SCS24RH	P1	-	-	-	-
SC APC Simplex Singlemode	P07SCA24RH	P1	-	-	-	-
E2000 Multimode	P07E2M24RH	-	P2	P3	P4	P5
E2000 Singlemode	P07E2S24RH	P1	-	-	-	-
E2000 APC Singlemode	P07E2A24RH	P1	-	-	-	-
LC Duplex Multimode Beige	P07LCM24RH	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	P07LCV24RH	-	-	-	-	P5
LC Duplex Singlemode	P07LCS24RH	P1	-	-	-	-
LC APC Duplex Singlemode	P07LCA24RH	P1	-	-	-	-

NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

SC Adaptor
(Flangeless)E2000 Adaptor
(Flangeless)LC Duplex Adaptor
(Flangeless)

SC Pigtail



E2000 Pigtail

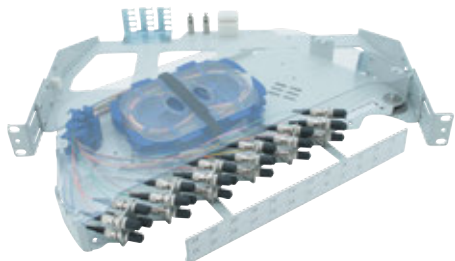


LC Duplex Pigtail

P07 Adaptors and Pigtails

P07 1U 24 POSITION ST/FC PIVOTING PATCH PANEL LOADED

1U single tray pivoting patch panel suitable for up to 24 ST or FC Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 24 fibres.



	PART NO.	PIGTAILS				
		OS1/OS2 9/125 SM	OM1 62.5/125 MM	OM2 50/125 MM	OM3 50/125 MM	OM4 50/125 MM
ST Singlemode	P07STS24RH	P1	-	-	-	-
ST Multimode	P07STM24RH	-	P2	P3	P4	P5
FC Singlemode	P07FCS24RH	P1	-	-	-	-
FC Multimode	P07FCM24RH	-	P2	P3	P4	P5
FC APC Singlemode	P07FCA24RH	P1	-	-	-	-

NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST



ST Adaptor



FC Adaptor



ST Pigtail



FC Pigtail



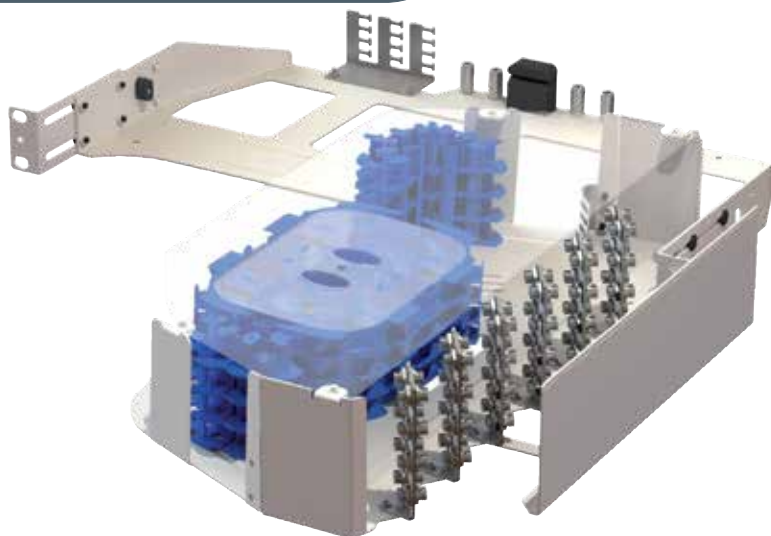
FOR MORE PATCH PANEL ACCESSORIES INCLUDING;

Splice Trays
Splice Protectors
Panel Blanks
Fibre Management

SEE THE ACCESSORIES SECTION STARTING ON PAGE 127



P08 2U Pivot Patch Panel



An innovative, robust 2U pivot patch panel. This panel has been designed to accept up to 96 fibres housed within a 2U space. With the ability to use a full array of adaptor types offering a flexible

solution to the end user, enabling them to incorporate a multi functional panel which allows easy access during installation or re-work with no disturbance of the existing cable or fibres.

Features

- > Pivoting tray gives full access to adaptors and fibres whilst managing incoming cable length
- > Angled adaptor plates direct patch cords to side management behind removable front label plate
- > Holds up to 48 SC, LC, FC, ST or E2000 adaptors in 2U
- > Suitable for up to 4 incoming cables
- > Angled tray and minimal panel foot print increase airflow to aid equipment cooling
- > Tray can be assembly left or right handed, and recessed or set forward to accommodate different racks
- > Tray secured by vibration dampening closing features
- > Splicing and fibre bend radius managed by Optronics's Speedway Splice Tray and Spool
- > Multiple adaptor options available
- > Accepts loose tube, distribution and pre terminated cables.
- > REACH/SvHC
- > Fits standard 19"

Applications

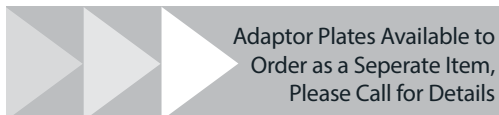
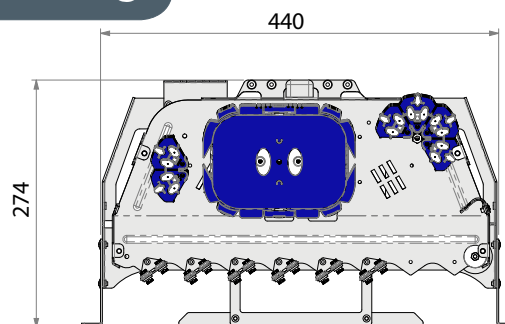
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Technical Specification

PIVOT PANEL	
Height	2U (88.8mm)
Width	482mm
Depth	274mm
Net weight	3kg
Packaged weight	3.5kg
Packaged dimensions (WxLxD)	450mm x 98mm x 260mm
IP rating	IP20
Suitable for adaptor type	ST,FC,SC Simplex,LC Duplex, E2000
Number of fibre	48 to 96
Mounting Adjustment range	50mm
Material	Cold- rolled steel
Material thickness	1.2mm
Material coating	Powder coating
Colour	Grey RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754,EN297-1
Compliant to	REACH/SvHC

Drawing

All dimensions in mm



Ordering Information

P08 Adaptors Only



2U
48 Position
GREY

P08 2U 48 POSITION SC/LC/E2000 PIVOTING PATCH PANEL

2U single tray pivoting patch panel suitable for up to 48 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 96 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	P08SCM48RH	E2000 APC Singlemode	P08E2A48RH
SC Simplex Singlemode	P08SCS48RH	LC Duplex Multimode Beige	P08LCM48RH
SC APC Simplex Singlemode	P08SCA48RH	LC Duplex Multimode Erika Violet	P08LCV48RH
E2000 Multimode	P08E2M48RH	LC Duplex Singlemode	P08LCS48RH
E2000 Singlemode	P08E2S48RH	LC APC Duplex Singlemode	P08LCA48RH



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

P08 Adaptors Only



2U
48 Position
GREY

P08 2U 48 POSITION ST/FC PIVOTING PATCH PANEL

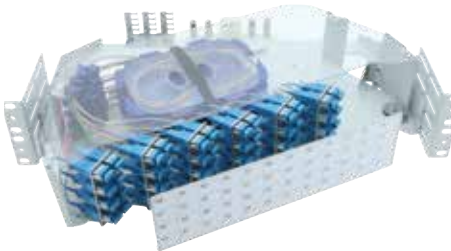
2U single tray pivoting patch panel suitable for up to 48 ST or FC Adaptors. The panel is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

PART NO.		PART NO.	
ST Singlemode	P08STS48RH	FC Multimode	P08FCM48RH
ST Multimode	P08STM48RH	FC APC Singlemode	P08FCA48RH
FC Singlemode	P08FCS48RH		



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

P08 Adaptors and Pigtails



2U
48 Position
GREY

P08 2U 48 POSITION SC/LC/E2000 PIVOTING PATCH PANEL LOADED

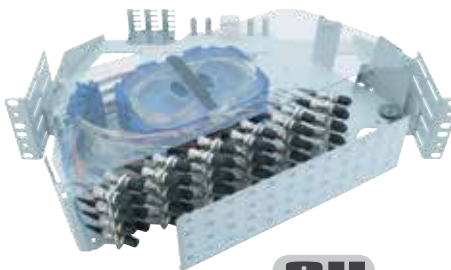
2U single tray pivoting patch panel suitable for up to 48 SC, LC or E2000 Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 96 fibres.

		PIGTAILS				
		PART NO.	OS1/OS2 9/125	OM1 62.5/125	OM2 50/125	OM3 50/125
SC Simplex Multimode	P08SCM48RH	-	-	P2	P3	P4
SC Simplex Singlemode	P08SCS48RH	P1	-	-	-	-
SC APC Simplex Singlemode	P08SCA48RH	P1	-	-	-	-
E2000 Multimode	P08E2M48RH	-	P2	P3	P4	P5
E2000 Singlemode	P08E2S48RH	P1	-	-	-	-
E2000 APC Singlemode	P08E2A48RH	P1	-	-	-	-
LC Duplex Multimode Beige	P08LCM48RH	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	P08LCV48RH	-	-	-	-	P5
LC Duplex Singlemode	P08LCS48RH	P1	-	-	-	-
LC APC Duplex Singlemode	P08LCA48RH	P1	-	-	-	-



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST

P08 Adaptors and Pigtails

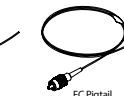


2U
48 Position
GREY

P08 2U 48 POSITION ST/FC PIVOTING PATCH PANEL LOADED

2U single tray pivoting patch panel suitable for up to 48 ST or FC Adaptors. The panel is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 48 fibres.

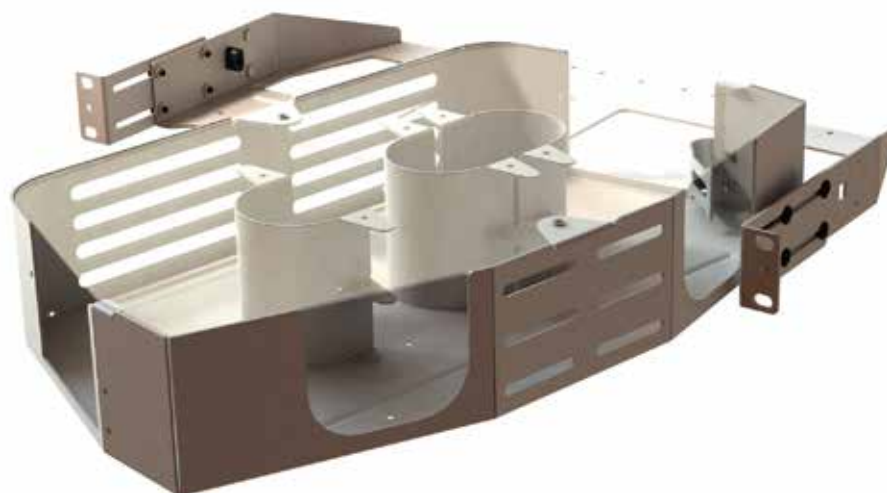
		PIGTAILS				
		PART NO.	OS1/OS2 9/125	OM1 62.5/125	OM2 50/125	OM3 50/125
ST Singlemode	P08STS48RH	P1	-	-	-	-
ST Multimode	P08STM48RH	-	P2	P3	P4	P5
FC Singlemode	P08FCS48RH	P1	-	-	-	-
FC Multimode	P08FCM48RH	-	P2	P3	P4	P5
FC APC Singlemode	P08FCA48RH	P1	-	-	-	-



NOTE: RIGHT HAND OPENING IS SUPPLIED AS STANDARD LEFT HAND AVAILABLE ON REQUEST



P09 2U Stuff Tray Pivot Panel



We offer an innovative solution for storing excess lengths of patch cords and cable. This pivot panel includes a removable

cover which provides easy access to the tray. The tray can accommodate up to 24 fibre cable with a length of 5m.

Features

- > Pivot Panel allows easy access
- > Stores a 24 fibre cable up to 5m
- > Removable cover
- > Cable tie locations
- > Adjustable brackets
- > Can pivot from either side of the tray
- > Damp heat, vibration, shock and thermal cycle tested

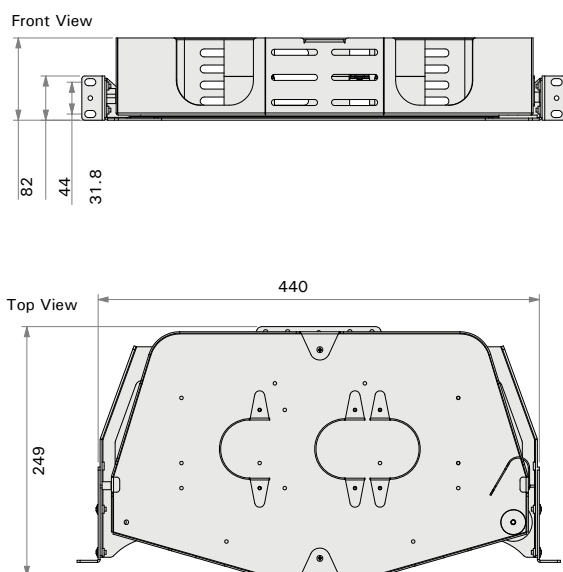
Applications

- > FTTx
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Technical Specification

DESCRIPTION	
Height	2U (88.8mm)
Width	482mm
Depth	274mm
Net weight	2.5kg
Packaged weight	3kg
Packaged dimensions	530mm (W) x 95mm (H) 275mm (D)
IP rating	IP20
Mounting Adjustment range	50mm
Material	Cold-rolled steel
Material thickness	Tray: 1.2mm - Frame: 2.0mm
Material coating	Powder coating
Colour	RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach/SVHC

Drawing



Ordering Information

DESCRIPTION	PART NUMBER
2U Stuff Tray Pivot Panel	P09XXX00

Pre-Terminated Breakout Panel



This 1U Pre-term Breakout Panel is designed to provide housing for connections from a preterm to patch cords. The open frame allows for quick and easy installation of connectors. Having the option to use an array of different adaptor types by using a

different front plate makes this panel suitable for a wide range of applications. A key feature of the panel is that it provides space within the 1U space to route the patch cords through to the back of the rack.

Features

- > Simple design provides easy access for installers
- > Up to 96 fibre when using LC quad adaptors
- > Tray has cable management hoops and tie locations for neat and tidy solution
- > Channel to route patch cords to the rear of the rack with the 1U space
- > Changeable front plates to allow for a wide range of adaptor types
- > Suitable for pre-terminated cables only

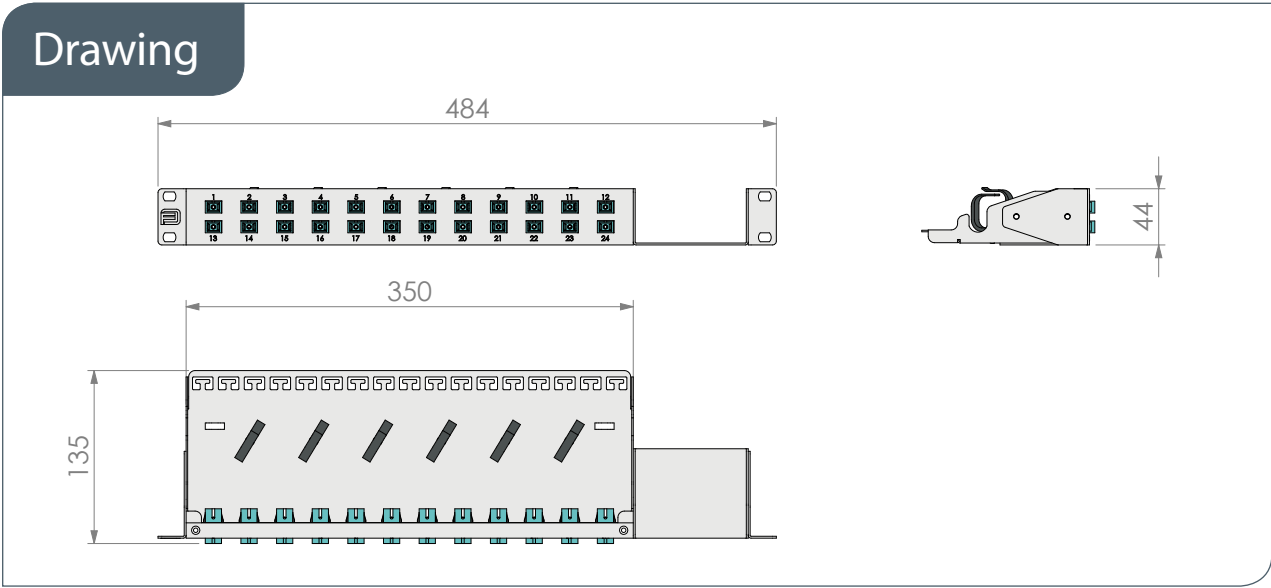
Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Technical Specification

ELEMENT	CHARACTERISTIC
Height (mm)	44
Width (mm)	483
Depth (mm)	130
Net weight (kg)	1.15
Suitable for adaptor type	SC Duplex/LC Quad, SC Simplex/LC Duplex, ST/FC
Number of ports	24
Material	Cold Rolled Steel
Material thickness (mm)	1.2
Material coating	Electrostatic powder coating
Colour	Black RAL 9004
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach/SVHC





F26

F26 24 POSITION SC/LC/E2000 BREAKOUT PANEL

1U Black Pre-Terminated Breakout Panel Patch Panel suitable for up to 24 SC, LC or E2000 Adaptors. This panel is designed to provide housing for connections from a preterm to patch cords. The open frame allows for quick and easy installation of up to 24 connectors.



1U
24 Position
BLACK

	PART NO.		PART NO.
SC Simplex Multimode	F26SCM24	E2000 APC Singlemode	F26E2A24
SC Simplex Singlemode	F26SCS24	LC Duplex Multimode Beige	F26LCM24
SC APC Simplex Singlemode	F26SCA24	LC Duplex Multimode Erika Violet	F26LCV24
E2000 Multimode	F26E2M24	LC Duplex Singlemode	F26LCS24
E2000 Singlemode	F26E2S24	LC APC Duplex Singlemode	F26LCA24



SC Adaptor

E2000 Adaptor

LC Duplex Adaptor

Scan for More
Information



F27

F27 24 POSITION SC DUPLEX 1U BREAKOUT PANEL

1U Black Pre-Terminated Breakout Panel Patch Panel suitable for up to 24 SC Duplex Adaptors. This panel is designed to provide housing for connections from a preterm to patch cords. The open frame allows for quick and easy installation of up to 24 connectors.



1U
24 Position
BLACK

	PART NO.		PART NO.
SC Duplex Singlemode	F27SCS24	SC Duplex Multimode Erika Violet	F27SCV24
SC Duplex Multimode	F27SCM24	SC APC Duplex Singlemode	F27SCA24



SC Adaptor

Scan for More
Information



F28

F28 24 POSITION ST/FC 1U BREAKOUT PANEL

1U Black Pre-Terminated Breakout Panel Patch Panel suitable for up to 24 ST or FC Adaptors. This panel is designed to provide housing for connections from a preterm to patch cords. The open frame allows for quick and easy installation of up to 24 connectors.



1U
24 Position
BLACK

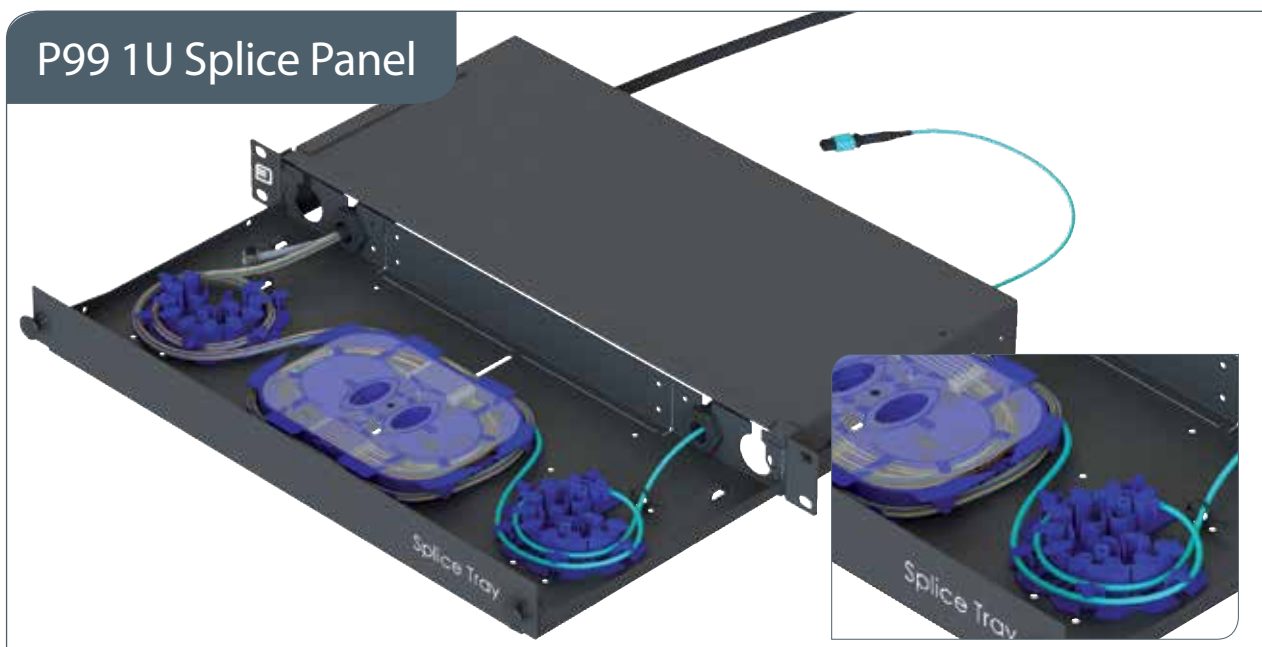
	PART NO.		PART NO.
ST Singlemode	F28STS24	FC Multimode	F28FCM24
ST Multimode	F28STM24	FC APC Singlemode	F28FCA24
FC Singlemode	F28FCS24		



Scan for More
Information



P99 1U Splice Panel



Optronics offers an innovative and robust 1U splice panel. This panel has been designed to accept up to 48 fibres housed within a 1U space.

The new Optronics Speedway splice tray allows splicing of up to 24 fibres per tray using secondary buffered fibres without the

need to strip back whilst still accommodating sufficient over length for up to 2 re-splices.

The use of the Optronics Speedway Spool ensures the protection of fibre bend radii at all times, with the sliding function providing easy access during installation or re-work.

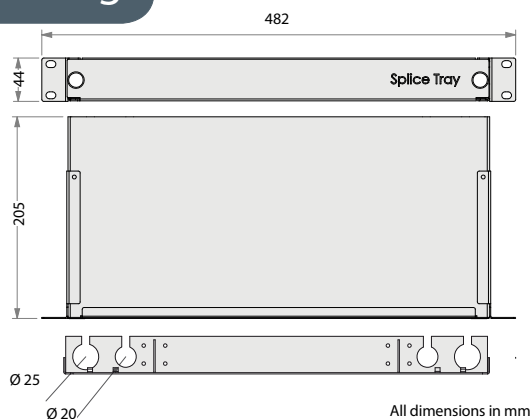
Features

- > Suitable for up to 4 incoming cables
- > Splicing and fibre bend radius managed by the Optronics Speedway Splice Tray and Spool
- > Splicing for up to 48 fibres
- > REACH/SvHC
- > Fits standard 19"

Applications

- > Data centres, premise installations, telecommunication networks. Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Drawing



Technical Specification

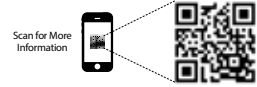
SPLICE PANEL	
Height	1U (44.4mm)
Width	482mm
Depth	205mm
Net weight	2.4kg
Packaged weight	2.7 kg
Package dimensions (WxLxH)	530mm x 55mm x 260mm
IP rating	IP20
Number of fibres	48
Mounting adjustment range	50mm
Gland entry points	2 x 20mm, 2 x 25mm
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Black RAL 9004
Operating temperature	-40°C to +60°C
Compliant to	REACH / SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1

Ordering Information

DESCRIPTION	PART NUMBER
1U Splice Panel	P99XXX00



1U Sliding Patch Panel Chassis



This removable front-panel chassis is a 19 inch, 1U sliding panel in two parts; a sliding chassis and a separate front panel, that receives the optical adaptors. Its primary advantage is

the flexibility its modular composition gives, allowing you to maintain a separate stock of chassis and a variety of panels, only attaching a suitable front panel when needed.

Features

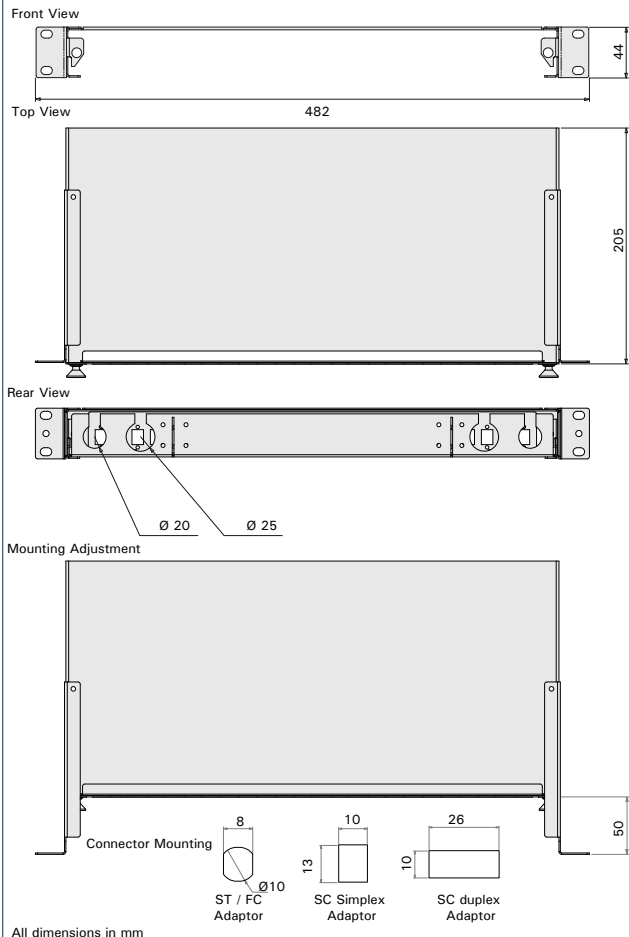
- > Recessed panel option
- > No exposed screws
- > Screen printed for easy labelling
- > Rear cable entry options
- > Panel numbers and rack number identification labels
- > High quality finish, no sharp edges

Technical Specification

SLIDING PATCH PANEL CHASSIS FOR REMOVABLE FRONT PANELS

Height	1U (44.4mm)
Width	482mm \pm 1mm
Depth	205mm
Net weight	2.1kg
Packaged weight	2.5kg
Packaged Dimensions	530mm x 55mm x 260mm
IP Rating	IP20
Suitable for adaptor type	All
Mounting adjustment range	50mm
Cable entry 20mm	2
Cable entry 25mm	2
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Black RAL 9004 Grey RAL 7035
Operating Temperature	-40°C to +60°C
Compliant to	Reach / SVHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1

Drawing



SPANEL

1U Empty chassis panel for optional removable front panels - Black



DESCRIPTION	PART NO.
1U Empty chassis panel - Black RAL9004	SPANEL

SPANEL/G

1U Empty chassis panel for optional removable front panels - Grey



DESCRIPTION	PART NO.
1U Empty chassis panel - Grey RAL7035	SPANEL/G

SPANEL/DE/G

1U Empty chassis panel with mounting post



DESCRIPTION	PART NO.
1U Empty chassis panel with mounting post - Grey RAL7035	SPANEL/DE/G

RF01 - Black



RF01 12 POSITION SC DUPLEX FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 12 SC Duplex Adaptors. Allows the installation of up to 24 fibres.



SC Adaptor

	PART NO.		PART NO.
SC Duplex Singlemode	RF01SCS12	SC Duplex Multimode Erika Violet	RF01SCV12
SC Duplex Multimode	RF01SCM12	SC APC Duplex Singlemode	RF01SCA12

RF01 - Grey



RF01 12 POSITION SC DUPLEX FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 12 SC Duplex Adaptors. Allows the installation of up to 24 fibres.



SC Adaptor

	PART NO.		PART NO.
SC Duplex Singlemode	RF01SCS12/G	SC Duplex Multimode Erika Violet	RF01SCV12/G
SC Duplex Multimode	RF01SCM12/G	SC APC Duplex Singlemode	RF01SCA12/G

RF02 - Black



RF02 24 POSITION ST/FC FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 24 ST/FC Duplex Adaptors. Allows the installation of up to 24 fibres.



ST Adaptor



FC Adaptor

	PART NO.		PART NO.
ST Singlemode	RF02STS24	FC Singlemode	RF02FCS24
ST Multimode	RF02STM24	FC Multimode	RF02FCM24
		FC APC Singlemode	RF02FCA24

RF02 - Grey



RF02 24 POSITION ST/FC FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 24 ST/FC Duplex Adaptors. Allows the installation of up to 24 fibres.



ST Adaptor



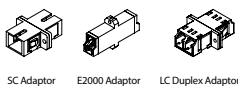
FC Adaptor

	PART NO.		PART NO.
ST Singlemode	RF02STS24/G	FC Singlemode	RF02FCS24/G
ST Multimode	RF02STM24/G	FC Multimode	RF02FCM24/G
		FC APC Singlemode	RF02FCA24/G



FIBRE MANAGEMENT | 1U REMOVABLE FRONT PLATES

RF03 - Black

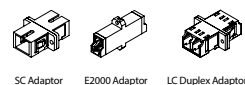


RF03 24 POSITION SC/LC/E2000 FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 24 SC/LC/E2000 Duplex Adaptors. Allows the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	RF03SCM24	E2000 APC Singlemode	RF03E2A24
SC Simplex Singlemode	RF03SCS24	LC Duplex Multimode Beige	RF03LCM24
SC APC Simplex Singlemode	RF03SCA24	LC Duplex Multimode Erika Violet	RF03LCV24
E2000 Multimode	RF03E2M24	LC Duplex Singlemode	RF03LCS24
E2000 Singlemode	RF03E2S24	LC APC Duplex Singlemode	RF03LCA24

RF03 - Grey



RF03 24 POSITION SC/LC/E2000 FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 24 SC/LC/E2000 Duplex Adaptors. Allows the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	RF03SCM24/G	E2000 APC Singlemode	RF03E2A24/G
SC Simplex Singlemode	RF03SCS24/G	LC Duplex Multimode Beige	RF03LCM24/G
SC APC Simplex Singlemode	RF03SCA24/G	LC Duplex Multimode Erika Violet	RF03LCV24/G
E2000 Multimode	RF03E2M24/G	LC Duplex Singlemode	RF03LCS24/G
E2000 Singlemode	RF03E2S24/G	LC APC Duplex Singlemode	RF03LCA24/G

RF04 - Black



RF04 12 POSITION ANGLED SC DUPLEX FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 12 Angled SC Duplex Adaptors. Allows the installation of up to 24 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF04SCS12	SC Duplex Multimode Erika Violet	RF04SCV12
SC Duplex Multimode	RF04SCM12	SC APC Duplex Singlemode	RF04SCA12

RF04 - Grey

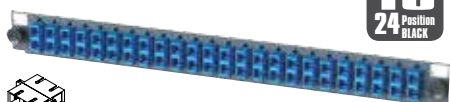


RF04 12 POSITION ANGLED SC DUPLEX FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 12 Angled SC Duplex Adaptors. Allows the installation of up to 24 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF04SCS12/G	SC Duplex Multimode Erika Violet	RF04SCV12/G
SC Duplex Multimode	RF04SCM12/G	SC APC Duplex Singlemode	RF04SCA12/G

RF05 - Black



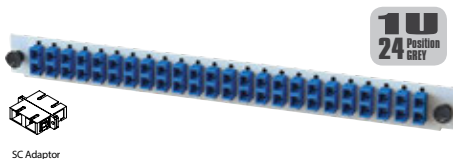
RF05 24 POSITION SC DUPLEX FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 24 SC Duplex Adaptors. Allows the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF05SCS24	SC Duplex Multimode Erika Violet	RF05SCV24
SC Duplex Multimode	RF05SCM24	SC APC Duplex Singlemode	RF05SCA24



RF05 - Grey



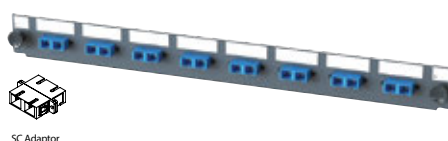
1U
24 Position
GREY

RF05 24 POSITION ANGLED SC DUPLEX FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 24 SC Duplex Adaptors. Allows the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF05SCS24/G	SC Duplex Multimode Erika Violet	RF05SCV24/G
SC Duplex Multimode	RF05SCM24/G	SC APC Duplex Singlemode	RF05SCA24/G

RF06 - Black



1U
8 Position
BLACK

RF06 8 POSITION SC DUPLEX FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 8 SC Duplex Adaptors. Allows the installation of up to 16 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF06SCS08	SC Duplex Multimode Erika Violet	RF06SCV08
SC Duplex Multimode	RF06SCM08	SC APC Duplex Singlemode	RF06SCA08

RF06 - Grey



1U
8 Position
GREY

RF06 8 POSITION SC DUPLEX FRONT PANEL - GREY

1U Grey Removable front panel for Sliding Patch Panel chassis suitable for up to 8 SC Duplex Adaptors. Allows the installation of up to 16 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	RF06SCS08/G	SC Duplex Multimode Erika Violet	RF06SCV08/G
SC Duplex Multimode	RF06SCM08/G	SC APC Duplex Singlemode	RF06SCA08/G

RF07 - Black



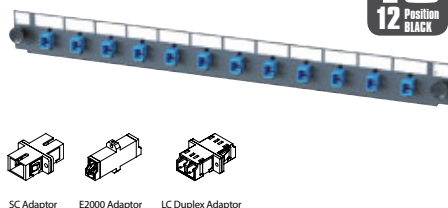
1U
MODULAR

RF07 MODULAR FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 3 Adaptor Modules.

PART NO.	
Removable front panel for up to 3 adaptor modules (see page 26 for modules)	RF07XXX00

RF08 - Black



1U
12 Position
BLACK

RF08 12 POSITION SC/LC/E2000 FRONT PANEL - BLACK

1U Black Removable front panel for Sliding Patch Panel chassis suitable for up to 12 SC Simplex Adaptors. Allows the installation of up to 24 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	RF08SCM12	E2000 APC Singlemode	RF08E2A12
SC Simplex Singlemode	RF08SCS12	LC Duplex Multimode Beige	RF08LCM12
SC APC Simplex Singlemode	RF08SCA12	LC Duplex Multimode Erika Violet	RF08LCV12
E2000 Multimode	RF08E2M12	LC Duplex Singlemode	RF08LCS12
E2000 Singlemode	RF08E2S12	LC APC Duplex Singlemode	RF08LCA12



OPT01 Sliding Patch Panel



The Optronics sliding patch panel system in its basic form is supplied with the panels unloaded without adaptors ready for you to install the adaptor of your choice. The panel can also be pre-loaded complete with the required adaptor and simple splice management kit, or pre-loaded with pigtails to meet your project needs. The tray is locked in

place with two simple to operate plastic latches, when fully extended the tray is designed to lower to 45°, or move the tray to the side and it will lock to lower only 10°. This provides the perfect working platform for simple installation or easy maintenance and access even after the panel is installed in the rack.

Features/Benefits

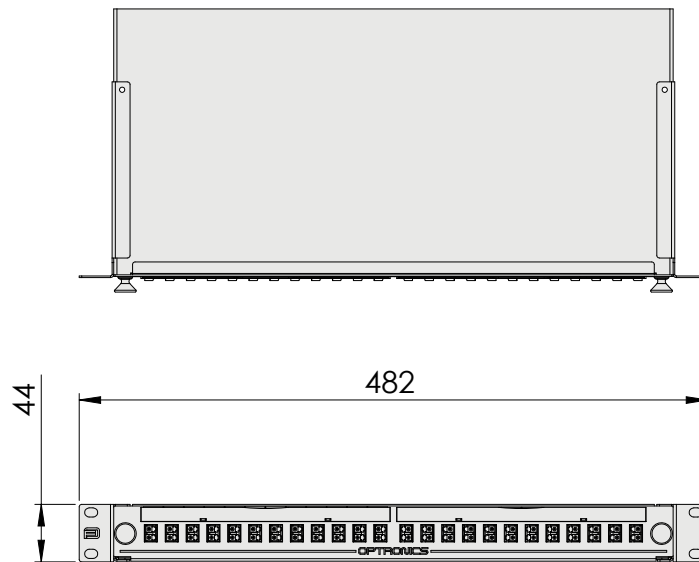
- > Recessed panel option
- > Recessed adaptors provide improved fibre management
- > No exposed screws
- > Screen printed for easy labelling
- > 45° working angle
- > Rear cable entry options
- > Panel numbers and rack number identification labels
- > High quality finish, no sharp edges

Technical Specification

SLIDING PATCH PANELS	
Height	1U (44.4mm)
Width	483mm
Depth	200mm
Net Weight	2.4kg
Packaged Weight	2.7kg
Package Dimensions (WxLxH)	530mm x 55mm x 260mm
IP Rating	IP20
Suitable for adaptor type	SC Simplex (24 port), E2000 (24 port), LC Duplex (24 port)
Mounting adjustment range	50mm
Cable entry 20mm	2
Cable entry 25mm	2
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Black RAL 9004
Operating Temperature	-40°C to +60°C
Compliant to	This product conforms to the materials requirements of RoHS2, REACH / SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1



Drawing



All dimensions in mm

Ordering Information

DESCRIPTION	PART NO.
Optronics 4 Port E2000/APC Simplex Panel Loaded with 4 E2000/APC Simplex Single Mode	OPT01E2A04
Optronics 8 Port E2000/APC Simplex Panel Loaded with 8 E2000/APC Simplex Single Mode	OPT01E2A08
Optronics 16 Port E2000/APC Simplex Panel Loaded with 16 E2000/APC Simplex Single Mode	OPT01E2A16
Optronics 24 Port E2000/APC Simplex Panel Loaded with 24 E2000/APC Simplex Single Mode	OPT01E2A24
Optronics 4 Port E2000 Simplex Panel Loaded with 4 E2000 Simplex Single Mode	OPT01E2S04
Optronics 8 Port E2000 Simplex Panel Loaded with 8 E2000 Simplex Single Mode	OPT01E2S08
Optronics 16 Port E2000 Simplex Panel Loaded with 16 E2000 Simplex Single Mode	OPT01E2S16
Optronics 24 Port E2000 Simplex Panel Loaded with 24 E2000 Simplex Single Mode	OPT01E2S24
Optronics 4 Port E2000 Simplex Panel Loaded with 4 E2000 Simplex Multi Mode	OPT01LCM04
Optronics 8 Port E2000 Simplex Panel Loaded with 8 E2000 Simplex Multi Mode	OPT01LCM08
Optronics 16 Port E2000 Simplex Panel Loaded with 16 E2000 Simplex Multi Mode	OPT01LCM16
Optronics 24 Port E2000 Simplex Panel Loaded with 24 E2000 Simplex Multi Mode	OPT01LCM24
Optronics 4 Port LC Duplex Panel Loaded with 4 LC Duplex Single Mode	OPT01LCS04
Optronics 8 Port LC Duplex Panel Loaded with 8 LC Duplex Single Mode	OPT01LCS08
Optronics 16 Port LC Duplex Panel Loaded with 16 LC Duplex Single Mode	OPT01LCS16
Optronics 4 Port SC/APC Duplex Panel Loaded with 4 SC/APC Duplex Single Mode	OPT01SCA04
Optronics 8 Port SC/APC Duplex Panel Loaded with 8 SC/APC Duplex Single Mode	OPT01SCA08
Optronics 16 Port SC/APC Duplex Panel Loaded with 16 SC/APC Duplex Single Mode	OPT01SCA16
Optronics 4 Port SC Duplex Panel Loaded with 4 SC Duplex Multi Mode	OPT01SCM04
Optronics 8 Port SC Duplex Panel Loaded with 8 SC Duplex Multi Mode	OPT01SCM08
Optronics 16 Port SC Duplex Panel Loaded with 16 SC Duplex Multi Mode	OPT01SCM16
Optronics 4 Port SC Duplex Panel Loaded with 4 SC Duplex Single Mode	OPT01SCS04
Optronics 8 Port SC Duplex Panel Loaded with 8 SC Duplex Single Mode	OPT01SCS08
Optronics 16 Port SC Duplex Panel Loaded with 16 SC Duplex Single Mode	OPT01SCS16
Optronics 24 Port Unloaded Panel Loaded for SC Simplex or LC Duplex Adaptors	OPT01XXX00



OPT02 Sliding Patch Panel



The Optronics sliding patch panel system in its basic form is supplied with the panels unloaded without adaptors ready for you to install the adaptor of your choice. The panel can also be pre-loaded complete with the required adaptor and simple splice management kit, or pre-loaded with pigtails to meet your project needs. The tray is locked in

place with two simple to operate plastic latches, when fully extended the tray is designed to lower to 45°, or move the tray to the side and it will lock to lower only 10°. This provides the perfect working platform for simple installation or easy maintenance and access even after the panel is installed in the rack.

Features/Benefits

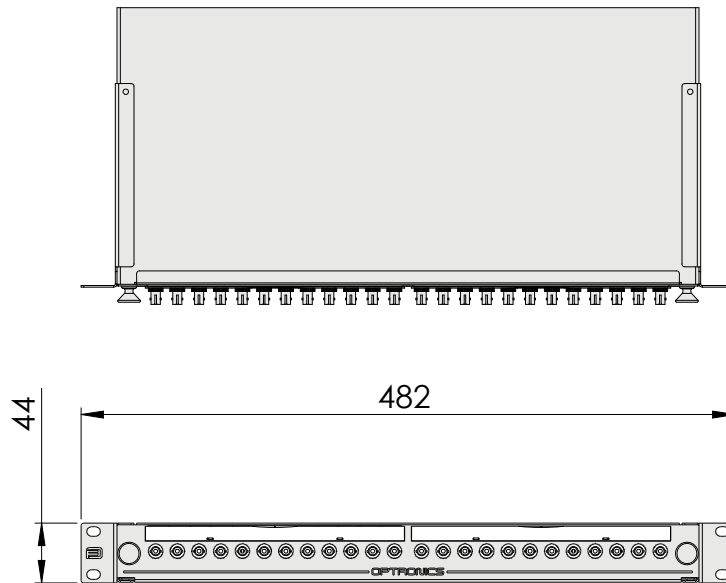
- > Recessed panel option
- > Recessed adaptors provide improved fibre management
- > No exposed screws
- > Screen printed for easy labelling
- > 45° working angle
- > Rear cable entry options
- > Panel numbers and rack number identification labels
- > High quality finish, no sharp edges

Technical Specification

SLIDING PATCH PANELS	
Height	1U (44.4mm)
Width	483mm
Depth	200mm
Net Weight	2.4kg
Packaged Weight	2.7kg
Package Dimensions (WxLxH)	530mm x 55mm x 260mm
IP Rating	IP20
Suitable for adaptor type	ST / FC (16 / 24 port)
Mounting adjustment range	50mm
Cable entry 20mm	2
Cable entry 25mm	2
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Black RAL 9004
Operating Temperature	-40°C to +60°C
Compliant to	This product conforms to the materials requirements of RoHS2, REACH / SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1



Drawing



All dimensions in mm

Ordering Information

DESCRIPTION	PART NO.
Optronics 4 Port FC/APC Simplex Panel Loaded with 4 FC/APC Simplex Single Mode	OPT02FCA04
Optronics 8 Port FC/APC Simplex Panel Loaded with 8 FC/APC Simplex Single Mode	OPT02FCA08
Optronics 16 Port FC/APC Simplex Panel Loaded with 16 FC/APC Simplex Single Mode	OPT02FCA16
Optronics 24 Port FC/APC Simplex Panel Loaded with 24 FC/APC Simplex Single Mode	OPT02FCA24
Optronics 4 Port FC Simplex Panel Loaded with 4 FC Simplex Multi Mode	OPT02FCM04
Optronics 8 Port FC Simplex Panel Loaded with 8 FC Simplex Multi Mode	OPT02FCM08
Optronics 16 Port FC Simplex Panel Loaded with 16 FC Simplex Multi Mode	OPT02FCM16
Optronics 24 Port FC Simplex Panel Loaded with 24 FC Simplex Multi Mode	OPT02FCM24
Optronics 4 Port FC Simplex Panel Loaded with 4 FC Simplex Single Mode	OPT02FCS04
Optronics 8 Port FC Simplex Panel Loaded with 8 FC Simplex Single Mode	OPT02FCS08
Optronics 16 Port FC Simplex Panel Loaded with 16 FC Simplex Single Mode	OPT02FCS16
Optronics 24 Port FC Simplex Panel Loaded with 24 FC Simplex Single Mode	OPT02FCS24
Optronics 4 Port ST Simplex Panel Loaded with 4 ST Simplex Multi Mode	OPT02STM04
Optronics 8 Port ST Simplex Panel Loaded with 8 ST Simplex Multi Mode	OPT02STM08
Optronics 16 Port ST Simplex Panel Loaded with 16 ST Simplex Multi Mode	OPT02STM16
Optronics 24 Port ST Simplex Panel Loaded with 24 ST Simplex Multi Mode	OPT02STM24
Optronics 4 Port ST Simplex Panel Loaded with 4 ST Simplex Single Mode	OPT02STS04
Optronics 8 Port ST Simplex Panel Loaded with 8 ST Simplex Single Mode	OPT02STS08
Optronics 16 Port ST Simplex Panel Loaded with 16 ST Simplex Single Mode	OPT02STS16
Optronics 24 Port ST Simplex Panel Loaded with 24 ST Simplex Single Mode	OPT02STS24
Optronics 24 Port Unloaded Panel Loaded for ST/FC Simplex Adaptors	OPT02XXX00
Optronics 4 Port SC Duplex Panel Loaded with 4 SC Duplex Single Mode	OPT01SCS04



OPT03 Sliding Patch Panel



This innovative, robust 1U sliding patch panel has been designed to accept up to 48 fibres housed within a 1U space.

With the ability to use a full array of Adaptor types offering a flexible solution to the end user, enabling them to incorporate a multi functional panel which allow easy access during installation or re-work with no disturbance of the existing cable or fibres.

In the addition to the array of adaptors the panel also offers multiple cable entry solutions, up to 4 standard cable entry points for, loose tube, tight buffer, pre terminated and steel tape armoured cable.

Each panels has integrated strength member tie positions also with the additional removable plate at the rear of the panel allows the installation of steel tape armoured cable.

Features/Benefits

- > Up to 48 fibres in 1U
- > Multiple Adaptor options available
- > 24 Adaptor positions
- > Individually labelled ports
- > 45° open working angle
- > Accepts loose tube, distribution and pre terminated cables
- > RoHS, REACH SvHC and UL rated
- > Fits standard 19"

Applications

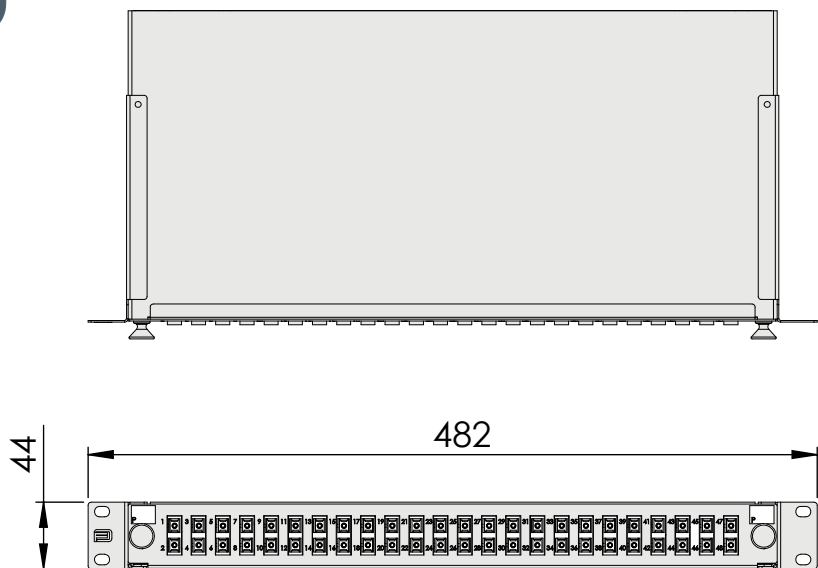
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Technical Specification

SLIDING PATCH PANELS	
Height	1U (44.4mm)
Width	482mm
Depth	205mm
Net Weight	2.5kg
Packaged Weight	3kg
Package Dimensions (WxLxH)	450mm x 55mm x 260mm
IP Rating	IP20
Suitable for adaptor type	SC Duplex (24 ports)
Mounting adjustment range	50mm
Cable entry 20mm	2
Cable entry 25mm	2
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Black RAL 9004
Operating Temperature	-40°C to +50°C
Compliant to	This product conforms to the materials requirements of RoHS2, REACH / SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1



Drawing



All dimensions in mm

Ordering Information

DESCRIPTION	PART NO.
Optronics 4 Port LC Quad Panel Loaded with 4 LC Quad Multi Mode	OPT03LQM04
Optronics 8 Port LC Quad Panel Loaded with 8 LC Quad Multi Mode	OPT03LQM08
Optronics 12 Port LC Quad Panel Loaded with 12 LC Quad Multi Mode	OPT03LQM12
Optronics 16 Port LC Quad Panel Loaded with 16 LC Quad Multi Mode	OPT03LQM16
Optronics 24 Port LC Quad Panel Loaded with 24 LC Quad Multi Mode	OPT03LQM24
Optronics 4 Port LC Quad Panel Loaded with 4 LC Quad Single Mode	OPT03LQS04
Optronics 8 Port LC Quad Panel Loaded with 8 LC Quad Single Mode	OPT03LQS08
Optronics 12 Port LC Quad Panel Loaded with 12 LC Quad Single Mode	OPT03LQS12
Optronics 16 Port LC Quad Panel Loaded with 16 LC Quad Single Mode	OPT03LQS16
Optronics 24 Port LC Quad Panel Loaded with 24 LC Quad Single Mode	OPT03LQS24



S15 1½U Sliding Patch Panel



This unique 1½U sliding patch panel made out of light weight aluminium. The 1½U design gives the same amount of space for splicing as a 1U panel, however allows for excess cable slack storage below the tray. Mounted on telescopic runners to ensure the tray slides in and out with a smooth action.

The panel also offers multiple cable entry solutions, up to 2 standard cable entry points for, loose tube, tight buffer, pre-terminated and steel tape armoured cable. Each panel has integrated strength member tie positions.

Features

- > Up to 48 fibres in 1½U
- > 24 Adaptor positions
- > Individually labelled ports
- > Accepts loose tube, distribution and pre terminated cables
- > This product conforms to the materials requirements of RoHS2 and REACH/SvHC
- > Fits standard 19"
- > Light weight aluminium design

Applications

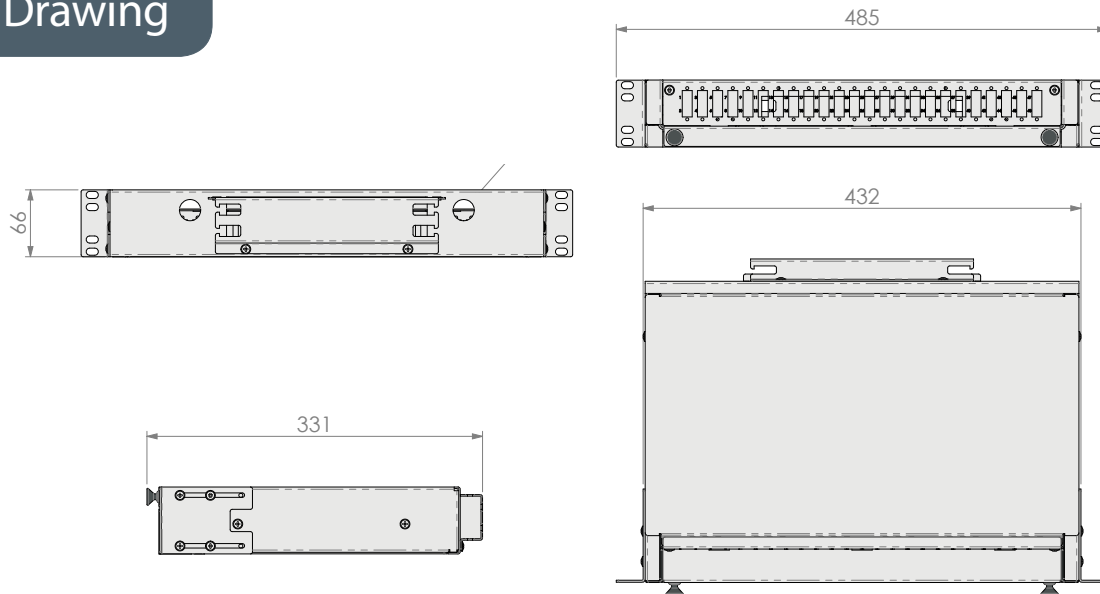
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Technical Specification

ELEMENT	CHARACTERISTIC
Height (mm)	66
Width (mm)	483
Depth (mm)	330
Net weight (kg)	2.4
Packaged weight (kg)	3.4
Packaged dimensions	510mm (W) x 170mm (H) x 440mm (D)
Suitable for adaptor type	SC Duplex
Number of ports	24
Cable entry	2
Mounting adjustment range (mm)	50
Material	Aluminium
Material thickness (mm)	1.2
Material coating	Electrostatic powder coating
Colour	Grey RAL 7035
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach/SVHC



Drawing



Ordering Information

ADAPTOR TYPE		NO. OF ADAPTORS
SC Duplex Singlemode	SCS	04
SC Duplex Multimode	SCM	08
SC Duplex Multimode	SCV	12
SC Duplex Singlemode APC	SCA	16
		24

Example Part Number: **S15 SCS 24**
 S15SCS24/Z will configure a grey sliding patch panel with 24 SC Duplex Singlemode adaptors.



Fibre Management 1RU Patch Panel



The Fibre Management 1U patch panel is a rack mountable interconnect point specifically designed to manage dense fibre applications. Based on the LGX intermateability platform, the panel is fully compatible with Optical Cassette, Passive Optical

Coupler Modules, and module solutions. This panel offers enhanced management of densities up to 72 fibres using MPO/ MTP Optical Cassettes (24 fibres).

Features

- > Steel construction
- > Textured black powder coat finish
- > Universal WECC/TIA 19"/23" rack compatibility
- > (3) LGX 118 adapter plate / module mounting positions
- > Slide-out tray with relief cut-outs for simplified connector access
- > Optional front door key lock for heightened protection of internal components

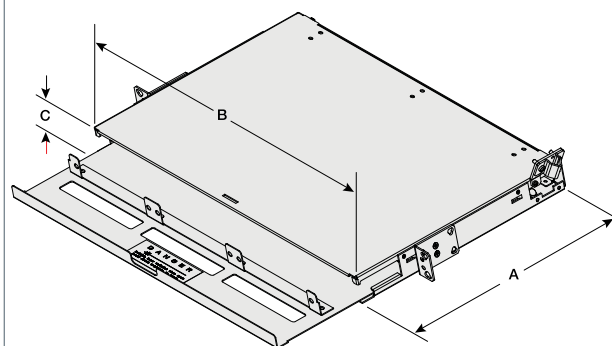
Applications

- > Data Centres
- > Enterprise Networks
- > Telecommunications Closets
- > Central Offices / Headends

Technical Specification

ELEMENT	CHARACTERISTIC
Depth (inches) A	15.5
Width (inches) B	17
Height (inches) C	1.7
Rack Units	1
Capacity	(3) LGX 118
Unloaded Weight	13 lbs.

Drawing



Ordering Information

DESCRIPTION	PART NUMBER
Optronics Fibre Management 1U Patch Panel, Black, Empty	OPTXFM1UBE



Fibre Management 2RU Patch Panel



The Fibre Management 2U patch panel is a rack mountable interconnect point specifically designed to manage dense fibre applications. Based on the LGX intermateability platform, the panel is fully compatible with Optical Cassette, Passive Optical

Coupler Modules, and module solutions. This panel offers enhanced management of densities up to 144 fibres using MPO/MTP Optical Cassettes (24 fibres).

Features

- > Steel construction
- > Textured black powder coat finish
- > Universal WECCO/TIA 19"/23" rack compatibility
- > (6) LGX 118 adapter plate / module mounting positions
- > Slide-out tray with relief cut-outs for simplified connector access
- > Optional front door key lock for heightened protection of internal components

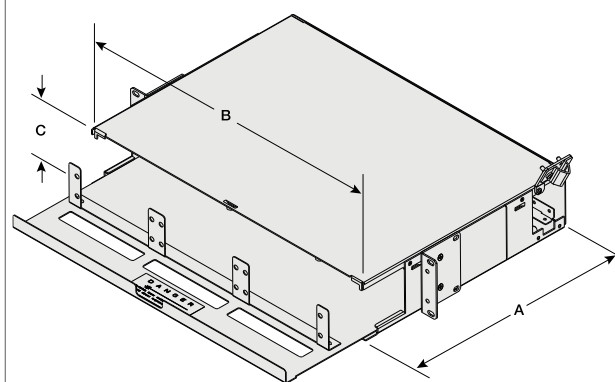
Applications

- > Data Centres
- > Enterprise Networks
- > Telecommunications Closets
- > Central Offices / Headends

Technical Specification

ELEMENT	CHARACTERISTIC
Depth (inches) A	15.5
Width (inches) B	17
Height (inches) C	3.5
Rack Units	1
Capacity	(6) LGX 118
Unloaded Weight	15 lbs.

Drawing



Ordering Information

DESCRIPTION	PART NUMBER
Optronics Fibre Management 2U Patch Panel, Black, Empty	OPTXFM2UBE



Fibre Management 4RU Patch Panel



The Fibre Management 1U patch panel is a rack mountable interconnect point specifically designed to manage dense fibre applications. Based on the LGX intermateability platform, the panel is fully compatible with Optical Cassette, Passive Optical Coupler Modules, and module solutions. This panel offers enhanced management of densities up to 288 fibres using MPO/MTP, single fibre, or patch and splice methodologies. A

hinged fibre management panel can be secured in an upright or lowered position, which provides enhanced cable routing exiting the panel to the left or right, and also allows cable assemblies to be routed up and across the front of the panel for extreme density management. This panel can be provisioned with a key lock at the time of order for secure environments.

Features

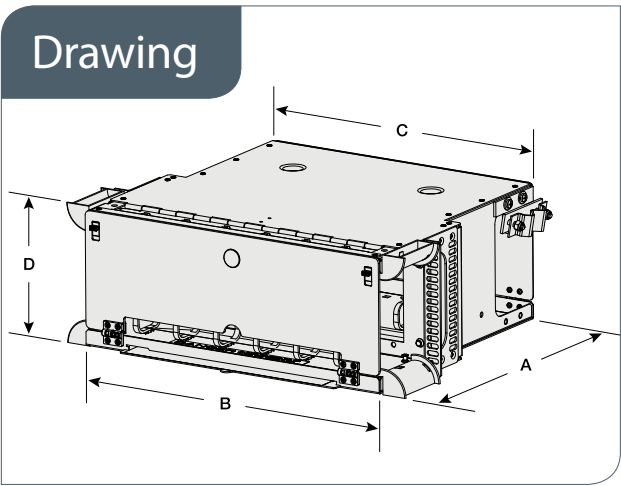
- > Steel construction
- > Textured black powder coat finish
- > Universal WECO/TIA 19"/23" rack compatibility
- > (3) LGX 118 adapter plate / module mounting positions
- > Slide-out tray with relief cut-outs for simplified connector access
- > Optional front door key lock for heightened protection of internal components

Applications

- > Data Centres
- > Enterprise Networks
- > Telecommunications Closets
- > Central Offices / Headends

Technical Specification

ELEMENT	CHARACTERISTIC
Depth (inches) A	15.5
Front Width (inches) B	17
Rear Width (inches) B	15
Height (inches) C	7
Rack Units	4
Capacity	(9) LGX 118
Unloaded Weight	9 lbs.



Ordering Information

DESCRIPTION	PART NUMBER
Optronics Fibre Management 4U Patch Panel, Black, Empty	OPTXFM4UBE
Optronics Fibre Management 4U Patch Panel, Black, Empty, Key Lock	OPTXFM4UBEK



Fibre Management MPO Optical Cassettes



The Fibre Management Optical Cassette product line is a family of preterminated fanout modules that streamline the deployment of optical network infrastructure. The primary function of these products is to break out multi-fibre ribbon connectors to simplex or duplex style connectors for connection to adjacent network elements. The Fibre Management Optical Cassette solution features low-loss MPO/MTP style trunk cable

assemblies. All modules feature a durable powder coat finish, and are compatible with all 1U-4U LAN System platforms. All modules are clearly labeled with a silk-screened "A" and "B" positioning reference to ensure proper polarity is maintained in the network, referenced to the polarity convention being deployed.

Features

- > 12- and 24- port configurations
- > ANSI/TIA/EIA-568-B.3 compliant
- > Single-slot LGX packages
- > Compatible with LANSystem and WME hardware
- > Available in black with rear MPO/MTP connection(s)
- > SMF, 62.5 μ m MMF and 50 μ m and OM4 MMF supported
- > SC- and LC-MPO/MTP standard configurations
- > ST- and FC-MPO/MTP configurations available on special order

Applications

- > Data Centres
- > LAN, WAN and SAN
- > Interoffice cross-connects
- > Campus environments

Ordering Information

FIBRE COUNT, CONNECTOR OPTION	SINGLEMODE		MULTIMODE	
	UPC - MPO (MALE, APC)	APC - MPO (MALE, APC)	50 MM LOMMF OM4 PC - MPO (MALE, PC)	62.5 MM OM1 PC - MPO (MALE, PC)
12 Fibre LC	OPT12SMLCMPOMA	OPT12SMLCAMPOMA	OPT12OM4LCMPOM	OPT12OM1LCMPOM
24 Fibre LC	OPT24SMLCMPOMA	OPT24SMLCAMPOMA	OPT24OM4LCMPOM	OPT24OM1LCMPOM
12 Fibre SC	OPT12SMSCMPOMA	OPT12SMSCAMPOMA	OPT12OM4SCMPOM	OPT12OM1SCMPOM
12 Fibre ST	OPT12SMSTMPOMA	OPT12SMSTAMPOMA	OPT12OM4STMPOM	OPT12OM1STMPOM

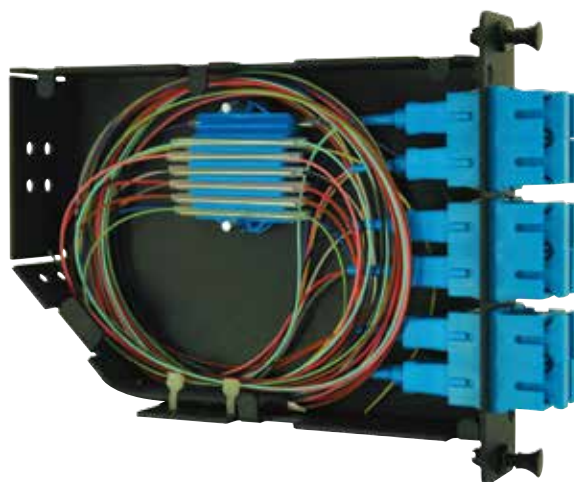
Technical Specification

SINGLEMODE FIBRE (OS1)					
PARAMETER	LC - MPO	LCAPC - MPO	SC - MPO	SCAPC - MPO	ST - MPO
Max IL (dB)	1.15	1.15	1.3	1.3	1.3
Typical IL (dB)	0.6	0.6	0.6	0.6	0.6
Reflectance (dB)	-55	-65	-55	-65	-55

MULTIMODE FIBRE (OM1, OM2 AND 50 MM LASER OPTIMIZED)			
PARAMETER	LC - MPO	SC - MPO	ST - MPO
Max IL (dB)	1.15	1.3	1.3
Typical IL (dB)	0.6	0.6	0.6
Reflectance (dB)	-30	-30	-30



OPTROMOD Module



The OPTROMOD module is an innovative Patch and Splice Module, which allows for increased patch and splice densities in an incremental growth platform. Based on the LGX 118 footprint, this product is capable of supporting up to 144 patch and splices in a standard 4U panel, resulting in 1296 patch and splices within a seven foot rack (38RU). Other features include

front and rear accessibility, secured environment for the spliced fibre and easy fibre identification. Available in single-slot (up to 24-Fibre Patch and Splice) and double slot (up to 18-Fibre Patch & Splice) configurations, the module system allows for ease in incremental expansion without concerns of damaging or disturbing existing components.

Features

- > Up to 24-port configurations
- > Single-slot and double-slot
- > LGX 118 compatible
- > Available in SC, ST and LC (additional configurations available upon request)
- > Includes module, cover, adapters, pigtails, splice sleeves, and all required hardware for installation
- > Available in white or black, and singlemode or multimode
- > Organized fibre routing
- > Fixed solution, no moving parts
- > Ease of splice identification
- > Front and rear access

Applications

- > Telecommunications Closets
- > Data Centres
- > Customer Premise
- > Local Area Networks
- > Wide Area Networks
- > Central Offices
- > Hub Sites
- > Cabinets
- > Remote Terminals



Ordering Information

Loaded with Adaptors and Pigtails

CONNECTOR	FIBRE COUNT	COLOUR	UPC SM	APC SM	PC MM 62.5MM (BEIGE)	PC MM 50MM (BEIGE)	PC MM 50MM (AQUA)
SC	6 Fibre	White	OPTSC06SMWP1	OPTSCA06SMWP1	OPTSC0662WP1	OPTSC0650WP1	OPTSC06OM3WP1
		Black	OPTSC06SMBP1	OPTSCA06SMBP1	OPTSC0662BP1	OPTSC0650BP1	OPTSC06OM3BP1
	12 Fibre	White	OPTSC12SMWP1	OPTSCA12SMWP1	OPTSC1262WP1	OPTSC1250WP1	OPTSC12OM3WP1
		Black	OPTSC12SMBP1	OPTSCA12SMBP1	OPTSC1262BP1	OPTSC1250BP1	OPTSC12OM3BP1
	18 Fibre	White	OPTSC18SMWP1	OPTSCA18SMWP1	OPTSC1862WP1	OPTSC1850WP1	OPTSC18OM3WP1
		Black	OPTSC18SMBP1	OPTSCA18SMBP1	OPTSC1862BP1	OPTSC1850BP1	OPTSC18OM3BP1
LC	12 Fibre	White	OPTLC12SMWP1	OPTLCA12SMWP1	OPTLC1262WP1	OPTLC1250WP1	OPTLC12OM3WP1
		Black	OPTLC12SMBP1	OPTLCA12SMBP1	OPTLC1262BP1	OPTLC1250BP1	OPTLC12OM3BP1
	24 Fibre	White	OPTLC24SMWP1	OPTLCA24SMWP1	OPTLC2462WP1	OPTLC2450WP1	OPTLC24OM3WP1
		Black	OPTLC24SMBP1	OPTLCA24SMBP1	OPTLC2462BP1	OPTLC2450BP1	OPTLC24OM3BP1
ST	6 Fibre	White	OPTST06SMWP1	N/A	OPTST0662WP1	OPTST0650WP1	N/A
		Black	OPTST06SMBP1	N/A	OPTST0662BP1	OPTST0650BP1	N/A
	12 Fibre	White	OPTST12SMWP1	N/A	OPTST1262WP1	OPTST1250WP1	N/A
		Black	OPTST12SMBP1	N/A	OPTST1262BP1	OPTST1250BP1	N/A

Loaded with Adaptors only

CONNECTOR	FIBRE COUNT	COLOUR	UPC SM	APC SM	PC MM (BEIGE)	PC MM (AQUA)
SC	6 Fibre	White	OPTSC06SMW	OPTSCA06SMW	OPTSC0662W	OPTSC06OM3W
		Black	OPTSC06SMB	OPTSCA06SMB	OPTSC0662B	OPTSC06OM3B
	12 Fibre	White	OPTSC12SMW	OPTSCA12SMW	OPTSC1262W	OPTSC12OM3W
		Black	OPTSC12SMB	OPTSCA12SMB	OPTSC1262B	OPTSC12OM3B
	18 Fibre	White	OPTSC18SMW	OPTSCA18SMW	N/A	N/A
		Black	OPTSC18SMB	OPTSCA18SMB	N/A	N/A
LC	12 Fibre	White	OPTLC12SMW	OPTLCA12SMW	OPTLC1262W	OPTLC12OM3W
		Black	OPTLC12SMB	OPTLCA12SMB	OPTLC1262B	OPTLC12OM3B
	24 Fibre	White	OPTLC24SMW	OPTLCA24SMW	OPTLC2462W	OPTLC24OM3W
		Black	OPTLC24SMB	OPTLCA24SMB	OPTLC2462B	OPTLC24OM3B
ST	6 Fibre	White	OPTST06SMW	N/A	OPTST0662W	N/A
		Black	OPTST06SMB	N/A	OPTST0662B	N/A
	12 Fibre	White	OPTST12SMW	N/A	OPTST1262W	N/A
		Black	OPTST12SMB	N/A	OPTST1262B	N/A

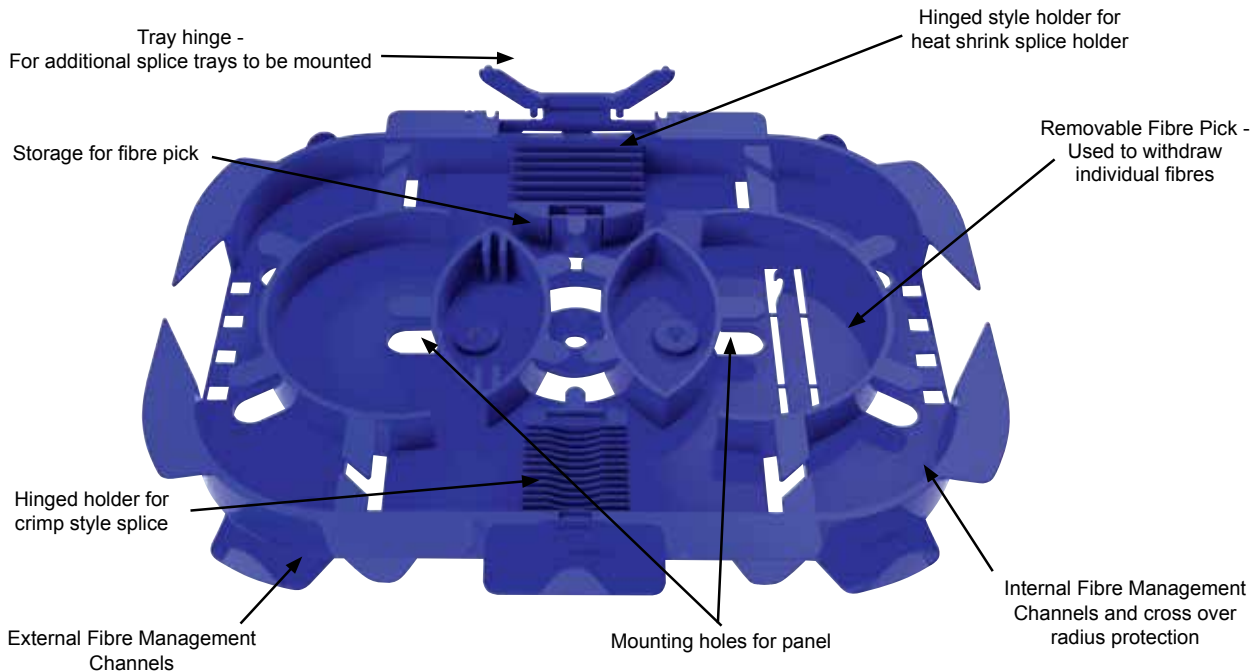


Optical Fibre Management

Accessories

Speedway Fibre Splice Tray	119
Speedway Fibre Management Spool	120
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2U Cable bar with Detachable Hooks	122
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2U Patch Cord Storage Panel	124
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Optical Fibre Fusion Splice Protectors	127

Speedway Fibre Splice Tray For up to 24 Fibres



Introducing the revolutionary new Speedway splice tray with unrivalled ease of use and flexibility. Featuring a unique external fibre pathway and pivoting splice holder arrangement this tray redefines the concept of splice management, combining fibre

management and splicing control in one product. Due to its accommodating internal dimensions the Speedway splice tray is able to comfortably hold 24 splices with either heatshrink or crimp style splice protectors with up to 900µm buffered fibres.

Features

- > Unique external fibre pathway allows easy storage of excess fibre and multi-directional routing of entry and exit fibres
- > Spacious interior maintains 30mm fibre bend radius and allows storage of either 250µm or 900µm buffered fibre
- > Internal management allows multiple fibre routing options including cross over
- > Pivoting splice holders allow uninterrupted control of fibre prior to splicing and during rework
- > Built in fibre pick can be used to withdraw individual fibres and can be stored in the tray after use
- > Will hold up to 24 splices with either heatshrink or crimp style splice protectors
- > Supplied with tray hinge to maintain access to splices with stacked trays
- > Transparent clip in lid supplied with every tray
- > Cable tie points to secure fibre on entry and exit
- > Mountable via central hole, DIN style holes or double sided foam adhesive pad

Applications

- > Fibre management
- > Internal and external
- > Wall boxes
- > Patch panels

Technical Specification

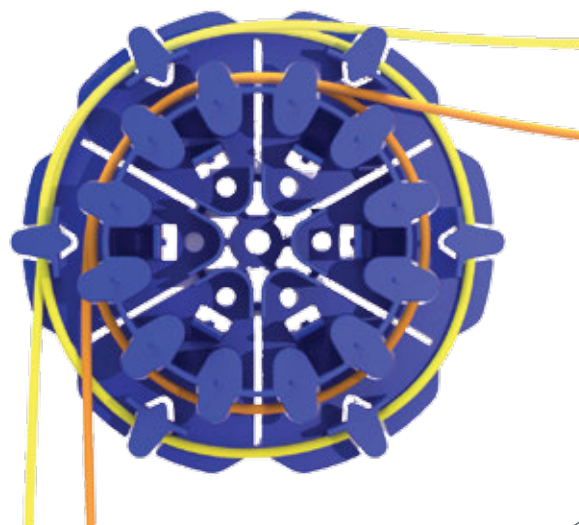
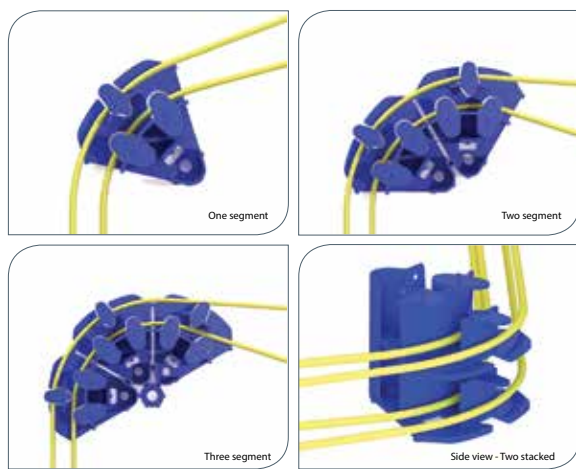
SPLICE TRAY	
Width	168mm
Depth	124mm
Height	13mm
Net weight	81g
Material	ABS
Colour	Blue
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC

Ordering Information

DESCRIPTION	PART NO.
Speedway Fibre Splice Tray Heat Shrink	SPT01
Speedway Fibre Splice Tray Crimp Style	SPT02



Speedway 6 Segment Fibre Management Spool



Introducing the revolutionary Speedway bend radius spool with its unrivalled ease of use and flexibility. Designed to accommodate a number of cable diameters up to 3mm. This incredibly versatile accessory allows the installer to use the complete unit for fibre storage or break it down into up to 6 individual components suitable for fibre management/routing.

These can then be mounted via adhesive foam pads or via screws. It allows two channels of routing aiding segregation of incoming and exiting fibre bundles. The individual spools are designed to stack up into as many units as you may require through a simple snap fit system.

Features

- > Fibre pathway allows easy storage of excess fibre and multi-directional routing of entry and exit fibres
- > Allows storage of 250µm, 900µm up to 3mm fibre cabling
- > Minimum 30mm Bend Radius
- > Can be split in to six separate sections
- > Clips together allowing multiple stacks to be formed
- > Mountable via central hole by screw, or double sided foam adhesive pad

Applications

- > Fibre management
- > Internal and external
- > Wall boxes
- > Patch panels

Technical Specification

FIBRE MANAGEMENT SPOOL	
Diameter	Max 96mm
Height - Individual	22mm with Adhesive pad, 21mm without
Height - 2 Stacked	37mm with Adhesive pad, 36mm without
Net weight	27g
Packaged weight	27g
Material	ABS
Colour	Blue
Operating temperature	-40°C to +50°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173
Compliant to	IEC60304, IEC61754, EN297-1 Reach / SVHC

Ordering Information

SPLICE TRAY WITH CLEAR LID	PART NUMBER
Speedway Bend Radius Spool	SPOOL6/PAD

Design Registration Number 001274211



1U Cable Bar with Detachable Hooks



1UCABLEBAR/PL01



Detachable Hook



1UCABLEBAR/PL02

The 1U cable bar with detachable hooks is designed to manage patch cords for high density solutions. The individual hooks can be placed as per the installer's preference. The cable

management bar can be supplied in a range of different colour such as black, grey and silver depending on the customer's preference.

Features

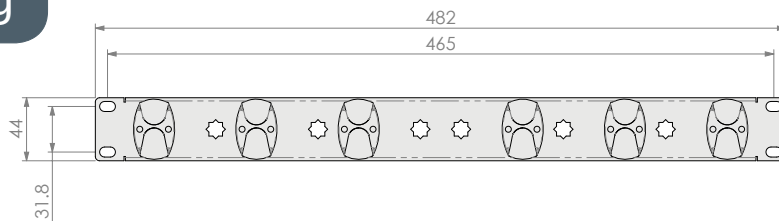
- > Detachable hooks to be placed as per installers preference
- > 1U to provide cable management between patch panels
- > 19" rack mountable
- > Provides patch cable management with minimal attenuation loss

Applications

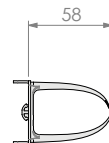
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Drawing

Front View



Side View



Technical Specification

ELEMENT	CHARACTERISTIC
Height (mm)	44
Width (mm)	482
Depth (mm)	70
Net weight (kg)	0.33
Number of cable rings	6
Material	Cold Rolled Steel
Material thickness (mm)	1.2
Plate Colour	Black RAL 9004 & Grey 7035
Hook Colour	Dark Grey 7015 & Grey 7035
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Black 9004 with Grey RAL 7015 Hooks	1UCABLEBAR/PL01
Light Grey RAL 7035 with Light Grey RAL7035 Hooks	1UCABLEBAR/PL02
Black RAL9004 with Grey RAL7015 87mm Hooks	1UCABLEBAR/PL04



2U Cable Bar with Detachable Hooks



2UCABLEBAR/PL01



Detachable Hook



2UCABLEBAR/PL02

The 2U cable bar with detachable hooks is designed to manage patch cords for high density solutions. The individual hooks can be placed as per the installer's preference. The cable

management bar can be supplied in a range of different colour such as black, grey and polished metal depending on the customer's preference.

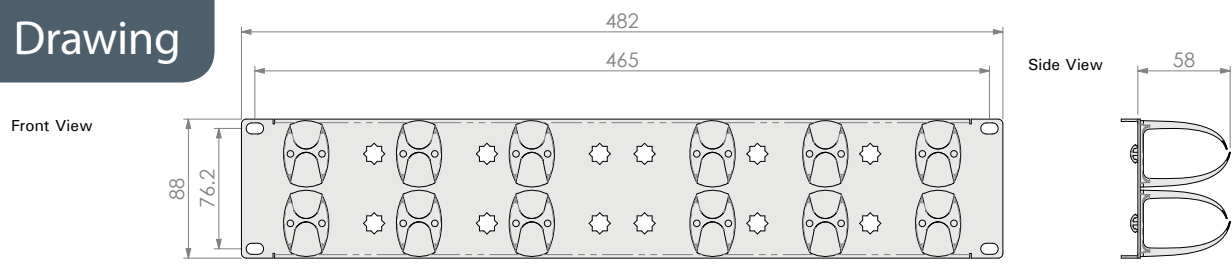
Features

- > Detachable hooks to be placed as per installers preference
- > 2U to provide cable management between patch panels
- > 19" rack mountable
- > Provides patch cable management with minimal attenuation loss

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Drawing



Technical Specification

ELEMENT	CHARACTERISTIC
Height (mm)	88
Width (mm)	482
Depth (mm)	70
Net weight (kg)	0.6
Number of cable rings	12
Material	Cold Rolled Steel
Material thickness (mm)	1.2
Plate Colour	Black RAL 9004, Grey RAL 7035 & Polished Metal
Hook Colour	Dark Grey RAL 7015 & Grey RAL 7035
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Black RAL 9004 with Grey RAL 7015 Hooks	2UCABLEBAR/PL01
Light Grey RAL 7035 with Light Grey RAL7035 Hooks	2UCABLEBAR/PL02



1U Cable Bar with 87mm Detachable Hooks



The 1U cable bar with 87mm detachable hooks is designed to manage a higher volume of patch cords for high density solutions. The individual hooks can be placed as per the installer's

preference. The cable management bar can be supplied in a range of different colour such as black, grey and silver depending on the customer's preference.

Features

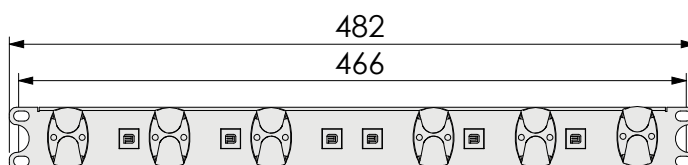
- > 87mm Detachable hooks to be placed as per installers preference
- > 1U to provide cable management between patch panels
- > 19" rack mountable
- > Provides patch cable management with minimal attenuation loss

Applications

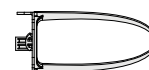
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Drawing

Front View



Side View



Technical Specification

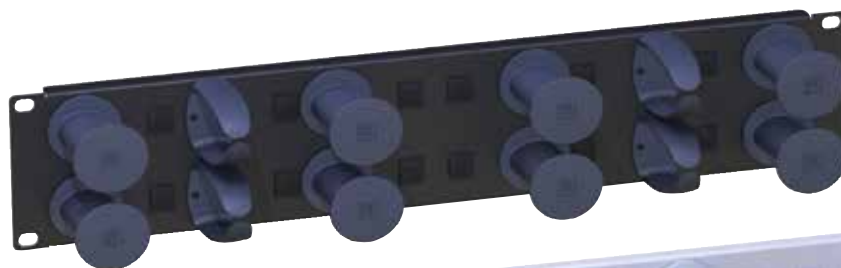
ELEMENT	CHARACTERISTIC
Height (mm)	44
Width (mm)	482
Depth (mm)	99
Net weight (kg)	0.33
Number of cable rings	6
Material	Cold Rolled Steel
Material thickness (mm)	1.2
Plate Colour	Black RAL 9004
Hook Colour	Dark Grey RAL 7015
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	RoHS, Reach / SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Black 9004 with Grey RAL 7015 Hooks 87mm	1UCABLEBAR/PL04



2U Patch Cord Storage Panel



2UCABLEBAR/PL04



2UCABLEBAR/PL05

The 2U Patch cord storage panel with detachable rings and bend radius spools is designed to manage patch cords of various lengths. The individual hooks and spools can be placed as per the installer's preference to manage patch cords

effectively whilst protecting the bend radius at all times. The patch cord storage panel can be supplied in a range of different colours such as black, grey and polished metal depending on the customers preference.

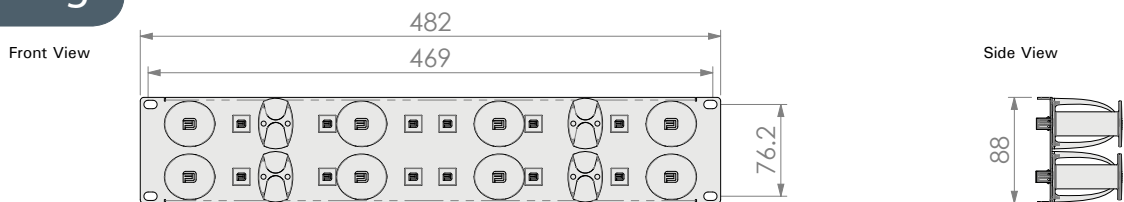
Features

- > Detachable rings and spools to be placed as per installers preference
- > 2U to provide cable management between patch panels
- > 19" rack mountable
- > Provides patch cable management with minimal attenuation loss

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication
- > Indoor applications

Drawing



Technical Specification

ELEMENT	CHARACTERISTIC
Height (mm)	88
Width (mm)	482
Depth (mm)	57.5
Net weight (kg)	0.6
Number of cable rings 58mm	4
Number of cable Spools	8
Material	Cold Rolled Steel
Material thickness (mm)	1.2
Plate Colour	Black RAL 9004 & Grey RAL 7035
Hook Colour	Dark Grey RAL 7015 & Grey RAL 7035
Operating temperature (°C)	-40 to +60
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC

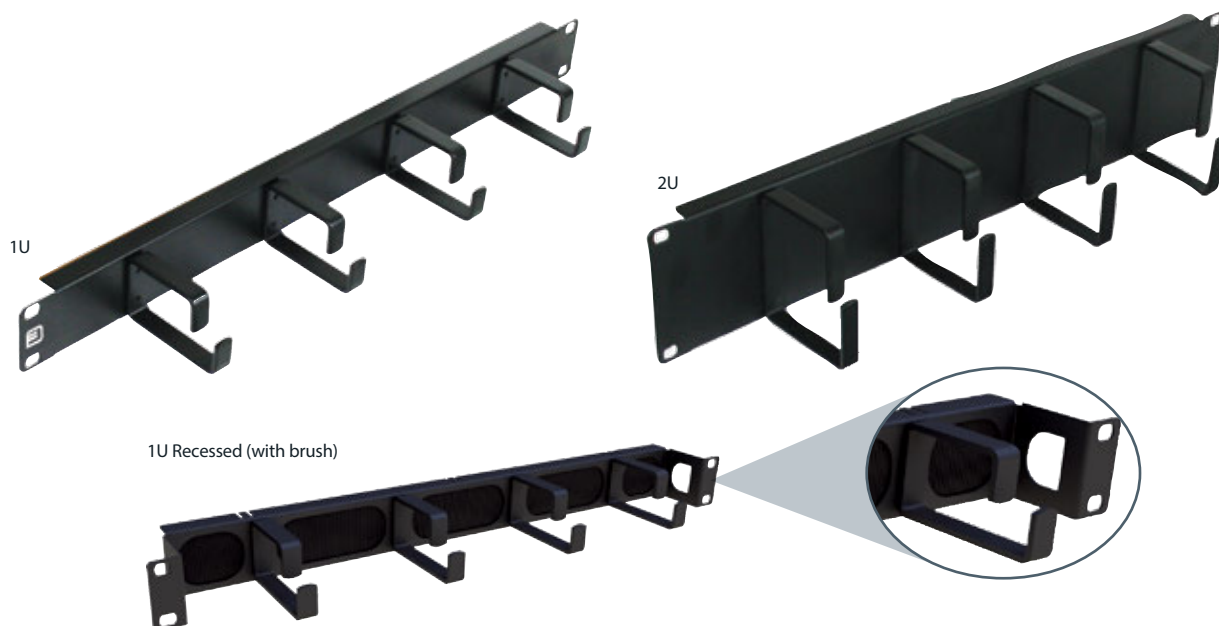
Ordering Information

DESCRIPTION	PART NUMBER
Black 9004 with Grey RAL 7015 Hooks and spools	2UCABLEBAR/PL04
Light Grey RAL 7035 with Light Grey RAL7035 Hooks and spools	2UCABLEBAR/PL05



4 Ring Cable Management Bar

- > 19" rack mount
- > Black / Grey powder coat finish



DESCRIPTION	PART NO.
1U Cable management bar	1UCABLEBAR
1U Cable management bar - Grey	1UCABLEBAR/G
2U Cable management bar	2UCABLEBAR
1U Cable management bar with brush - Recessed - Black	1UCABLEBAR/REC
1U Cable management bar with brush - Recessed - Grey	1UCABLEBAR/REC/G

Blanking Plates

- > 19" Rack Mount
- > Black Powder Coat



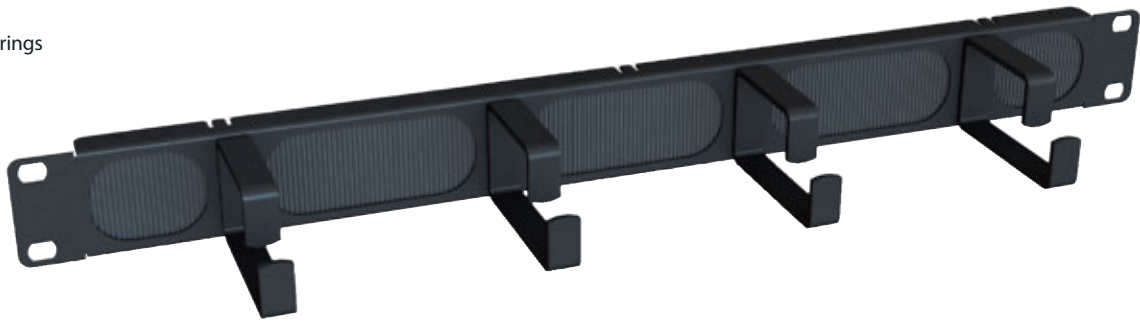
DESCRIPTION	PART NO.
1U blank plate	1UBLANK
2U blank plate	2UBLANK
3U blank plate	3UBLANK



Brush Strips

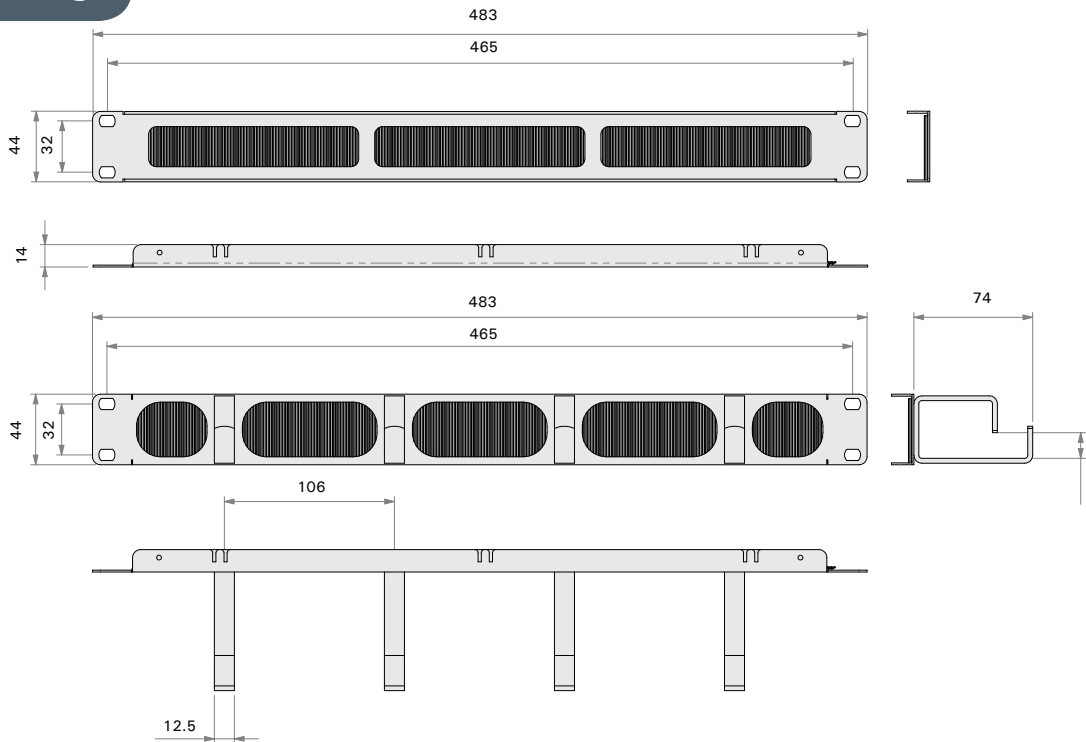


Without rings



With rings

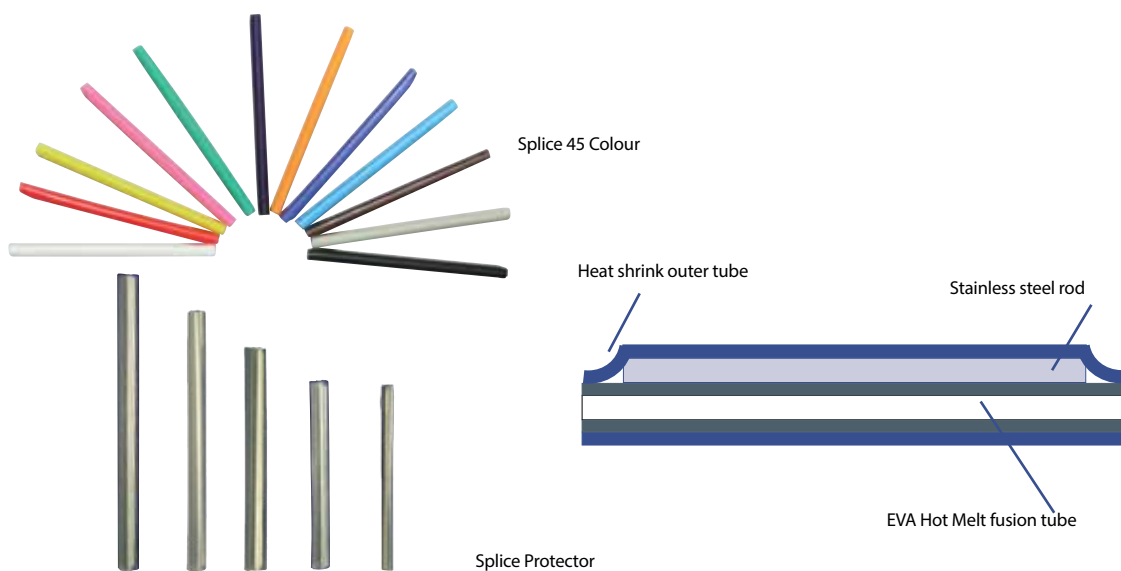
Drawing



DESCRIPTION	PART NO.
1U Brush Strip	1UBRUSHSTRIP03
1U Cable Management Bar with Brush Strip	1UCABLEBAR/BR



Optical Fibre Fusion Splice Protector



Technical Specifications

GENERAL	
Stainless Rod	301 Grade
Shrink Process	Heat to 125°C / maintain 80 seconds / cool
Outer Tube	Cross-linked polyolefin
Inner Tube	Ethylene Vinyl Acetate
Construction	Outer tube encloses and captures fusion tube and rod. Fusion tube centred in assembly.
Operating temperature	-45°C to +100°C
Minimum shrink temperature	120°C (full recovery)

Features & Advantages

- > Components: heat shrinkable outer tube, hot melt fusion tube and stainless steel strength rod
- > Provides strength and protection to optical fibre splices
- > Clear sleeve to allow visual location of splice prior to shrinking
- > Easy to use and install without damaging splice
- > Maintains optical properties of fibre
- > Sealant protects splice

Ordering Information

PART NUMBER	SPLICE PROTECTOR (L)		TUBE (A)		ROD (B)	TUBE COLOUR	PACKING
	O.D. RECOVERED	LENGTH	I.D.	LENGTH	O.D.	OUTER/INNER	
SPLICE45CLEAR/Z	2.5±0.2	45±1	1.2±0.1	43±1	1.0±0.1	Clear/Clear	100/pcs
SPLICE60CLEAR/Z	2.5±0.2	60±1	1.2±0.1	58±1	1.0±0.1	Clear/Clear	100/pcs
SPLICE60CLEAR3MM	3.0±0.2	60±1	1.2±0.1	58±1	1.0±0.1	Clear/Clear	100/pcs
SPLICE45COLOUR	2.5±0.2	45±1	1.2±0.1	43±1	1.0±0.1	Various/Various*	TBA
Please contact the sales team	1.5±0.2	25±1	0.95±0.1	23±1	0.5±0.1	Clear/Clear	100/pcs
	1.5±0.2	35±1	1.8±0.1	33±1	0.5±0.1	Clear/Clear	100/pcs
	1.5±0.2	20±1	0.95±0.1	18±1	0.5±0.1	Clear/Clear	100/pcs
	1.4±0.2	26±1	0.95±0.1	23±1	0.5±0.1	Clear/Clear	100/pcs
	2±0.2	25±1	1.6±0.1	22±1	0.8±0.1	Clear/Clear	100/pcs
	2.5±0.2	40±1	1.6±0.1	37±1	1.2±0.1	Clear/Clear	100/pcs
	2.5±0.2	30±1	1.75±0.1	27±1	1.2±0.1	Clear/Clear	100/pcs

*Pack Comprises of : 12 individual splices in a single bag. The colour set includes the colours designated in IEC 60304; Blue, orange, green, brown, Grey, White, Red, Black, Yellow, Violet, Rose and Aqua.

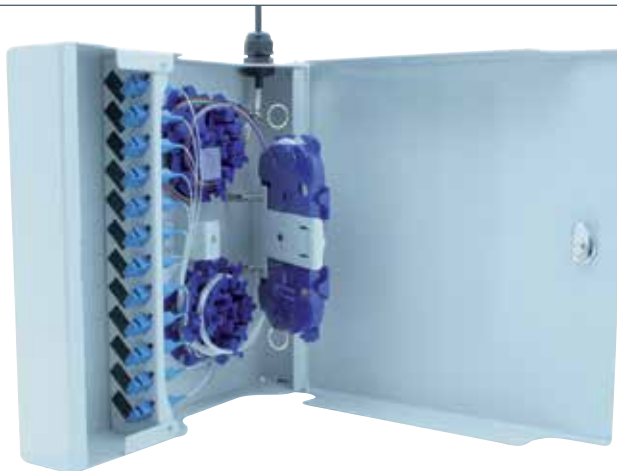


Optical Fibre Management

Wall Boxes

Lockable Slimline Wall Box	129
Single and Double Door Lockable Low Profile Wall Boxes	133
W26 Splicing Lockable Wall Box	139
Single and Double Door Lockable Wall Boxes	141
AM Style Lockable Single Module Wall Box	147
AM Style Lockable Dual Module Wall Box	148
AM Style Lockable Quad Module Wall Box	149
Slimline Wall Boxes	150

Lockable Slimline Wall Box



The Optronics wall box system can be supplied unloaded ready for the installer to load with their choice of adaptors, or pre-loaded with adaptors and pigtails ready for installation. With the ability to use a full array of adaptor types, this wall box offers a flexible solution to the end user which enables them to incorporate a multi functional wall mounted box (which allows

easy access during installation or rework) with no disturbance to existing cable or fibres. In addition to the array of adaptors the box also offers multiple cable entry and exit solutions: up to 4 standard entry points for loose tube, tight buffered, preterminated, steel tape armoured cable and 2 slotted positions for patch cord exit.

- > Up to 24 fibre
- > Multiple adaptor options
- > 24 adaptor positions
- > REACH/SvHC
- > Lockable single door
- > Internal bend radius protection included
- > Internal applications
- > For use in multi dwelling units or demarcation points

Technical Specification

SLIMLINE WALL BOX	
Height	288mm
Width	300mm
Depth	54mm
Net Weight	3.3Kg
Packaged Weight	3.5Kg
Package Dimensions (WxLxH)	310mm x 300mm x 65mm
IP Rating	IP20
Suitable for adaptor type	SC Simplex, ST, FC, SC Duplex, LC, E2000
Number of doors	1
Cable entry 20mm	4
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Grey (RAL7035)
Operating Temperature	-40°C to +60°C
Compliant to	REACH/SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1

ALSO AVAILABLE

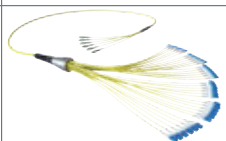
Full range of patch cords including LC, SC, ST, FC, MTRJ and E2000, simplex and duplex, LSZH and PVC, high performance and specialist applications



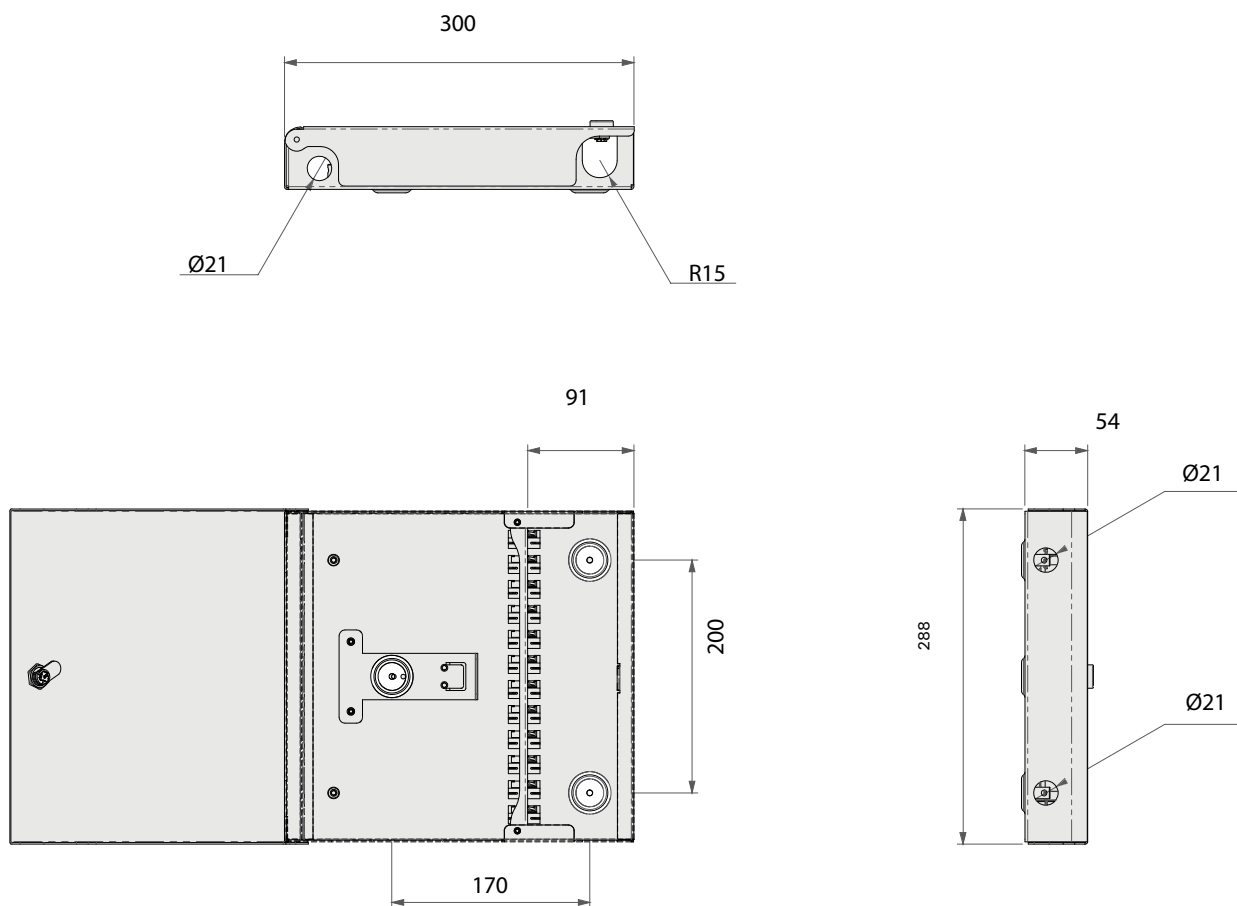
Comprehensive range of pigtails in all major connector types, individually bagged and identified for full traceability



Unique range of pre-terminated assemblies featuring our patented FirstLight™ Prime breakout modules

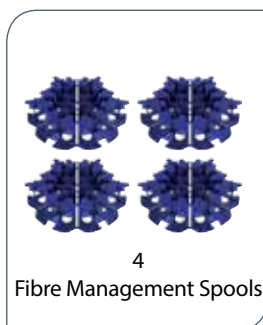


Drawing



All dimensions in mm

In the box



W27

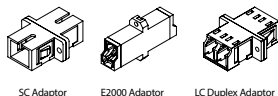


24 Position
SINGLE DOOR

W27 24 POSITION SC/LC/E2000 SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

	PART NO.		PART NO.
SC Simplex Multimode	W27SCM12	E2000 APC Singlemode	W27E2A12
SC Simplex Singlemode	W27SCS12	LC Duplex Multimode Beige	W27LCM12
SC APC Simplex Singlemode	W27SCA12	LC Duplex Multimode Erika Violet	W27LCV12
E2000 Multimode	W27E2M12	LC Duplex Singlemode	W27LCS12
E2000 Singlemode	W27E2S12	LC APC Duplex Singlemode	W27LCA12



SC Adaptor E2000 Adaptor LC Duplex Adaptor

Scan for More
Information



W28



12 Position
SINGLE DOOR

W28 12 POSITION SC DUPLEX SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 12 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

	PART NO.		PART NO.
SC Duplex Singlemode	W28SCS12	SC Duplex Multimode Erika Violet	W28SCV12
SC Duplex Multimode	W28SCM12	SC APC Duplex Singlemode	W28SCA12



SC Duplex Adaptor

Scan for More
Information



W29

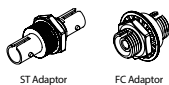


24 Position
SINGLE DOOR

W29 24 POSITION ST/FC SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

	PART NO.		PART NO.
ST Singlemode	W29STS12	FC Multimode	W29FCM12
ST Multimode	W29STM12	FC APC Singlemode	W29FCA12
FC Singlemode	W29FCS12		



ST Adaptor FC Adaptor

Scan for More
Information



FOR MORE PATCH PANEL ACCESSORIES INCLUDING;

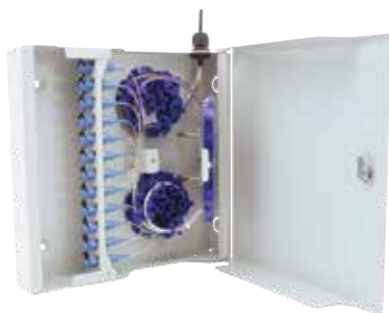
Splice Trays
Splice Protectors
Panel Blanks
Fibre Management

SEE THE ACCESSORIES SECTION STARTING ON PAGE 127



FIBRE MANAGEMENT | LOCKABLE SLIMLINE WALL BOX LOADED WITH PIGTAILS

W27



24 Position
SINGLE DOOR

W27 24 POSITION SC/LC/E2000 SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 48 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS				
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
SC Simplex Multimode	W27SCM12	-	P2	P3	P4	P5
SC Simplex Singlemode	W27SCS12	P1	-	-	-	-
SC APC Simplex Singlemode	W27SCA12	P1	-	-	-	-
E2000 Multimode	W27E2M12	-	P2	P3	P4	P5
E2000 Singlemode	W27E2S12	P1	-	-	-	-
E2000 APC Singlemode	W27E2A12	P1	-	-	-	-
LC Duplex Multimode Beige	W27LCM12	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	W27LCV12	-	-	-	-	P5
LC Duplex Singlemode	W27LCS12	P1	-	-	-	-
LC APC Duplex Singlemode	W27LCA12	P1	-	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail

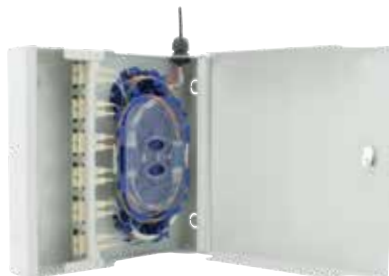


LC Duplex Pigtail

Scan for More
Information



W28



12 Position
SINGLE DOOR

W28 12 POSITION SC DUPLEX SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 12 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 48 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS				
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
SC Duplex Singlemode	W28SCS12	P1	-	-	-	-
SC Duplex Multimode	W28SCM12	-	P2	P3	P4	P5
SC Duplex Multimode Erika Violet	W28SCV12	-	-	-	-	P5
SC APC Duplex Singlemode	W28SCA12	P1	-	-	-	-



SC Duplex Adaptor



SC Pigtail

Scan for More
Information



W29



24 Position
DOUBLE DOOR

W29 24 POSITION ST/FC SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 24 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS				
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
ST Singlemode	W29STS12	P1	-	-	-	-
ST Multimode	W29STM12	-	P2	P3	P4	P5
FC Singlemode	W29FCS12	P1	-	-	-	-
FC Multimode	W29FCM12	-	P2	P3	P4	P5
FC APC Singlemode	W29FCA12	P1	-	-	-	-



ST Adaptor



FC Adaptor



ST Pigtail



FC Pigtail

Scan for More
Information



Single and Double Door Lockable Low Profile Wall Boxes



The Optronics wall box system can be supplied unloaded ready for the installer to load with their choice of adaptors, or pre - loaded with adaptors and pigtails ready for installation. With the ability to use a full array of adaptor types, this wall box offers a flexible solution to the end user, enabling them to incorporate a multi functional wall mounted box (which allows easy access during installation or rework) with no disturbance of existing cable or fibres. In addition to the array of adaptors the box also offers multiple cable entry and exit solutions: up to 8 standard entry points for loose tube, tight buffered, preterminated, steel tape armoured cable and 2 slotted positions for patch cord exit.

- > Up to 72 fibre
- > Multiple adaptor options
- > 36 adaptor positions
- > REACH/SvHC
- > Available in single door and double door versions
- > Internal bend radius protection included
- > Ideal internal applications
- > For use in multi dwelling units or demarcation points within a network
- > Data centres or telecommunication networks

Technical Specification

LOCKABLE WALL BOXES		SINGLE DOOR	DOUBLE DOOR
Height		360mm	360mm
Width		360mm	360mm
Depth		98mm	98mm
Net Weight		7 kg	7.5 kg
Packaged Weight		7.3 kg	7.5 kg
Package Dimensions		420 W x 400 D x 106 H	420 W x 400 D x 106 H
IP Rating		IP 20	IP 20
Suitable for adaptor type		SC Simplex LC Duplex E2000 MJ	SC Simplex LC Duplex E 2000 MJ
Number of doors		1	2
Cable entry	20mm	4 x 20mm	4 x 20mm
	25mm	4 x 25mm	4 x 25mm
Material		Cold Rolled Steel	Cold Rolled Steel
Material thickness		1.2mm	1.2mm
Material coating		Electrostatic Powder Coating	Electrostatic Powder Coating
Colour		Grey RAL 7035	Grey RAL 7035
Operating Temperature		-40°C to +60°C	-40°C to +60°C
Compliant to		REACH/SvHC	REACH/SvHC
Designed in accordance with		TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1

ALSO AVAILABLE

Full range of patch cords including LC, SC, ST, FC, MTRJ and E2000. simplex and duplex, LSZH and PVC. high performance and specialist applications



Comprehensive range of pigtails in all major connector types, individually bagged and identified for full traceability

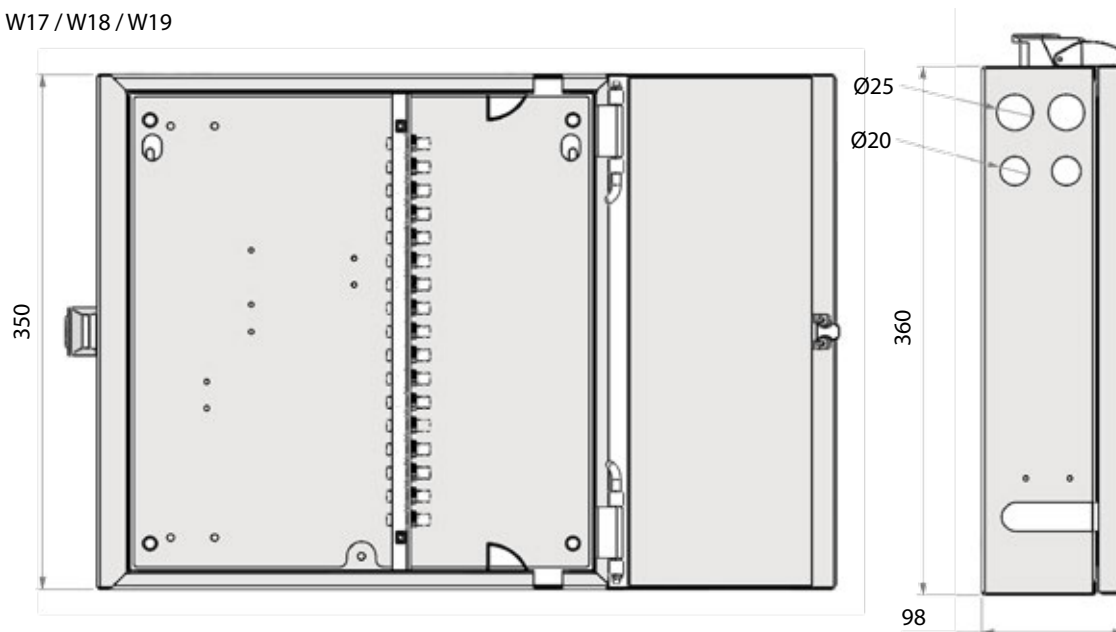


Unique range of pre-terminated assemblies featuring our patented FirstLight™ Prime breakout modules

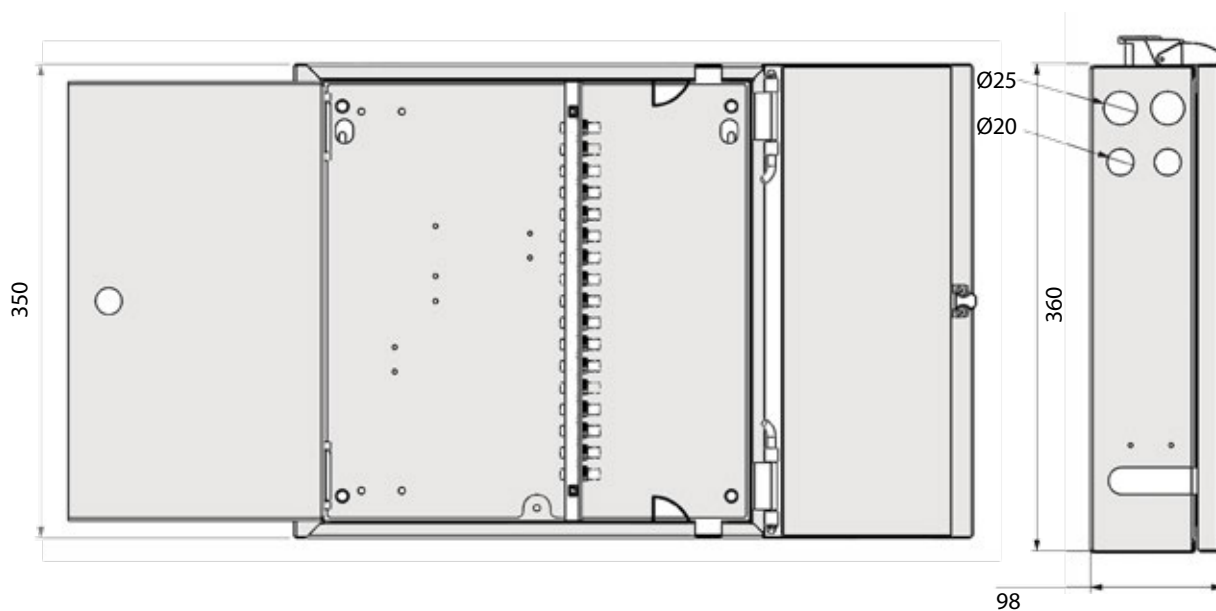


Drawing

W17 / W18 / W19



W20 / W21 / W22



All dimensions in mm



W17

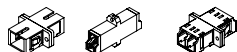


36 Position
SINGLE DOOR

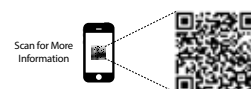
W17 36 POSITION SC/LC/E2000 SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 36 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 72 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	W17SCM36/Z	E2000 APC Singlemode	W17E2A36/Z
SC Simplex Singlemode	W17SCS36/Z	LC Duplex Multimode Beige	W17LCM36/Z
SC APC Simplex Singlemode	W17SCA36/Z	LC Duplex Multimode Erika Violet	W17LCV36/Z
E2000 Multimode	W17E2M36/Z	LC Duplex Singlemode	W17LCS36/Z
E2000 Singlemode	W17E2S36/Z	LC APC Duplex Singlemode	W17LCA36/Z



SC Adaptor E2000 Adaptor LC Duplex Adaptor



Scan for More
Information

W18



48 Position
SINGLE DOOR

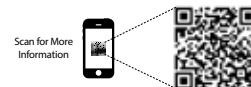
W18 48 POSITION ST/FC SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 48 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

PART NO.		PART NO.	
ST Singlemode	W18STS48/Z	FC Multimode	W18FCM48/Z
ST Multimode	W18STM48/Z	FC APC Singlemode	W18FCA48/Z
FC Singlemode	W18FCS48/Z		



ST Adaptor FC Adaptor



Scan for More
Information

W19



24 Position
DOUBLE DOOR

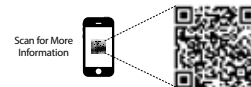
W19 24 POSITION SC DUPLEX SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

PART NO.		PART NO.	
SC Duplex Singlemode	W19SCS24/Z	SC Duplex Multimode Erika Violet	W19SCV24/Z
SC Duplex Multimode	W19SCM24/Z	SC APC Duplex Singlemode	W19SCA24/Z



SC Adaptor



Scan for More
Information



W20



36 Position
DOUBLE DOOR

W20 36 POSITION SC/LC/E2000 DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 36 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 72 fibres.

	PART NO.		PART NO.
SC Simplex Multimode	W20SCM36/Z	E2000 APC Singlemode	W20E2A36/Z
SC Simplex Singlemode	W20SCS36/Z	LC Duplex Multimode Beige	W20LCM36/Z
SC APC Simplex Singlemode	W20SCA36/Z	LC Duplex Multimode Erika Violet	W20LCV36/Z
E2000 Multimode	W20E2M36/Z	LC Duplex Singlemode	W20LCS36/Z
E2000 Singlemode	W20E2S36/Z	LC APC Duplex Singlemode	W20LCA36/Z



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W21



48 Position
DOUBLE DOOR

W21 48 POSITION ST/FC DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 48 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

	PART NO.		PART NO.
ST Singlemode	W21STS48/Z	FC Multimode	W21FCM48/Z
ST Multimode	W21STM48/Z	FC APC Singlemode	W21FCA48/Z
FC Singlemode	W21FCS48/Z		



ST Adaptor



FC Adaptor

Scan for More
Information



W22



24 Position
DOUBLE DOOR

W22 24 POSITION SC DUPLEX DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 24 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.

	PART NO.		PART NO.
SC Duplex Singlemode	W22SCS24/Z	SC Duplex Multimode Erika Violet	W22SCV24/Z
SC Duplex Multimode	W22SCM24/Z	SC APC Duplex Singlemode	W22SCA24/Z



SC Adaptor

Scan for More
Information



FOR MORE PATCH PANEL ACCESSORIES INCLUDING;

Splice Trays
Splice Protectors
Panel Blanks
Fibre Management

SEE THE ACCESSORIES SECTION STARTING ON PAGE 127



FIBRE MANAGEMENT | SINGLE DOOR LOW PROFILE LOCKABLE WALL BOXES

W17

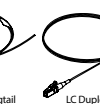
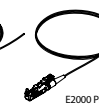
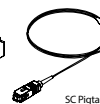
W17 36 POSITION SC/LC/E2000 SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 36 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 72 fibres.



36 Position
SINGLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W17SCM36/Z	-	P2	P3	P4
SC Simplex Singlemode	W17SCS36/Z	P1	-	-	-
SC APC Simplex Singlemode	W17SCA36/Z	P1	-	-	-
E2000 Multimode	W17E2M36/Z	-	P2	P3	P4
E2000 Singlemode	W17E2S36/Z	P1	-	-	-
E2000 APC Singlemode	W17E2A36/Z	P1	-	-	-
LC Duplex Multimode Beige	W17LCM36/Z	-	P2	P3	P4
LC Duplex Multimode Erika Violet	W17LCV36/Z	-	-	-	P5
LC Duplex Singlemode	W17LCS36/Z	P1	-	-	-
LC APC Duplex Singlemode	W17LCA36/Z	P1	-	-	-



Scan for More
Information



W18

W18 48 POSITION ST/FC SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 48 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 48 fibres.



48 Position
SINGLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
ST Singlemode	W18STS48/Z	P1	-	-	-
ST Multimode	W18STM48/Z	-	P2	P3	P4
FC Singlemode	W18FCS48/Z	P1	-	-	-
FC Multimode	W18FCM48/Z	-	P2	P3	P4
FC APC Singlemode	W18FCA48/Z	P1	-	-	-



Scan for More
Information



W19

W19 24 POSITION SC DUPLEX SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 24 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.



24 Position
DOUBLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Duplex Singlemode	W19SCS24/Z	P1	-	-	-
SC Duplex Multimode	W19SCM24/Z	-	P2	P3	P4
SC Duplex Multimode Erika Violet	W19SCV24/Z	-	-	-	P5
SC APC Duplex Singlemode	W19SCA24/Z	P1	-	-	-



Scan for More
Information



W20

W20 36 POSITION SC/LC/E2000 DOUBLE DOOR WALL BOX LOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 36 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 72 fibres.



36 Position
DOUBLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W20SCM36/Z	-	P2	P3	P4
SC Simplex Singlemode	W20SCS36/Z	P1	-	-	-
SC APC Simplex Singlemode	W20SCA36/Z	P1	-	-	-
E2000 Multimode	W20E2M36/Z	-	P2	P3	P4
E2000 Singlemode	W20E2S36/Z	P1	-	-	-
E2000 APC Singlemode	W20E2A36/Z	P1	-	-	-
LC Duplex Multimode Beige	W20LCM36/Z	-	P2	P3	P4
LC Duplex Multimode Erika Violet	W20LCV36/Z	-	-	-	P5
LC Duplex Singlemode	W20LCS36/Z	P1	-	-	-
LC APC Duplex Singlemode	W20LCA36/Z	P1	-	-	-



Scan for More
Information



W21

W21 48 POSITION ST/FC DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 48 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.



48 Position
DOUBLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
ST Singlemode	W21STS48/Z	P1	-	-	-
ST Multimode	W21STM48/Z	-	P2	P3	P4
FC Singlemode	W21FCS48/Z	P1	-	-	-
FC Multimode	W21FCM48/Z	-	P2	P3	P4
FC APC Singlemode	W21FCA48/Z	P1	-	-	-



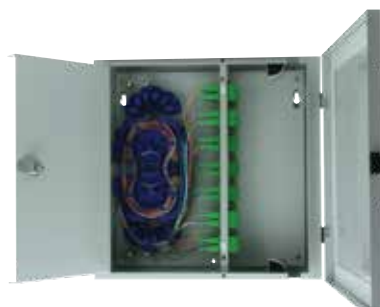
Scan for More
Information



W22

W22 24 POSITION SC DUPLEX DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 24 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 48 fibres.



24 Position
DOUBLE DOOR

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Duplex Singlemode	W22SCS24/Z	P1	-	-	-
SC Duplex Multimode	W22SCM24/Z	-	P2	P3	P4
SC Duplex Multimode Erika Violet	W22SCV24/Z	-	-	-	P5
SC APC Duplex Singlemode	W22SCA24/Z	P1	-	-	-



Scan for More
Information



W26 Splicing Lockable Wall Box



This single door lockable wall box is designed to allow pass through splicing within a multi-dwelling unit or demarcation point. The speedway splice tray plus fibre management spools makes splicing and routing fibre easy due to internal layout; the trays are stackable and include a hinge so that stacked splice trays

can be worked on without disturbing surrounding fibres. The use of spools provides a neat and tidy solution for maintaining excess fibres whilst keeping the required minimum bend radius. This solution is ideal for multi-dwelling or demarcation points within a network.

Features

- > Up to 144 fibres
- > Up to 6 Speedway Splice Trays
- > 14 Cable entry/exit points
- > This product conforms to the materials requirements of RoHS2, REACH/SvHC
- > Internal bend radius protection included
- > Grooved channels allow for the internals to be adjusted as per the installer's preference

Applications

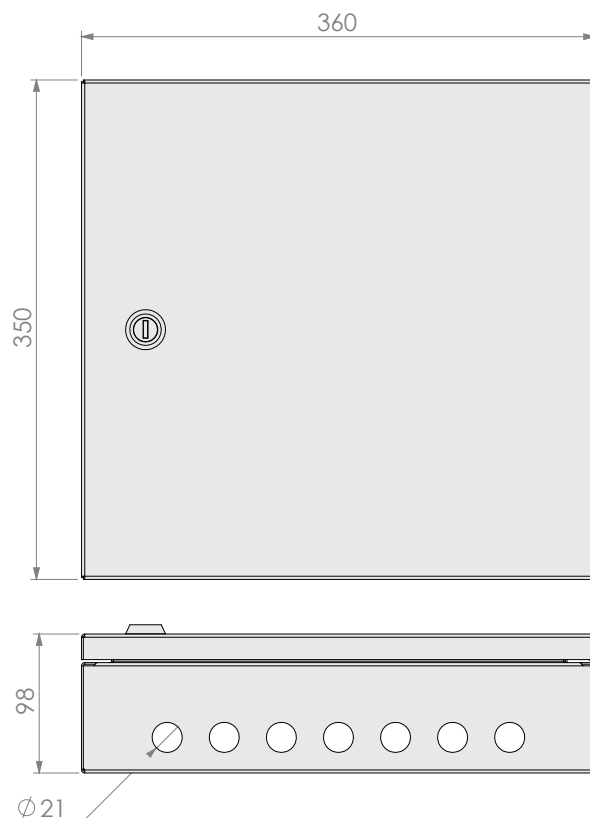
- > Internal Applications
- > For use in multi-dwelling units
- > Demarcation points within a network

Kit Includes

- > 6 x SPT01
- > 4 x SPOOL6 / Pad
- > 6 x Gland PG13.5
- > 12 x Cable Ties
- > 14 x Strain Tie
- > 1 x Transit Tube



Drawing



Technical Specification

PRODUCT SPECIFICATION	
Height	360mm
Width	350mm
Depth	98mm
Net weight	7.5kg
Packed weight	8.0kg
Packaged dimensions	215(H) x 420(W) x 400(D)mm
IP rating	IP20
Number of doors	1
Cable entry	14
Material	Cold Rolled Steel
Material thickness	1.2mm
Material Coating	Electro Static Powder Coating
Colour	Grey RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 279-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach/SVHC

Ordering Information

DESCRIPTION	PART NO.
Splicing Demarcation Box	W26XXX00



Single and Double Door Lockable Wall Boxes



The Optronics wall box system in its basic form is supplied with the box unloaded ready for you to install the adaptor of your choice. The box can also be pre-loaded complete with the required adaptor or pre-loaded with pigtails to meet your

project needs. The quality of construction that comes with the Optronics range of wallboxes ensures a safe, secure and aesthetically pleasing wallbox for your network.

- > Available in single and double door models
- > Double door models include two separate locks for security
- > Internal bend radius protection included
- > Cable entry and exit points can be knocked out to suit installation

Technical Specification

LOCKABLE WALL BOXES		SINGLE DOOR	DOUBLE DOOR
Height		360mm	360mm
Width		360mm	360mm
Depth		120mm	120mm
Net Weight		7.5kg	7.5kg
Packaged Weight		8kg	8kg
Package Dimensions (WxLxH)		420mm x 400mm x 130mm	
IP Rating		IP20	
Suitable for adaptor type		SC Simplex, ST/FC, E2000, LC Duplex, SC Duplex	
Number of doors		1 / 2	
Cable entry	20mm	4	
	25mm	4	
Material		Cold Rolled Steel	
Material thickness		1.2mm	
Material coating		Electrostatic Powder Coating	
Colour		Grey RAL 7035	
Operating Temperature		-40°C to +60°C	
Compliant to		REACH/SvHC	
Designed in accordance with		TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1.	

ALSO AVAILABLE

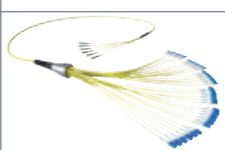
Full range of patch cords including LC, SC, ST, FC, MTRJ and E2000. simplex and duplex, LSZH and PVC. high performance and specialist applications



Comprehensive range of pigtails in all major connector types, individually bagged and identified for full traceability

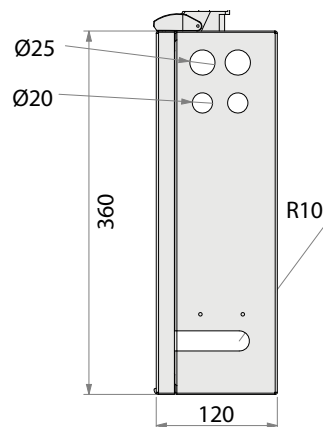
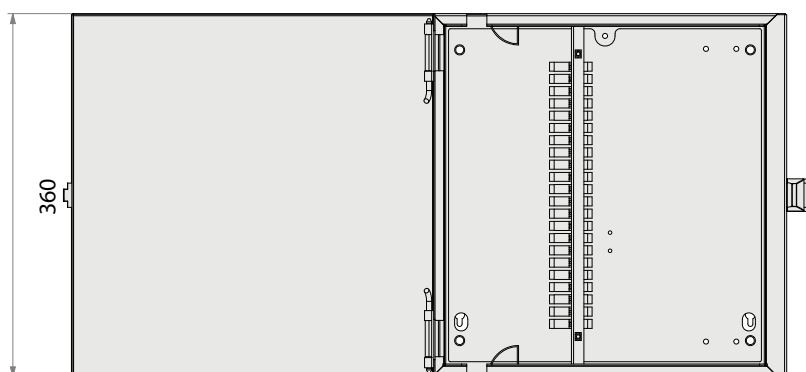


Unique range of pre-terminated assemblies featuring our patented FirstLight™ Prime breakout modules

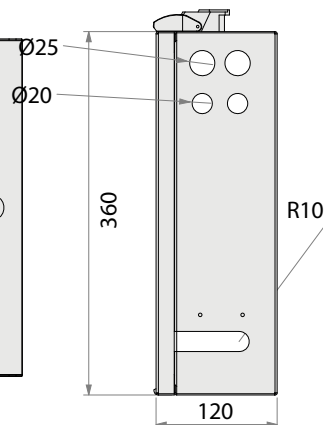
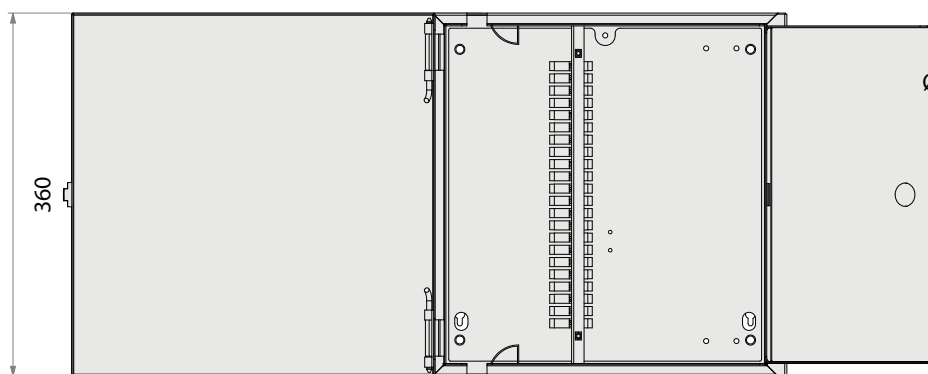


Drawing

W10 / W11 / W12 / W15



W06 / W07 / W08 / W09



All dimensions in mm



W15

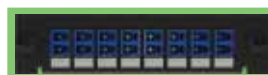
W15 4 POSITION MODULAR SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 4 Adaptor modules. The box is pre-loaded with your choice of adaptor modules (for modules see page 26).



**MODULAR
SINGLE DOOR**

DESCRIPTION	PART NO.
Single door modular wall box	W15XXX00/Z



For Adaptor Plates see
page 76

Scan for More
Information



W10

W10 72 POSITION ST/FC SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 72 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 72 fibres.



**96 Position
SINGLE DOOR**

	PART NO.		PART NO.
ST Singlemode	W10SCS72	FC Multimode	W10FCM72
ST Multimode	W10SCM72	FC APC Singlemode	W10FCA72
FC Singlemode	W10FCS72		



ST Adaptor



FC Adaptor

Scan for More
Information



W11

W11 72 POSITION SC/LC/E2000 SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 72 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 144 fibres.



**72 Position
SINGLE DOOR**

	PART NO.		PART NO.
SC Simplex Multimode	W11SCM72	E2000 APC Singlemode	W11E2A72
SC Simplex Singlemode	W11SCS72	LC Duplex Multimode Beige	W11LCM72
SC APC Simplex Multimode	W11SCA72	LC Duplex Multimode Erika Violet	W11LCV72
E2000 Multimode	W11E2M72	LC Duplex Singlemode	W11LCS72
E2000 Singlemode	W11E2S72	LC APC Duplex Singlemode	W11LCA72



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W12

W12 48 POSITION SC DUPLEX SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 48 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 96 fibres.



**48 Position
SINGLE DOOR**

	PART NO.		PART NO.
SC Duplex Singlemode	W12SCS48	SC Duplex Multimode Erika Violet	W12SCV48
SC Duplex Multimode	W12SCM48	SC APC Duplex Singlemode	W12SCA48



SC Duplex Adaptor

Scan for More
Information



W09

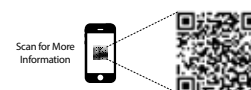


MODULAR
DOUBLE DOOR

W09 4 POSITION MODULAR DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 4 Adaptor modules. The box is pre-loaded with your choice of adaptor modules (for modules see page 26).

DESCRIPTION	PART NO.
Double Door modular wall box	W09XXX00



W06

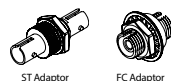


96 Position
DOUBLE DOOR

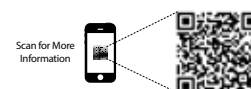
W06 72 POSITION ST/FC DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 72 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 72 fibres.

	PART NO.		PART NO.
ST Singlemode	W06STS72/Z	FC Multimode	W06FCM72/Z
ST Multimode	W06STM72/Z	FC APC Singlemode	W06FCA72/Z
FC Singlemode	W06FCS72/Z		



ST Adaptor FC Adaptor



W07

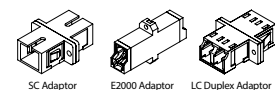


72 Position
SINGLE DOOR

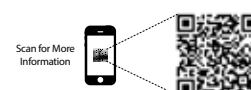
W07 72 POSITION SC/LC/E2000 DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 72 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 144 fibres.

	PART NO.		PART NO.
SC Simplex Multimode	W07SCM72/Z	E2000 APC Singlemode	W07E2A72/Z
SC Simplex Singlemode	W07SCS72/Z	LC Duplex Multimode Beige	W07LCM72/Z
SC APC Simplex Singlemode	W07SCA72/Z	LC Duplex Multimode Erika Violet	W07LCV72/Z
E2000 Multimode	W07E2M72/Z	LC Duplex Singlemode	W07LCS72/Z
E2000 Singlemode	W07E2S72/Z	LC APC Duplex Singlemode	W07LCA72/Z



SC Adaptor E2000 Adaptor LC Duplex Adaptor



W08



48 Position
DOUBLE DOOR

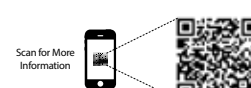
W08 48 POSITION SC DUPLEX DOUBLE DOOR LOCKABLE WALL BOX

Double Door Lockable Slimline Metal Wall Box suitable for up to 48 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 96 fibres.

	PART NO.		PART NO.
SC Duplex Singlemode	W08SCS48/Z	SC Duplex Multimode Erika Violet	W08SCV48/Z
SC Duplex Multimode	W08SCM48/Z	SC APC Duplex Singlemode	W08SCA48/Z



SC Duplex Adaptor



FIBRE MANAGEMENT | SINGLE DOOR LOCKABLE WALL BOXES

W10



96 Position
SINGLE DOOR

W10 72 POSITION ST/FC SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 96 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 72 fibres.

PART NO.	PIGTAILS					
	OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
ST Singlemode	W10SCS72	P1	-	-	-	-
ST Multimode	W10STM72	-	P2	P3	P4	P5
FC Singlemode	W10FCS72	P1	-	-	-	-
FC Multimode	W10FCM72	-	P2	P3	P4	P5
FC APC Singlemode	W10FCA72	P1	-	-	-	-



ST Adaptor



FC Adaptor



ST Pigtail



FC Pigtail

Scan for More
Information



W11



72 Position
SINGLE DOOR

W11 72 POSITION SC/LC/E2000 SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 72 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 144 fibres.

PART NO.	PIGTAILS				
	OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W17SCM72	-	P2	P3	P5
SC Simplex Singlemode	W17SCS72	P1	-	-	-
SC APC Simplex Singlemode	W17SCA72	P1	-	-	-
E2000 Multimode	W17E2SM72	P1	P3	P4	P5
E2000 Singlemode	W17E2S72	P1	-	-	-
E2000 APC Singlemode	W17E2SA72	P1	-	-	-
LC Duplex Multimode Erika	W17LCM72	-	P2	P3	P5
LC Duplex Multimode Erika Violet	W17LCV72	-	-	-	P5
LC Duplex Singlemode	W17LCS72	P1	-	-	-
LC APC Duplex Singlemode	W17LCA72	P1	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail



LC Duplex Pigtail

Scan for More
Information



W12



48 Position
SINGLE DOOR

W12 48 POSITION SC DUPLEX SINGLE DOOR WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 48 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 96 fibres.

PART NO.	PIGTAILS				
	OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Duplex Singlemode	W12SCS48	P1	-	-	-
SC Duplex Multimode	W12SCM48	-	P2	P3	P5
SC Duplex Multimode Erika Violet	W12SCV48	-	-	-	P5
SC APC Duplex Singlemode	W12SCA48	P1	-	-	-



SC Duplex Adaptor



SC Pigtail

Scan for More
Information



FIBRE MANAGEMENT | DOUBLE DOOR LOCKABLE WALL BOXES

W06

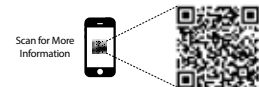
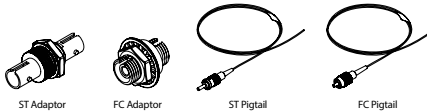


72 Position
DOUBLE DOOR

W06 72 POSITION ST/FC DOUBLE DOOR WALL BOX LOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 96 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 72 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
ST Singlemode	W06STS72/Z	P1	-	-	-
ST Multimode	W06STM72/Z	-	P2	P3	P4
FC Singlemode	W06FCS72/Z	P1	-	-	-
FC Multimode	W06FCM72/Z	-	P2	P3	P4
FC APC Singlemode	W06FCA72/Z	P1	-	-	-



W07

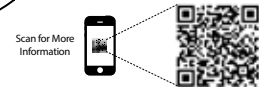
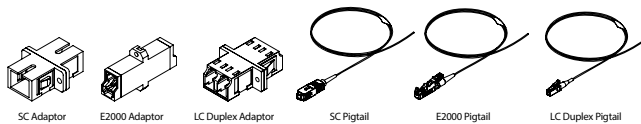


72 Position
SINGLE DOOR

W07 72 POSITION SC/LC/E2000 DOUBLE DOOR WALL BOX LOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 72 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 144 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W07SCM72/Z	-	P2	P3	P4
SC Simplex Singlemode	W07SCS72/Z	P1	-	-	-
SC APC Simplex Singlemode	W07SCA72/Z	P1	-	-	-
E2000 Multimode	W07E2M72/Z	-	P2	P3	P4
E2000 Singlemode	W07E2S72/Z	P1	-	-	-
E2000 APC Singlemode	W07E2A72/Z	P1	-	-	-
LC Duplex Multimode Beige	W07LCM72/Z	-	P2	P3	P4
LC Duplex Multimode Erika Violet	W07LCV72/Z	-	-	-	-
LC Duplex Singlemode	W07LCS72/Z	P1	-	-	-
LC APC Duplex Singlemode	W07LCA72/Z	P1	-	-	-



W08

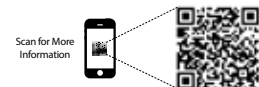
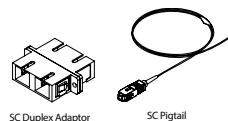


48 Position
DOUBLE DOOR

W08 48 POSITION SC DUPLEX DOUBLE DOOR WALL BOX LOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 48 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 96 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS			
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Duplex Singlemode	W08SCS48/Z	P1	-	-	-
SC Duplex Multimode	W08SCM48/Z	-	P2	P3	P4
SC Duplex Multimode Erika Violet	W08SCV48/Z	-	-	-	-
SC APC Duplex Singlemode	W08SCA48/Z	P1	-	-	-



AM Style Lockable Single Module Wall Box

Optronic offers a wide range of indoor wall mounted splice enclosures. The AMW enclosures offer a compact solution to the end user that has been designed to accept one LGX style assembly.

With the ability to use a full array of adaptor types offering a flexible solution to the end user, enabling them to incorporate a multi functional enclosure (which allows easy access during

installation or re-work) with no disturbance of the existing cable or fibres.

In addition to the array of adaptors the enclosure also offers multiple cable entry solutions. Fibre cable can be spliced or there are many pre terminated options, making this enclosure one of the most flexible on the market.

Features

- > 1 LGX component
- > Wall mountable
- > Multiple adaptor options available
- > Splicing option available
- > Multiple fixing points
- > Hinged door
- > Accepts loose tube and distribution cable
- > REACH/SvHC

Applications

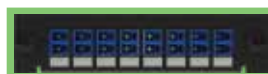
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Technical Specification

1U MODULAR PATCH PANEL CHASSIS	
Height	140mm
Width	161mm
Depth	32mm
Net weight	0.6kg
Packaged weight	0.7kg
Packaged dimensions (WxLxH)	180mm x 180mm x 55mm
Suitable for Adaptor type	LGX / MTP Cassettes
Number of module positions	1
Material	Cold-rolled steel
Material thickness	1.2mm
Material finish	Powder coating
Colour	RAL 9004
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

Ordering Information

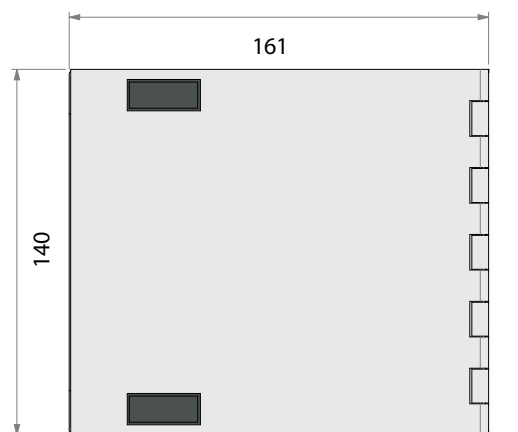
DESCRIPTION	PART NUMBER
Single Module AM Style Lockable Wall Box	AMW1



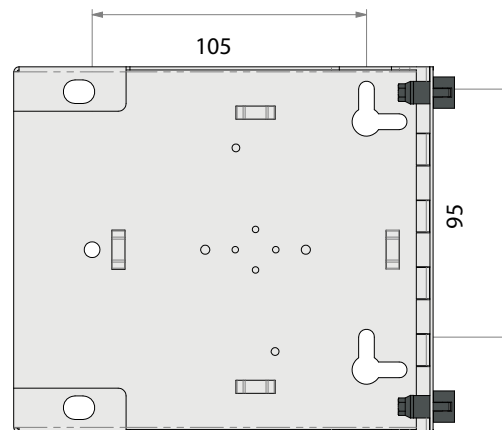
For Adaptor Plates see page 76



Drawing



Closed Front View



All dimensions in mm

Opened Front View



AM Style Lockable Dual Module Wall Box

Optronics offers a wide range of indoor wall mounted splice enclosures. The AMW enclosures offer a compact solution to the end user that has been designed to accept up to 2 LGX style assemblies.

With the ability to use a full array of adaptor types offering a flexible solution to the end user, enabling them to incorporate a multi functional enclosure (which allows easy access during

installation or re-work) with no disturbance of the existing cable or fibres.

In addition to the array of adaptors the enclosure also offers multiple cable entry solutions. Fibre cable can be spliced or there are many pre terminated options, making this enclosure one of the most flexible on the market.

Features

- > Up to 2 LGX components
- > Wall mountable
- > Multiple adaptor options available
- > Splicing option available
- > Lockable hinged door
- > Accepts loose tube and distribution cable
- > REACH/SvHC

Applications

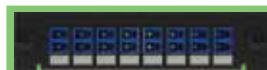
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Technical Specification

1U MODULAR PATCH PANEL CHASSIS	
Height	164mm
Width	313mm
Depth	120mm
Net weight	3.2kg
Packaged weight	3.5kg
Packaged dimensions (WxLxH)	230mm x 350mm x 160mm
Suitable for Adaptor type	LGX / MTP Cassettes
Number of module positions	2
Material	Cold-rolled steel
Material thickness	2.5mm
Material finish	Powder coating
Colour	RAL 9004
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN2971
Compliant to	REACH/SvHC

Ordering Information

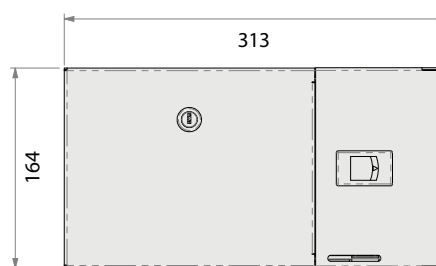
DESCRIPTION	PART NUMBER
Dual Module AM Style Lockable Wall Box	AMW2



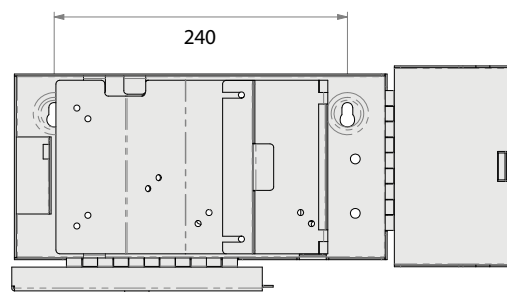
For Adaptor Plates see page 76



Drawing



Closed Front View



Opened Front View

All dimensions in mm



AM Style Lockable Quad Module Wall Box

Optronic offers a wide range of indoor wall mounted splice enclosures. The AMW enclosures offer a compact solution to the end user that has been designed to accept up to 4 LGX style assemblies.

With the ability to use a full array of adaptor types offering a flexible solution to the end user, enabling them to incorporate a multi functional enclosure (which allows easy access during

installation or re-work) with no disturbance of the existing cable or fibres.

In addition to the array of adaptors the enclosure also offers multiple cable entry solutions. Fibre cable can be spliced or there are many pre terminated options, making this enclosure one of the most flexible on the market.

Features

- > Up to 4 LGX components
- > Wall mountable
- > Multiple adaptor options available
- > Splicing option available
- > Lockable hinged door
- > Accepts loose tube and distribution cable
- > REACH/SvHC

Applications

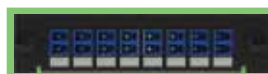
- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor applications

Technical Specification

1U MODULAR PATCH PANEL CHASSIS	
Height	290cm
Width	362mm
Depth	107mm
Net weight	4.6kg
Packaged weight	5.2kg
Packaged dimensions (WxLxH)	360mm x 410mm x 160mm
Suitable for Adaptor type	LGX / MTP Cassettes
Number of module positions	4
Material	Cold-rolled steel
Material thickness	2.5mm
Material finish	Powder coating
Colour	RAL 9004
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC

Ordering Information

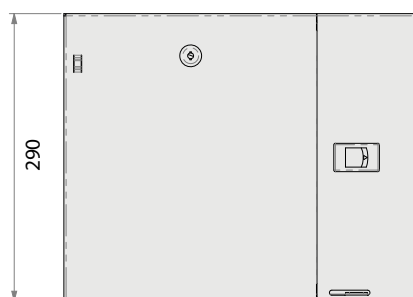
DESCRIPTION	PART NUMBER
Quad Module AM Style Lockable Wall Box	AMW4



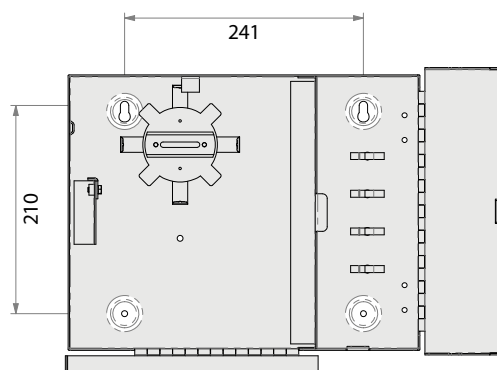
For Adaptor Plates see page 76



Drawing



Closed Front View



Opened Front View

All dimensions in mm



Slimline Wall Box



The slimline wall enclosure in its basic form is supplied unloaded with either a 12 port ST or 12 port SC plate installed. The enclosure can be pre-loaded with the required adaptor and a

simple splice kit, or ST, FC, SC, LC or E2000 pigtails to meet your project needs.

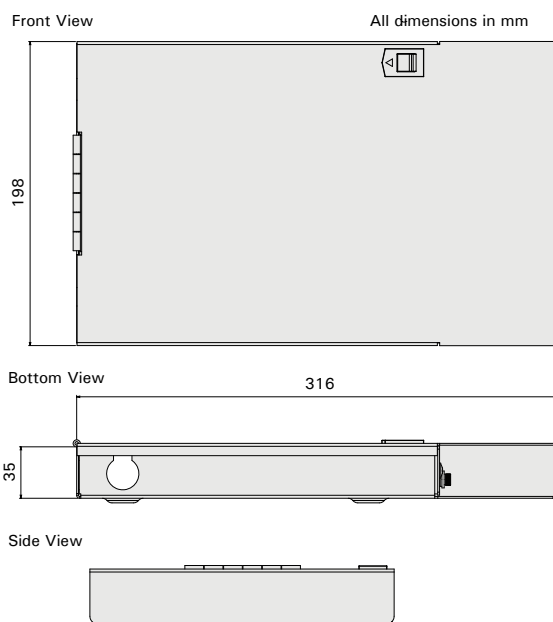
Features

- > Internal tie points
- > Cable entry points can be knocked out to suit installation
- > Solid construction with secure slam latch door
- > Slim-line design for installation where space is limited
- > Extended lid protects the exiting patch cords

Technical Specification

SLIMLINE WALL BOX	
Height	197mm
Width	316mm
Depth	35mm
Net Weight	1.5kg
Package Dimensions (WxLxH)	210mm x 325mm x 45mm
IP Rating	IP20
Suitable for adaptor type	SC Simplex (12 port), ST/FC (12 port), E2000 (12 port), LC Duplex (12 port)
Number of doors	1
Cable entry 20mm	3
Material	Cold Rolled Steel
Material thickness	1.2mm
Material coating	Electrostatic Powder Coating
Colour	Grey RAL 7035
Operating Temperature	-40°C to +60°C
Compliant to	REACH/SvHC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN 50173, IEC 60304, IEC 61754, EN 297-1

Drawing



*All ports are replicated on the top and bottom of the box



W16 Adaptors Only

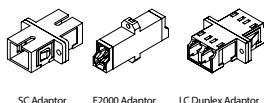


12 Position
GREY

W16 12 POSITION SC/LC/E2000 SINGLE DOOR LOCKABLE WALL BOX

Single Door Lockable Slimline Metal Wall Box suitable for up to 12 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

	PART NO.		PART NO.
SC Simplex Multimode	W16SCM12/Z	E2000 APC Singlemode	W16E2A12/Z
SC Simplex Singlemode	W16SCS12/Z	LC Duplex Multimode Beige	W16LCM12/Z
SC APC Simplex Singlemode	W16SCA12/Z	LC Duplex Multimode Erika Violet	W16LCV12/Z
E2000 Multimode	W16E2M12/Z	LC Duplex Singlemode	W16LCS12/Z
E2000 Singlemode	W16E2S12/Z	LC APC Duplex Singlemode	W16LCA12/Z

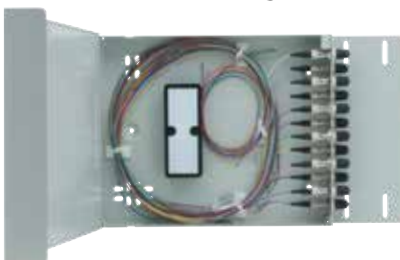


SC Adaptor E2000 Adaptor LC Duplex Adaptor

Scan for More
Information



W14 Adaptors and Pigtails



12 Position
SINGLE DOOR

W14 12 POSITION ST/FC SLIMLINE WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 12 ST or FC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 12 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS				
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
ST Singlemode	W14STS12	P1	-	-	-	-
ST Multimode	W14STM12	-	P2	P3	P4	P5
FC Singlemode	W14FCS12	P1	-	-	-	-
FC Multimode	W14FCM12	-	P2	P3	P4	P5
FC APC Singlemode	W14FCA12	P1	-	-	-	-

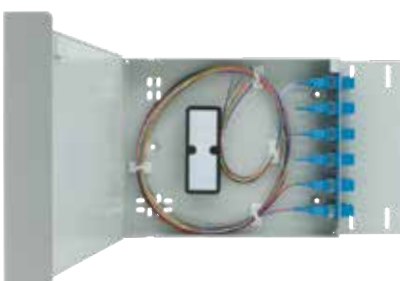


ST Adaptor FC Adaptor ST Pigtail FC Pigtail

Scan for More
Information



W16 Adaptors and Pigtails

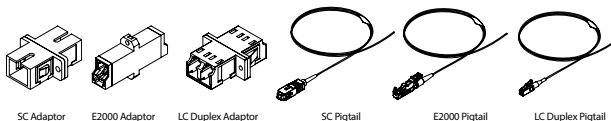


12 Position
SINGLE DOOR

W16 12 POSITION SC/LC/E2000 SLIMLINE WALL BOX LOADED

Single Door Lockable Slimline Metal Wall Box suitable for up to 12 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

PART NO.	OS1/OS2 9/125 SINGLEMODE	PIGTAILS				
		OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE	
SC Simplex Multimode	W16SCM12/Z	-	P2	P3	P4	P5
SC Simplex Singlemode	W16SCS12/Z	P1	-	-	-	-
SC APC Simplex Singlemode	W16SCA12/Z	P1	-	-	-	-
E2000 Multimode	W16E2M12/Z	-	P2	P3	P4	P5
E2000 Singlemode	W16E2S12/Z	P1	-	-	-	-
E2000 APC Singlemode	W16E2A12/Z	P1	-	-	-	-
LC Duplex Multimode Beige	W16LCM12/Z	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	W16LCV12/Z	-	-	-	-	P5
LC Duplex Singlemode	W16LCS12/Z	P1	-	-	-	-
LC APC Duplex Singlemode	W16LCA12/Z	P1	-	-	-	-



SC Adaptor E2000 Adaptor LC Duplex Adaptor SC Pigtail E2000 Pigtail LC Duplex Pigtail

Scan for More
Information



Optical Fibre Management

Termination Boxes

W23 IP65 Indoor/Outdoor Distribution Box	153
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External Customer Splice Box	166
Compact Termination Box	167
Internal Customer Splice Box	168
FTTH Subscriber Outlet	169
CSB10 FTTH Customer Outlet	170
CSB11 FTTH Customer Outlet	171
CSB12 FTTH Customer Outlet	172
IP66/67 Splice and Pass through Enclosure	173

W23 IP65 Indoor / Outdoor Distribution Box

8 Position up to 8 fibres



This IP65 distribution box offers the ability to terminate 8 fibres housed in a robust ABS enclosure for indoor and outdoor applications.

With the ability to use a full array of adaptor types this box offers a flexible solution to the end user, enabling them to incorporate a multi functional enclosure, which allows easy access during installation or re-work, with no disturbance of the existing cable or fibres.

In addition to the array of adaptors the enclosure also offers up to 8 exit points for patching cables and 1 standard cable entry point for loose tube, tight buffer, pre-terminated and steel tape armoured cable.

Each enclosure has integrated strength member tie positions and bend radius protection with the addition of a removable front door allowing for quick and easy installation.

Features

- > Up to 8 fibres
- > Multiple adaptor options available
- > 8 adaptor positions
- > IP65
- > Accepts loose tube, distribution and pre terminated cables
- > Integrated bend radius protection
- > Sealing glands for up to 8 cables
- > Removable door for ease of installation
- > REACH/SvHC
- > Supplied with 12 heat shrink splice protectors
- > Supplied with transit tubing
- > Supplied with wall fixings and tie wraps

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor / outdoor applications

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE

Height	210mm
Width	175mm
Depth	50mm
Net weight	0.44kg
Packed weight	0.52kg
Packaged dimensions (WxLxH)	215mm x 182mm x 51mm
IP rating	IP65
Suitable for adaptor type	SC Simplex LC Duplex
Number of fibres	8
Number of ports	8
Cable entry 20mm	1
Cable exit 20mm	2
Material	ABS
Colour	White
Operating temperature	-40°C to +50°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC



Ordering Information

W23 - Adaptors Only

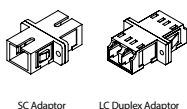


8 Position
GREY

W23 8 POSITION SC/LC/E2000 IP65 DISTRIBUTION BOX - UNLOADED

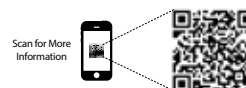
IP65 Distribution Box suitable for 8 SC or LC Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 8 fibres.

PART NO.		PART NO.	
LC Duplex Multimode Beige	W23LCM04/Z	SC Simplex Multimode	W23SCM08/Z
LC Duplex Multimode Erika Violet	W23LCV04/Z	SC Simplex Singlemode	W23SCS08/Z
LC Duplex Singlemode	W23LCS04/Z	SC APC Simplex Singlemode	W23SCA08/Z
LC APC Duplex Singlemode	W23LCA04/Z		



SC Adaptor

LC Duplex Adaptor



Scan for More
Information

W23 - Adaptors and Pigtails

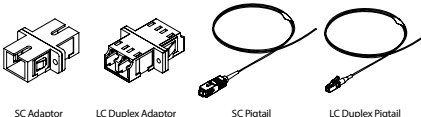


8 Position
GREY

W23 8 POSITION SC/LC/E2000 IP65 DISTRIBUTION BOX - LOADED

IP65 Distribution Box suitable for SC or LC Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 8 fibres.

PART NO.	PIGTAILS					
	OS1/OS2 9/085 SINGLEMODE	OM1 62.5/085 MULTIMODE	OM2 50/085 MULTIMODE	OM3 50/085 MULTIMODE	OM4 50/085 MULTIMODE	
SC Simplex Multimode	W23SCM08/Z	-	P2	P3	P4	P5
SC Simplex Singlemode	W23SCS08/Z	P1	-	-	-	-
SC APC Simplex Singlemode	W23SCA08/Z	P1	-	-	-	-
LC Duplex Multimode Beige	W23LCM08/Z	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	W23LCV08/Z	-	-	-	-	P5
LC Duplex Singlemode	W23LCS08/Z	P1	-	-	-	-
LC APC Duplex Singlemode	W23LCA08/Z	P1	-	-	-	-

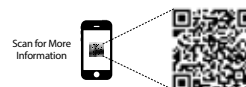


SC Adaptor

LC Duplex Adaptor

SC Pigtail

LC Duplex Pigtail



Scan for More
Information



W24 IP65 Indoor / Outdoor Distribution Box

6 Position up to 12 fibres



This lockable IP65 distribution box offers the ability to terminate 12 fibres housed in a robust ABS enclosure for indoor and outdoor applications.

With the ability to use a full array of adaptor types this box offers a flexible solution to the end user, enabling them to incorporate a multi functional enclosure, which allows easy access during installation or re-work, with no disturbance of the existing cable or fibres.

Features

- > Up to 12 fibres
- > Multiple adaptor options available
- > 6 adaptor positions
- > IP65
- > Accepts loose tube, distribution and pre terminated cables
- > Integrated bend radius protection
- > Sealing glands for up to 12 cables
- > Lockable door
- > Removable door for ease of installation
- > REACH/SvHC
- > Supplied with 12 heat shrink splice protectors
- > Supplied with transit tubing
- > Supplied with wall fixings and tie wraps

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor / outdoor applications

In addition to the array of adaptors the enclosure also offers up to 8 exit points for patching cables and 1 standard cable entry point for loose tube, tight buffer, pre- terminated and steel tape armoured cable.

Each enclosure has integrated strength member tie positions and bend radius protection with the addition of a removable front door allowing for quick and easy installation.

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE

Height	258mm
Width	186mm
Depth	61mm
Net weight	0.55kg
Packed weight	0.96kg
Packaged dimensions (WxLxH)	275mm x 197mm x 65mm
IP rating	IP65
Suitable for adaptor type	SC Duplex LC Quad
Number of fibres	12
Number of ports	6
Cable entry 20mm	1
Cable exit 20mm	2
Material	ABS
Colour	White
Operating temperature	-40°C to +50°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC



Ordering Information

W24 -
Adaptors Only



6 Position
GREY

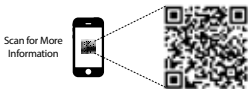


SC Duplex Adaptor

W24 6 POSITION SC DUPLEX IP65 DISTRIBUTION BOX - UNLOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 6 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 12 fibres.

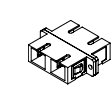
PART NO.		PART NO.	
SC Duplex Singlemode	W24SCS06/Z	SC Duplex Multimode Erika Violet	W24SCV06/Z
SC Duplex Multimode	W24SCM06/Z	SC APC Duplex Singlemode	W24SCA06/Z



W24 -
Adaptors and Pigtails



6 Position
GREY



SC Duplex Adaptor

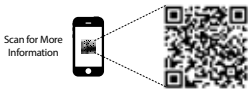


SC Pigtail

W24 6 POSITION SC DUPLEX IP65 DISTRIBUTION BOX - LOADED

Double Door Lockable Slimline Metal Wall Box suitable for up to 6 SC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 12 fibres.

PART NO.	PIGTAILS					
	OS1/OS2 9/065 SINGLEMODE	OM1 62.5/065 MULTIMODE	OM2 50/065 MULTIMODE	OM3 50/065 MULTIMODE	OM4 50/065 MULTIMODE	
SC Duplex Singlemode	W24SCS06/Z	P1	-	-	-	-
SC Duplex Multimode	W24SCM06/Z	-	P2	P3	P4	P5
SC Duplex Multimode Erika Violet	W24SCV06/Z	-	-	-	-	P5
SC APC Duplex Singlemode	W24SCA06/Z	P1	-	-	-	-



W25 IP65 Indoor / Outdoor Distribution Box

2 Position up to 4 fibres



This Lockable IP65 distribution box offers the ability to terminate 4 fibres housed in a strong robust ABS enclosure for indoor and outdoor applications.

With the ability to use SC and LC adaptor types this box offers a flexible solution to the end user, enabling them to incorporate a multi functional enclosure, which allows easy access during installation or re-work, with no disturbance of the existing cable or fibres.

Features

- > Up to 4 fibres
- > Removable splice tray for easy installation
- > Multiple adaptor options available
- > 2 adaptor positions
- > IP 65
- > Accepts loose tube, distribution and pre terminated cables
- > Integrated bend radius protection
- > Sealing glands for up to 4 cables
- > Lockable door
- > Removable door for ease of installation
- > REACH/SvHC
- > Supplied with 12 heat shrink splice protectors
- > Supplied with transit tubing
- > Supplied with wall fixings and tie wraps

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor / outdoor applications

In addition to the array of adaptors the enclosure also offers up to 4 exit points for patching cables and 1 standard cable entry point for loose tube, tight buffer, pre-terminated and steel tape armoured cable.

Each enclosure has integrated strength member tie positions and bend radius protection with the addition of a removable front door allowing for quick and easy installation.

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE	
Height	210mm
Width	156mm
Depth	48mm
Net weight	0.51kg
Packed weight	0.59kg
Packaged dimensions (WxLxH)	215mm x 157mm x 60mm
IP rating	IP65
Suitable for adaptor type	SC Simplex LC Duplex
Number of fibres	4
Number of ports	2
Cable entry 20mm	1
Cable exit 20mm	1
Material	ABS
Colour	White
Operating temperature	-40oC to +50oC
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	REACH/SvHC



Ordering Information

W25 - Adaptors only



2 Position
GREY

W25 2 POSITION SC/LC/E2000 IP65 DISTRIBUTION BOX - UNLOADED

IP65 Distribution Box suitable for up to 2 SC, LC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 4 fibres.

	PART NO.		PART NO.	
SC Simplex Multimode	W25SCM02/Z	E2000 APC Singlemode	W25E2A02/Z	
SC Simplex Singlemode	W25SCS02/Z	LC Duplex Multimode Beige	W25LCM02/Z	
SC APC Simplex Singlemode	W25SCA02/Z	LC Duplex Multimode Erika Violet	W25LCV02/Z	
E2000 Multimode	W25E2M02/Z	LC Duplex Singlemode	W25LCS02/Z	
E2000 Singlemode	W25E2S02/Z	LC APC Duplex Singlemode	W25LCA02/Z	



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W25 - Adaptors and Pigtails



2 Position
GREY

W25 2 POSITION SC/LC/E2000 IP65 DISTRIBUTION BOX

Single Door Lockable Distribution Box suitable for up to 2 SC, E2000 or LC Duplex Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 4 fibres.

	PART NO.	PIGTAILS				
		OS1/OS2 9/025 SINGLEMODE	OM1 62.5/025 MULTIMODE	OM2 50/025 MULTIMODE	OM3 50/025 MULTIMODE	OM4 50/025 MULTIMODE
SC Simplex Multimode	W25SCM02/Z	-	P2	P3	P4	P5
SC Simplex Singlemode	W25SCS02/Z	P1	-	-	-	-
SC APC Simplex Singlemode	W25SCA02/Z	P1	-	-	-	-
E2000 Multimode	W25E2M02/Z	-	P2	P3	P4	P5
E2000 Singlemode	W25E2S02/Z	P1	-	-	-	-
E2000 APC Singlemode	W25E2A02/Z	P1	-	-	-	-
LC Duplex Multimode Beige	W25LCM02/Z	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	W25LCV02/Z	-	-	-	-	P5
LC Duplex Singlemode	W25LCS02/Z	P1	-	-	-	-
LC APC Duplex Singlemode	W25LCA02/Z	P1	-	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail



LC Duplex Pigtail

Scan for More
Information



W31 Wall Box up to 24 fibres



This lockable IP65 distribution box is supplied unloaded as standard and offers the ability to terminate 24 fibres housed in a strong robust ABS enclosure for indoor and outdoor applications. An internal detachable tray provides a neat and tidy solution for housing 24 SC simplex connections and splices. The box has

24 patchcord exit points and up to 2 cable entry points which maintain the IP65 rating. Integrated cable tie points are included to secure incoming cables. A locking feature for the door adds extra security when positioned in un-secure areas.

Features

- > IP65 rating for external use
- > Lockable door for added security
- > Integrated cable tie points for securing incoming cable
- > Up to 24 splice & SC connection points
- > Removable splice tray for easy installation
- > Accepts loose tube, distribution and pre-terminated cables
- > Integrated bend radius protection
- > Sealing glands for up to 24 exiting cables + 2 incoming cable
- > Removable door for ease of installation
- > Supplied with 24 heatshrink splice protectors
- > Supplied with transit tubing
- > Supplied with wall fixings and tie wraps
- > This product conforms to the materials requirements of RoHS2, REACH/SvHC

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor/outdoor applications

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE	
Height	340mm
Width	270mm
Depth	110mm
Net weight	1.8kg
IP rating	IP65
Suitable for adaptor type	SC Simplex
Number of ports	24
Cable entry	2
Material	ABS
Colour	Grey RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach / SVHC



Ordering Information

W31 - Adaptors Only



24 Position
GREY

W31 24 POSITION SC/E2000 IP65 DISTRIBUTION BOX - UNLOADED

IP65 Distribution Box suitable for up to 24 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 24 fibres.

	PART NO.		PART NO.	
SC Simplex Multimode	W31SCM24/Z	LC Duplex Singlemode	W31LCS12/Z	
SC Simplex Singlemode	W31SCS24/Z	LC APC Duplex Singlemode	W31LCA12/Z	
SC APC Simplex Singlemode	W31SCA24/Z	E2000 Multimode	W31E2M24/Z	
LC Duplex Multimode Beige	W31LCM12/Z	E2000 Singlemode	W31E2S24/Z	
LC Duplex Multimode Erika Violet	W31LCV12/Z	E2000 APC Singlemode	W31E2A24/Z	



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W31 - Adaptors and Pigtails



24 Position
GREY

W31 24 POSITION SC/E2000 IP65 DISTRIBUTION BOX - LOADED

IP65 Distribution Box suitable for up to 24 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 24 fibres.

	PART NO.	PIGTAILS				
		OS1/OS2 9/245 SINGLEMODE	OM1 62.5/245 MULTIMODE	OM2 50/245 MULTIMODE	OM3 50/245 MULTIMODE	OM4 50/245 MULTIMODE
SC Simplex Multimode	W31SCM24/Z	-	P2	P3	P4	P5
SC Simplex Singlemode	W31SCS24/Z	P1	-	-	-	-
SC APC Simplex Singlemode	W31SCA24/Z	P1	-	-	-	-
E2000 Multimode	W31E2M24/Z	-	P2	P3	P4	P5
E2000 Singlemode	W31E2S24/Z	P1	-	-	-	-
E2000 APC Singlemode	W31E2A24/Z	P1	-	-	-	-
LC Duplex Multimode Beige	W31LCM12/Z	-	P2	P3	P4	P5
LC Duplex Multimode Erika Violet	W31LCV12/Z	-	-	-	-	P5
LC Duplex Singlemode	W31LCS12/Z	P1	-	-	-	-
LC APC Duplex Singlemode	W31LCA12/Z	P1	-	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail



LC Duplex Pigtail

Scan for More
Information



W35 Wall Box up to 12 fibres



This lockable IP65 distribution box is supplied unloaded as standard and offers the ability to terminate 12 fibres housed in a strong robust ABS enclosure for indoor and outdoor applications. An internal detachable tray provides a neat and tidy solution for housing 12 SC simplex connections and splices. The box has

12 patch cord exit points and up to 2 cable entry points which maintain the IP65 rating. Integrated cable tie points are included to secure incoming cables. A locking feature for the door adds extra security when positioned in un-secure area.

Features

- > IP65 rating for external use
- > Lockable door for added security
- > Integrated cable tie points for securing incoming cable
- > Up to 12 splice & SC connection points
- > Removable splice tray for easy installation
- > Accepts loose tube, distribution and pre-terminated cables
- > Integrated bend radius protection
- > Sealing glands for up to 12 exiting cables + 2 incoming cable
- > Removable door for ease of installation
- > Supplied with 12 heatshrink splice protectors
- > Supplied with transit tubing
- > Supplied with wall fixings and tie wraps
- > This product conforms to the materials requirements of RoHS2, REACH/SvHC

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor/outdoor applications

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE	
Height	235mm
Width	205mm
Depth	60mm
Net weight	0.9kg
IP rating	IP65
Suitable for adaptor type	SC Simplex, E2000, LC Duplex
Number of fibres	12
Cable entry	2
Material	ABS
Colour	Grey RAL 7035
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	This product conforms to the materials requirements of RoHS2, Reach / SVHC



Ordering Information

W35 - Adaptors Only



12 Position
GREY

W35 12 POSITION SC/E2000 IP65 DISTRIBUTION BOX - UNLOADED

IP65 Distribution Box suitable for up to 12 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 12 fibres.

	PART NO.		PART NO.
SC Simplex Multimode	W35SCM12/Z	LC Duplex Singlemode	W35LCS06/Z
SC Simplex Singlemode	W35SCS12/Z	LC APC Duplex Singlemode	W35LCA06/Z
SC APC Simplex Singlemode	W35SCA12/Z	E2000 Multimode	W35E2M12/Z
LC Duplex Multimode Beige	W35LCM06/Z	E2000 Singlemode	W35E2S12/Z
LC Duplex Multimode Erika Violet	W35LCV06/Z	E2000 APC Singlemode	W35E2A12/Z



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W35 - Adaptors and Pigtails



12 Position
GREY

W35 12 POSITION SC/E2000 IP65 DISTRIBUTION BOX - LOADED

IP65 Distribution Box suitable for up to 12 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 12 fibres.

	PART NO.	PIGTAILS				
		OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W35SCM12/Z	-	P2	P3	P4	P5
SC Simplex Singlemode	W35SCS12/Z	P1	-	-	-	-
SC APC Simplex Singlemode	W35SCA12/Z	P1	-	-	-	-
E2000 Multimode	W35E2M12/Z	-	P2	P3	P4	P5
E2000 Singlemode	W35E2S12/Z	P1	-	-	-	-
E2000 APC Singlemode	W35E2A12/Z	P1	-	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail



LC Duplex Pigtail

Scan for More
Information



W37 Wall Box up to 24 fibres



This IP65 distribution box offers the ability to terminate 4 fibres housed in a robust ABS enclosure for indoor and outdoor applications. With the ability to use SC Simplex, LC Duplex AND E2000 adaptor types offering a flexible solution to the end user, enabling them to incorporate a multi functional enclosure which allows easy access during installation or re-work with

no disturbance of the existing cable or fibres. In addition to the interchangeable adaptors, the enclosure offers up to 4 exit points for patching cables and 1 standard cable entry point for loose tube, tight buffer, preterminated and steel tape armoured cable. Each enclosure has integrated strength member tie positions and hinged splice tray.

Features

- > Up to 4 fibres
- > Removable/Hinged splice tray for easy installation
- > Multiple adaptor options available
- > 4 adaptor positions
- > IP 65
- > Accepts loose tube, distribution and pre terminated cables
- > Sealing glands for up to 4 exiting cables + 1 incoming cable
- > ROHS, REACH & SvHC compliant
- > Supplied with 4 heatshrink splice protectors
- > Supplied with wall fixings

Applications

- > Data centres, premise installations, telecommunication networks
- > Ethernet, Fibre Channel, ATM, LAN, MAN and WAN
- > Data communication and telecommunication networks
- > Indoor/outdoor applications

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE	
Height	217mm
Width	270mm
Depth	40mm
Net weight	0.44kg
IP rating	IP65
Suitable for adaptor type	SC Simplex, LC Duplex, E2000
Number of fibres	4
Cable entry	1
Material	ABS
Colour	White
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC



Ordering Information

W37 - Adaptors Only



4 Position
WHITE

W37 4 POSITION LC/SC/E2000 IP65 DISTRIBUTION BOX - UNLOADED

IP65 Distribution Box suitable for up to 4 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and allows for the installation of up to 4 fibres.

PART NO.		PART NO.	
SC Simplex Multimode	W37SCM04	LC Duplex Singlemode	W37LCS02
SC Simplex Singlemode	W37SCS04	LC APC Duplex Singlemode	W37LCA02
SC APC Simplex Singlemode	W37SCA04	E2000 Multimode	W37E2M04
LC Duplex Multimode Beige	W37LCM02	E2000 Singlemode	W37E2S04
LC Duplex Multimode Erika Violet	W37LCV02	E2000 APC Singlemode	W37E2A04



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor

Scan for More
Information



W37 - Adaptors and Pigtails



4 Position
WHITE

W37 4 POSITION LC/SC/E2000 IP65 DISTRIBUTION BOX - LOADED

IP65 Distribution Box suitable for up to 4 SC or E2000 Adaptors. The box is pre-loaded with your choice of adaptors and pigtails and allows for the installation of up to 02 fibres.

PART NO.	PIGTAILS				
	OS1/OS2 9/125 SINGLEMODE	OM1 62.5/125 MULTIMODE	OM2 50/125 MULTIMODE	OM3 50/125 MULTIMODE	OM4 50/125 MULTIMODE
SC Simplex Multimode	W37SCM04	-	P2	P3	P4
SC Simplex Singlemode	W37SCS04	P1	-	-	-
SC APC Simplex Singlemode	W37SCA04	P1	-	-	-
E2000 Multimode	W37E2M04	-	P2	P3	P4
E2000 Singlemode	W37E2S04	P1	-	-	-
E2000 APC Singlemode	W37E2A04	P1	-	-	-
LC Duplex Multimode Beige	W37LCM02	-	P2	P3	P4
LC Duplex Multimode Erika Violet	W37LCV02	-	-	-	P5
LC Duplex Singlemode	W37LCS02	P1	-	-	-
LC APC Duplex Singlemode	W37LCA02	P1	-	-	-



SC Adaptor



E2000 Adaptor



LC Duplex Adaptor



SC Pigtail



E2000 Pigtail



LC Duplex Pigtail

Scan for More
Information



External IP55 Rated Termination Box



The termination box is designed for use on the external wall of residential or small business premises. The unit houses a single splice tray and allows fibres from externally fed cables (blown fibre or conventional) to be spliced to pigtails for connection to

the optical network unit. Pigtail fibres or patch cords are routed through the external wall fabric via a rear entry/exit position and are protected by 25mm diameter conduit. The unit can also be used as a transition point between internal and external cable.

Features

- > Tamper proof cover security screws available as an option (refer to optional items)
- > Rear cable entry/exit position allows pigtails or patch cords to enter the customer premise
- > Compact wall mounted unit typically used for residential and small business premises
- > Standard kit supplied complete with all components necessary to splice an external cable to four pigtails. For applications where 12 fibres are to be spliced (external to internal cable), extra splice protectors will be required
- > Cable interstices can be sealed against water/gas ingress at the entry/exit position if required using a quick set resin
- > All fibres are positively managed to 30mm minimum bend radius
- > Cable up to 13mm in diameter can be accommodated with a cable gland
- > Removable cover fitted with re-enterable seal
- > Water ingress protection to IP55
- > Unit manufactured from UV resistant material
- > Compatible with blown fibre products

Ordering Information

DESCRIPTION	PART NUMBER
External IP Rated Termination Box	CSB05/Z

Technical Specification

COMPACT TERMINATION BOX		
Number of splice trays		1
Maximum fibre capacity		12 Fibres
Maximum cable diameter (mm)		18mm
Maximum no. of customer feeds		55
Required space envelope (mm)		(w) 220 x (h) 150 x (d) 50mm
Operating temperature		-20°C to + 50°C (5 to 95% RH)
Material	Cap	FR ABS Dark Grey RAL7042
	Base	FR ABS Dark Grey RAL7042
	Splitter trays (WxHxD)	230 x 160 x 60mm
Packing dimensions		0.87 kg
Packed weight		0.57 kg
Net weight		Tested 1310nm, 1550nm and 1625nm
Testing	Optical	BS EN 60068-2-2 Test Bb
	Dry heat	IEC 60068-2-3: 1969
	Damp heat	IEC 60068-2-14: 1984
	Change of temperature	IEC 60068-2-6: 1995
	Vibration	IEC 60068-2-27: 1987
	Shock	IEC 60068-2-27

NB. Additional items required, 2mm splice protector must be used when installing 12 fibres



External Customer Splice Box



The external termination box is designed for use on the external wall of residential or small business premises. The unit houses a single splice tray and allows fibres from externally fed cables (Blown Fibre or conventional), to be spliced to pigtails for connection to the optical network unit. Pigtail fibres or patch

ords are routed through the external wall fabric via a rear entry port and are protected by 25mm diameter conduit. The unit can also be used as a transition point between internal and external cable.

Features

- > Compact wall mounted unit typically used for residential and small business premises
- > Removable cover fitted with re-enterable seal. Water ingress protection to IP66
- > Tamper-proof cover security screws available as an option (refer to optional items)
- > Unit manufactured from UV resistant material
- > Standard kit supplied complete with all components necessary to splice an external cable to four pigtails. For applications where 12 fibres are to be spliced, extra splice protectors will be required
- > Rear cable entry port allows pigtails or patch cords to enter the customer premises
- > All fibres are positively managed to 30mm minimum bend radius
- > Cable up to 13mm in diameter can be accommodated with a cable gland
- > Cable interstices can be sealed against water/gas ingress at the entry port if required
- > Compatible with Blown Fibre products
- > Sealed to remain IP rated
- > Easy cable access

Materials

ELEMENT	MATERIAL
Wall Box	FR ABS dark grey
Splice tray	FR ABS light grey RAL 7035

Technical Specification

PARAMETER	UNIT	VALUE
Number of splice trays		1
Maximum fibre capacity		12
Maximum cable diameter	mm	18
Required space envelope	mm	(W) 220 X (H) 150 X (D) 50
Operating temperature	°C	20 to 50

Testing

PARAMETER	VALUE
Optical	Tested 1310nm, 1550nm, 1625nm
Dry heat	BS EN 60068-2-2 Test Bb
Damp heat	IEC 60068-2-3: 1969
Change of temperature	IEC 60068-2-14: 1984
Vibration	IEC 60068-2-6: 1995
Shock	IEC 60068-2-27: 1987
IP rating	66
Packing dimensions (mm)	(W) 230 X (H) 160 X (D) 60
Packed weight (kg)	0.55
Net weight (kg)	0.50

Ordering Information

DESCRIPTION	PART NUMBER
2 fibre SC-SC/A	CSB05SCX01
4 fibre SC-SC/A	CSB05SCX02
8 fibre SC-SC/A	CSB05SCX04
12 fibre SC-SC/A	CSB05SCX06



Compact Termination Box



The compact termination box is designed for use in residential and business applications for the termination of up to four fibres. The wall box enables the installation of either a single Sirocco Blown Tube cable using up to a 4 fibre blown unit or two 2 fibre

ruggedised cables to be spliced to four SC pigtails (PC or APC), which connect to adaptors at the base of the unit. The unit can be quickly installed within an office, house or communication room environment.

Features

- > Ergonomic design
- > Ability to allow cables to enter from rear or bottom of the unit
- > All fibres are positively managed to maintain a 30mm minimum bend radius
- > Optional Removable rear entry cable management
- > Flip tray to allow access to connectorised tails and cable entry
- > Compact, low profile, wall mounted unit used for small and large business premises
- > Removable cover for easy access
- > Tamper-proof cover security screws available as an option
- > Unit manufactured from fire resistant UL94-V0 rated material
- > Patch cords exit unit on bottom face and are protected by two protection covers
- > Standard colour white. Other colours available on request

Materials

ELEMENT	MATERIAL
Cap	FR high impact polystyrene
Base	FR high impact polystyrene
Splitter trays	FR high impact polystyrene

Technical Specification

PARAMETER	UNIT	VALUE
Number of splice trays		1
Maximum fibre capacity		4
Maximum cable diameter	mm	10
Required space envelope	mm	(L) 80 X (W) 120 X (D) 25
Operating temperature	°C	20 to 50

Testing

PARAMETER	VALUE
Optical	Tested 1310nm, 1550nm, 1625nm
Dry heat	BS EN 60068-2-2 Test Bb
Damp heat	IEC 60068-2-3: 1969
Change of temperature	IEC 60068-2-14: 1984
Vibration	IEC 60068-2-6:1995
Shock	IEC 60068-2-27:1987
IP rating	66
Packing dimensions (mm)	(W) 230 X (H) 160 X (D) 60
Packed weight (kg)	0.55
Net weight (kg)	0.50

Ordering Information

DESCRIPTION	PART NUMBER
2 fibre SC-SC/A	CSB06SCX01
4 fibre SC-SC/A	CSB06SCX02



Internal Customer Splice Box



The internal termination box is designed for use in residential, small and large businesses premises. The unit houses a single splice tray and allows fibres from internal or external cables to be spliced to pigtails for connection to the optical network

unit. The unit can be quickly installed within a home, office or communication room environment. Internal or external cable can enter the unit from the bottom of the box or through the wall.

Features

- > Compact wall mounted unit used for residential, small and large business premises
- > Removable cover for easy access
- > Tamper-proof cover security screws available as an option (refer to optional items)
- > Unit manufactured from UL94-V0 rated material
- > Tray cover provides circuit protection and contains fibre ID label
- > Single hinged splice tray enables access for working.
- > Pigtails exit from the bottom of the unit
- > Up to 12 SC type pigtails and adaptors can be accommodated
- > All fibre are positively bend managed to a 30mm minimum bend radius
- > Easy cable entry points
- > Optional resin pack allows box to be sealed against water/gas ingress
- > Compatible with Blown Fibre Products
- > Sealed to remain IP rated

Materials

ELEMENT	MATERIAL
Wall box	FR ABS light grey RAL 7035
Splice tray	FR ABS light grey RAL 7035

Technical Specification

PARAMETER	UNIT	VALUE
Number of splice trays		1
Maximum fibre capacity		12
Maximum cable diameter	mm	18
Required space envelope	mm	(W) 220 X (H) 150 X (D) 50
Operating temperature	°C	20 to 50

Testing

PARAMETER	VALUE
Optical	Tested 1310nm, 1550nm, 1625nm
Dry heat	BS EN 60068-2-2 Test Bb
Damp heat	IEC 60068-2-3: 1969
Change of temperature	IEC 60068-2-14: 1984
Vibration	IEC 60068-2-6:1995
Shock	IEC 60068-2-27:1987
IP rating	45
Packing dimensions (mm)	(W) 230 X (H) 160 X (D) 60
Packed weight (kg)	0.55
Net weight (kg)	0.50

Ordering Information

DESCRIPTION	PART NUMBER
2 fibre SC-SC/A	CSB04SCX01
4 fibre SC-SC/A	CSB04SCX02
8 fibre SC-SC/A	CSB04SCX04
12 fibre SC-SC/A	CSB04SCX06



CSB07 FTTH Customer Outlet



The internal customer outlet box is designed for use inside the home. The operator has the choice of using the box unloaded

or equipped with one or two adaptors, the box is designed with integrated shutters to comply with safety standards.

Features

- > Multi cable entry points
- > Integrated heat shrink splice holder
- > Holds up to 4 single fibres
- > Integrated fibre management
- > Integrated shutter
- > Integrated shutter protects against laser exposure and dust
- > Pigtails exit from the bottom of the unit

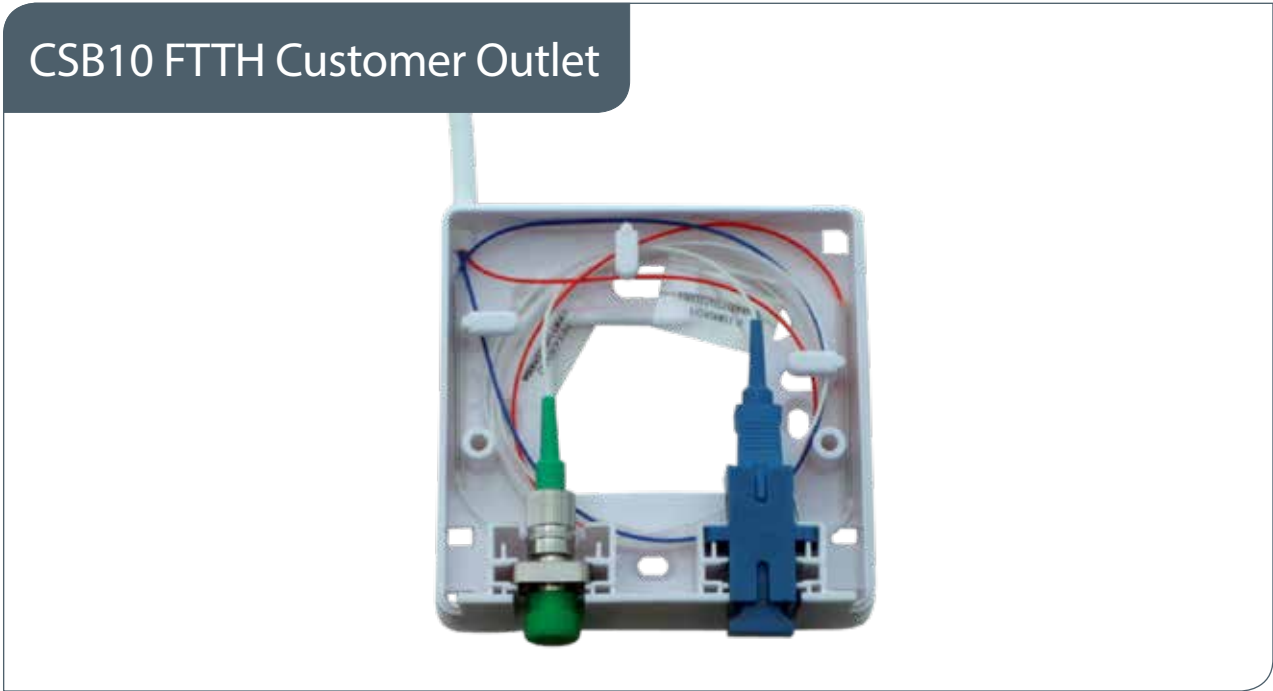
Technical Specification

PARAMETER	VALUE
Maximum single fibre count	2
Maximum number of heat splice	2
Number of shuttered outlets	2
Number of cable entry points	8
Dimension (mm)	(W) 86 x (H) 86 x (D) 25
Colour	White
Material	ABS

Ordering Information

DESCRIPTION	PART NUMBER
FTTH User outlet unloaded	CSB07SCX01
2 Fibre SC-SC/A	CSB07SCX02





This wall termination box is designed for FTTH applications, with similar dimensions to existing telephone connections it is well suited to home or office environments. The box can allow up to

4 fibres whilst maintaining the minimum bend radius. A variety of adaptors (LC/SC, & square ST, FC) can be used giving the user a flexible solution.

Features

- > Allows SC, LC, and square ST,FC adaptors to be installed
- > Integral fibre management
- > Accommodates splice protectors
- > Multi point fibre entry
- > Shutters for non-live ports
- > Standard colour white

Technical Specification

PARAMETER	VALUE
Dimension (mm)	2
Net Weight	2
Adaptor Type	2
Operating Temp.	8
Compliant to	(W) 86 x (H) 86 x (D) 27
Designed in accordance with	White
Material	ABS
Colour	White

Ordering Information

DESCRIPTION	PART NUMBER
FTTH User outlet unloaded	CSB10



CSB11 FTTH Customer Outlet



The internal customer outlet box is designed for use inside the home. The operator has the choice to have the box unloaded

or equipped with adaptors, the box is designed with integrated shutters to comply with safety standards.

Features

- > Multiple cable entry points
- > Integrated heat shrink splice holder
- > Hinged splice Tray
- > Holds up to 2 single fibres
- > Integrated fibre management
- > Integrated shutter protects against laser exposure and dust

Applications

- > FTTH

Technical Specification

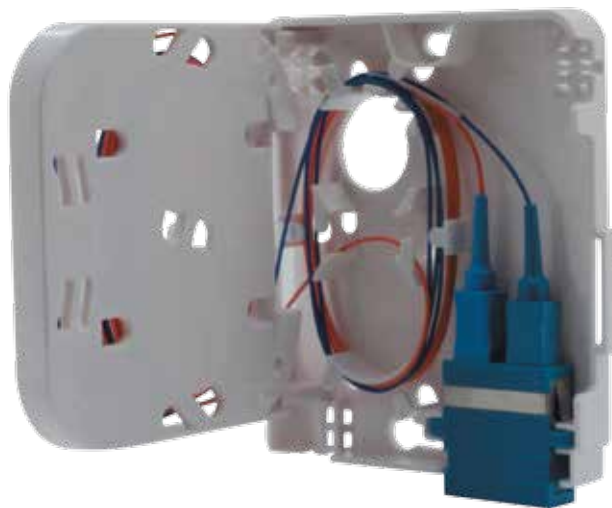
PARAMETER	VALUE
Maximum Single Fibre Count	2
Maximum Number of heat splice	2
Number of cable entre points	4
Height	86mm
Width	116mm
Depth	23mm
Colour	White
Material	ABS
Flame Retardant	Yes

Ordering Information

DESCRIPTION	PART NUMBER
FTTH User outlet unloaded	CSB11



CSB12 FTTH Customer Outlet



The internal customer outlet box is designed for use inside the home. The operator has the choice to have the box unloaded

or equipped with adaptors, the box is designed with integrated shutters to comply with safety standards.

Features

- > Multiple cable entry points
- > Integrated heatshrink splice holder
- > Hinged splice Tray
- > Holds up to 4 single fibres
- > Integrated fibre management
- > Integrated shutter protects against laser exposure and dust

Applications

- > FTTH

Technical Specification

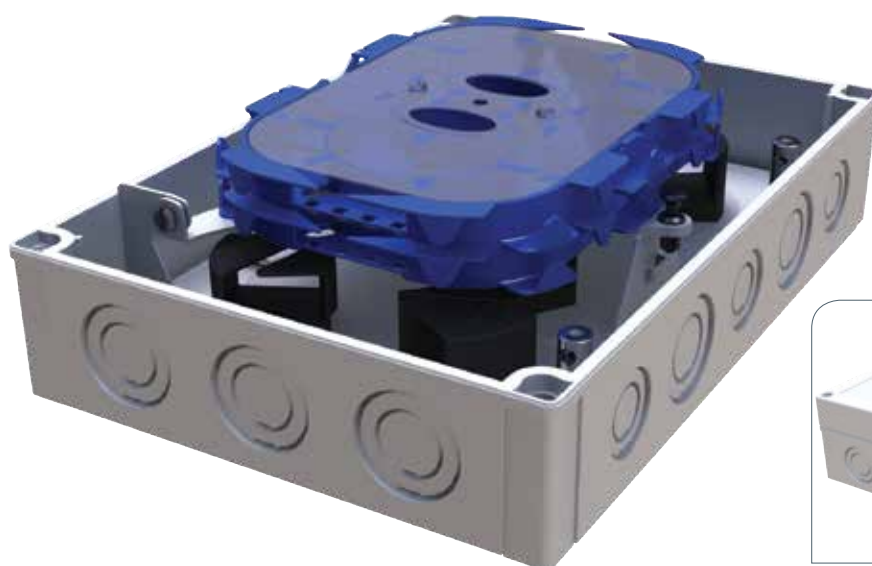
PARAMETER	VALUE
Maximum Single Fibre Count	4
Maximum Number of heat splice	4
Number of cable entre points	4
Height	86mm
Width	116mm
Depth	23mm
Colour	White
Material	ABS
Flame Retardant	Yes

Ordering Information

DESCRIPTION	PART NUMBER
FTTH User outlet unloaded	CSB12



IP66/67 Splice and Pass through Enclosure



This IP66/67 splice and Pass Through enclosure offers the ability to terminate up to 48 fibres housed in a robust ABS enclosure for indoor and outdoor applications. With the multiple gland entry point this enclosure offering a flexible solution that maintains

the bend radius of the fibres at all times, also included is the new speedway splice tray making this enclosure easy to access during installation or re-work with no disturbance of the existing cable or fibres.

Features

- > Removable cover for easy access
- > Unit manufactured from UL508 rated material
- > Raised hinged splice trays enables access for working
- > Up to 48 heat shrink
- > All fibre are managed to a 30mm minimum bend radius
- > Multiple cable entry points
- > Flammability rated to UL746C
- > integrated fibre management
- > 4 x strain tie points and cable ties included
- > Wall fixing screws included
- > 2mtr Of transit tubing included
- > 48 x Heat shrink splice protectors included
- > 4 x Cable glands included

Applications

- > External / Internal application
- > Data Centre or telecommunications networks
- > For use in multi dwelling units or demarcation points within a network

Technical Specification

IP RATED DISTRIBUTION BOX FOR INTERNAL/EXTERNAL USE	
Height	217mm
Width	270mm
Depth	40mm
Net weight	0.44kg
IP rating	IP65
Suitable for adaptor type	SC Simplex, LC Duplex, E2000
Number of fibres	4
Cable entry	1
Material	ABS
Colour	White
Operating temperature	-40°C to +60°C
Designed in accordance with	TIA/EIA 568.C, ISO/IEC 11801, EN50173, IEC60304, IEC61754, EN297-1
Compliant to	Reach / SVHC

Ordering Information

DESCRIPTION	PART NUMBER
IP66/67 Splice And Pass Through Enclosure	IP66BOX/Z



Optical Fibre Management

Enclosures

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Small Splice Enclosure



The Optronic OPTR402 protects fibre optic splicing joint in various installation conditions such as aerial, manholes, ducts and direct buried. It is specially designed for FTTH network and applicable to multi branching installations complying with the

requirements in each point of network. The Optronic OPTR402 provides easy and reliable installation and high mechanical strength against any environmental conditions.

Technical Specifications

SPECIFICATION	
Size (mm) LxWxH	270 x 160 x 80
Weight (kg)	2
Inlet ports	4
Cable Dia.(mm)	3 ~ 10
No. of Splice Tray	2
Tray Capacity	12F (up to 24F)
Splice Capacity	24F (up to 48F)
Splice Method	Fusion, Mechanical, Connector
Splice Protector	Heat Shrinkable Sleeve, Mechanical Splicer
Tension Member	Galvanized Steel Wire, FRP, Wire
Water proof	IP67 (in accordance with Telcordia International Standard)

Ordering Information

DESCRIPTION	PART NUMBER
Inline Aerial 12 Splice Enclosure	OPTR402-12
Inline Aerial 24 Splice Enclosure	OPTR402-24

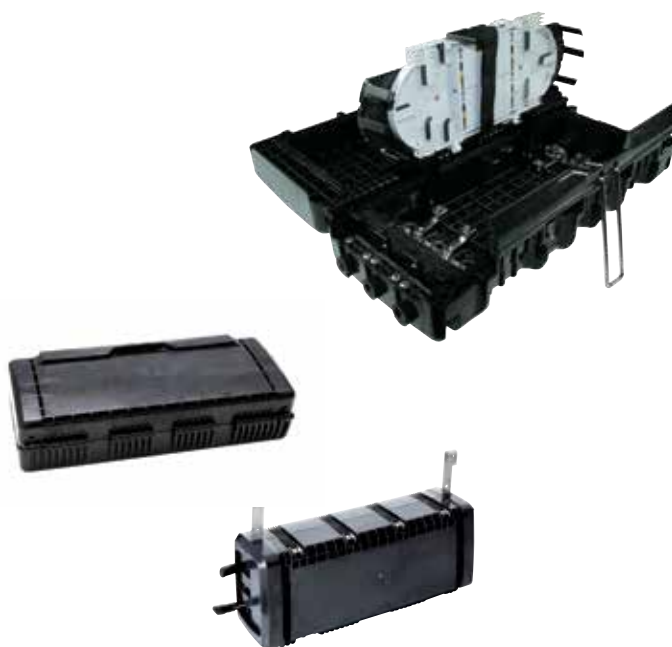
Applications

- > Telecommunications
- > CATV Networks
- > Data Transmission and Industrial control
- > Video Transmission and Security

Drawing



Large Splice Enclosure



The Optronics OPTB603 protects fibre optic splices in various installation conditions including aerial mounting. The design has catch clips that assist in the sealing performance of the unit. Optronics OPTB603B protects fibre optic splices in various installation conditions such as aerials. It's designed for the

aerial-line especially and provides safety by using catch clips and reliable sealing performance in low pressure environment. In addition, the enclosure is a discrete addition to the environment by mounting to the pole.

Technical Specifications

DESCRIPTION	OPTB603B
Size (mm) LxWxH	420 x 180 x 100
Weight (kg)	2.5
Inlet ports	6
Cable Dia.(mm)	8 ~ 20
No. of Splice Tray	Max 3
Tray Capacity	24F (max. 48F)
Splice Capacity	72F (max. 144F)
Splice Method	Fusion, Mechanical, Connector
Splice Protector	Heat Shrinkable Sleeve, Mechanical Splicer
Tension Member	Galvanized Steel Wire, FRP, Wire

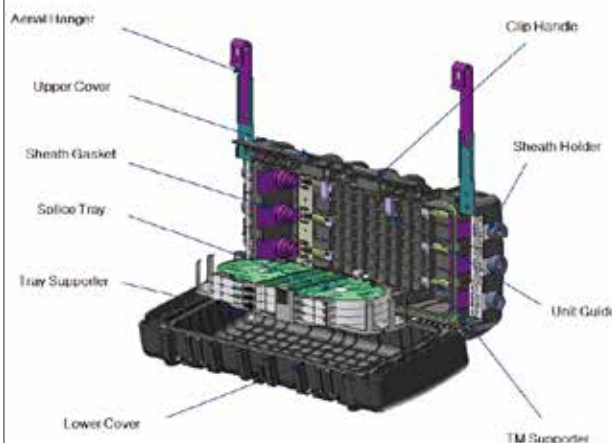
Ordering Information

DESCRIPTION	PART NUMBER
Splice Closure up to 24 splices	OPTB603B-24
Splice Closure up to 48 splices	OPTB603B-48
Splice Closure up to 72 splices	OPTB603B-72

Applications

- > Ergonomic design
- > One-Touch catch clips to assist safety and reduce insertion time
- > Double gasket construction for improved sealing performance

Drawing



Inline Splice Enclosure



The Optronics OPTB403A protects fibre optic splicing point in various installation conditions such as wires, manholes, ducts and direct buried. It is specially designed for FTTH network and applicable to multi branching installation by using Mid-plate which is for to increase core capacity and comply with the requirements at each point of the network.

Technical Specifications

DESCRIPTION	OPTB403A-XX	OPTB403A-XX	OPTB403A-XX
Size (mm) LxWxH	435 x 205 x 113	435 x 205 x 167	435 x 205 x 221
Weight (kg)	2.8	3.8	4.8
Main Entry Ports	4 Ports/Enclosure	8 Ports/Enclosure	12 Ports/Enclosure
Cable Dia.(mm)	6 ~ 20	6 ~ 20	6 ~ 20
No. of Splice Tray	4	6	8
Tray Capacity	24F (up to 48F)	24F (up to 48F)	24F (up to 48F)
Splice Capacity	24F - 96F	120F - 144F	168F - 192F
Splice Method	Fusion, Mechanical, Connector		
Splice Protector	Heat Shrinkable Sleeve, Mechanical Splicer		
Tension Member	Galvanized Steel Wire, FRP		
Water proof	IP 68 (in accordance with Telcordia International Standard)		

Ordering Information

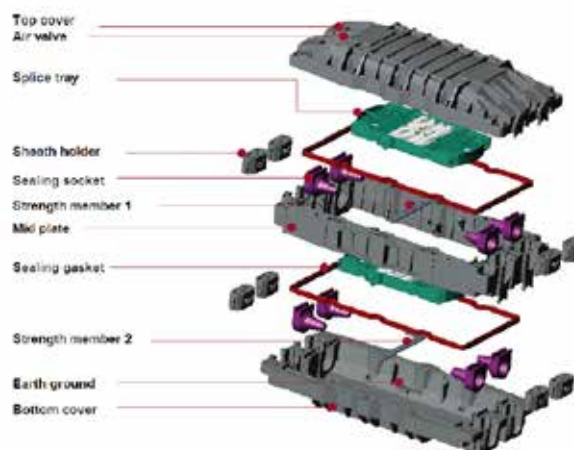
DESCRIPTION	PART NUMBER	
2 + 2 entry port enclosures	Inline 24 Splice, 1 Tray	OPTB403A-24
	Inline 48 Splice, 2 Tray	OPTB403A-48
	Inline 72 Splice, 3 Tray	OPTB403A-72
	Inline 96 Splice, 4 Tray	OPTB403A-96
4 + 4 entry port enclosures	Inline 120 Splice, 5 Tray	OPTB403A-120
	Inline 144 Splice, 6 Tray	OPTB403A-144
6 + 6 entry port enclosures	Inline 168 Splice, 7 Tray	OPTB403A-168
	Inline 192 Splice, 8 Tray	OPTB403A-192

The flat type gasket ensures reliable sealing performance by preventing air and water leak and the cone type sealing socket provides easy and reliable installation. This closure has high mechanical strength against any environmental conditions. With Optronics OPTB403A, you can improve your network system to the highest level.

Applications

- > Telecommunications
- > CATV Networks
- > Data Transmission and Industrial control
- > Video Transmission and Security
- > Aerial / Duct Installations

Drawing



Dome Enclosure



The Optronics OPTB604A protects fibre optic splices while providing fast and easy no-cost, re-entry. It can be installed on aerial cables, in manholes, ducts and be mounted on poles. The enclosure provides reliable sealing performance, and the fibre splicing points are protected in a ribbed polypropylene dome

that has high mechanical and environmental features. With six entry ports, the enclosure is applicable to in-line or mid-span branching methods. With the Optronics OPTB604A, you can enhance your network system to the highest level.

Technical Specifications

SPECIFICATION	OPTB604A
Size (mm) LxWxH	522 x 208 x 174
Weight (kg)	2.6
Inlet ports	6
Cable Dia.(mm)	8 ~ 24
No. of Splice Tray	4
Tray Capacity	12F (up to 24F)
Splice Capacity	48F (up to 96F)
Splice Method	Fusion, Mechanical, Connector
Splice Protector	Heat Shrinkable Sleeve, Mechanical Splicer
Tension Member	Galvanized Steel Wire, FRP, Wire
Water proof	IP 68 (in accordance with Telcordia International Standard)

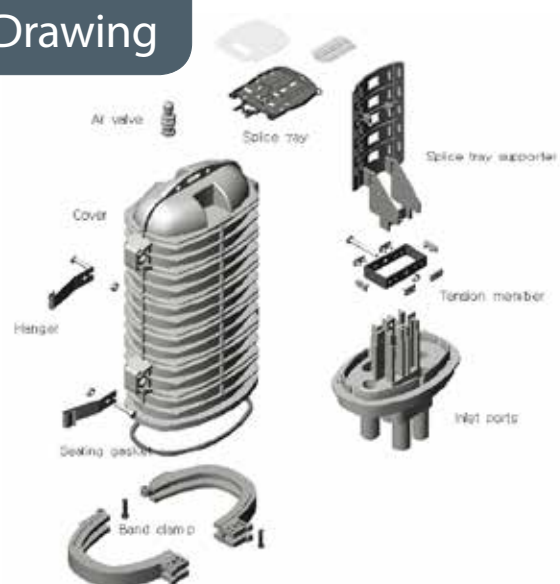
Ordering Information

DESCRIPTION	PART NUMBER
Dome 24 Splice, 1 tray Enclosure	OPTB604A-24
Dome 48 Splice, 2 trays Enclosure	OPTB604A-48
Dome 72 Splice, 3 trays Enclosure	OPTB604A-72
Dome 96 Splice, 4 trays Enclosure	OPTB604A-96

Applications

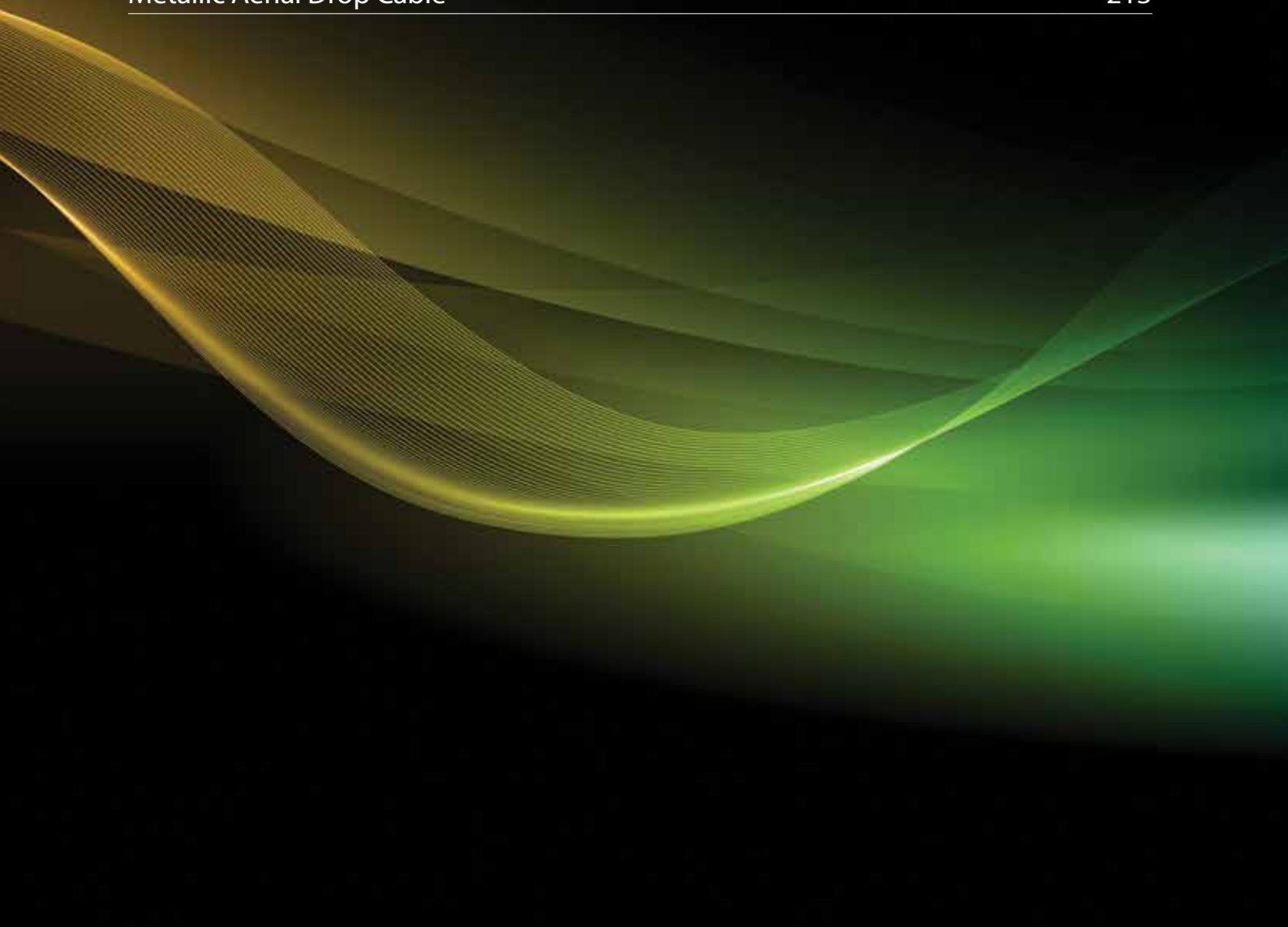
- > Telecommunications
- > CATV Networks
- > Data /Video transmission and security
- > Industrial control
- > Video Transmission and Security
- > Aerial and duct installations

Drawing



Fibre Optic Cable

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Single Loose Tube Cable	192
Multi Loose Tube Cable	198
Metallic Aerial Drop Cable	213



OPTICAL FIBRE CABLE | LABELLING CONVENTIONS

The following icons are used throughout this catalogue to represent the fibre optic cable specification, features and value added services that Optronics can offer:

FIBRE SPECIFICATIONS



Note: RBS Fibres are also available in mm.



Note: RBS Fibres are also available in mm.

FIBRE CABLE FEATURES

Water Resistant



Fire Retardant



Rodent Resistant



External Use



Internal Use



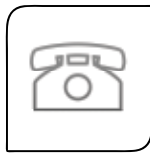
Rapid Deployment



Standard Length



Telecommunications



LSZH (LOW SMOKE ZERO HALOGEN) PERFORMANCE REQUIREMENTS

- > EC 61034-1 & 2 Smoke Emission
- > IEC 60332-1 Flammability
- > IEC 60754- 1 Toxicity
- > IEC 60754- 2 Acid Gas Emission
- > Limiting Oxygen Index (LOI) not less than 30 in accordance with ISO 4589-2 or equivalent.

Optronics has designed a range of cables specifically for the fibre within the access network. Our range of cables are constructed single to multi element

Optronics has developed a range of completely dry compact fibre optic cables to meet the requirements of the FTTH access and pre term interconnect market places. The completely gel free dry core and dry tube designs are ideal for low and high fibre count pre-termination and rapid on site installation by connectorisation or splicing.

The cables are available with a range of jacket and protection options for internal/external and external environments including Access, Riser and Drop. Water blocking of cable cores and tubes is achieved by the use of Super Absorbent Polymer (SAP) polymer materials which eliminate the need for gel materials.

Environmental resistance of outdoor cables is provided by black Polyethylene (PE) jacketing, and enhanced fire performance is achieved by the use of Low Smoke Zero Halogen (LSZH) jacketing material on indoor/outdoor cables. SZ reverse oscillation stranding is used with multi tube cables and in the riser to give easy breakout at each floor without the need to cut and splice fibres travelling to other floors.

Optronics dry FTTH cables meet the requirements of IEC 60793 the optical fibre specification and IEC 60794 the generic cable requirement specification. A long product lifetime is achieved through adherence to ITU design criteria recommendations.

Optronics offer these cable for splicing or with factory made high quality pre-termination to suit a customer's specific requirements.



Standards Applicable to Enterprise Networks

International standards are produced by ISO (International Organisation for Standardisation) and the IEC (International Electrotechnical Commission). Optonics products are designed and supplied in conformance with the standards cited on the related data sheet; in most cases IEC standards.

Regional standards bodies operate in concert with the international organisations and may introduce specific regional variants of the international standards. In North America, TIA (Telecommunications Industry Association) standards are widely followed. In Europe the EN (European Norm) standards are common. International and European standards are often republished by national standards bodies.

Primary Enterprise Communication Network Standards

The standards listed below are top level standards for enterprise or premise communications networks. The standards refer to further standards covering fibre itself, copper and fibre cables, connectivity products, testing practices and installation methods.

ISO/IEC 11801 (2nd edition); ANSI/TIA-568-C.1; EN 50173-1

These standards provide general requirements relating to the performance, installation and testing of generic cabling systems. Basic structured cabling classes are defined here – Cat 6, Cat 6A, OM1, OM2, OM3, OM4, OS1 and OS2.

specification, administration, planning, installation, handover, maintenance and repair of cabling systems. The US standards TIA-606-A, TIA-569-B, TIA-758-A and ANSI-J-STD-607-A cover most of these topics.

ISO/IEC 24764; ANSI/TIA-942; EN 50173-5:2007

These standards provide general requirements relating to the performance and installation of generic cabling systems within Data Centres.

IEC 14763-3; IEC 61280; TIA-568-C; EN 50346

These standards focus on the inspection and testing of cabling systems.

ISO/IEC 14763-2; EN 50174-1 (-2 and -3)

These standards provide information relating to the

ISO/IEC TR14763-2-1; ANSI/TIA 606-B

These standards are widely used as reference guides for the labelling of Structured Cabling Systems.

Fibre Standards

The following Technical Information Sheets provide a summary of optical fibre types and key parameters including basic fibre specifications and Ethernet application standards. These have been compiled from multiple IEC, TIA and ITU standards and are up-to-date as of the publication of this catalogue.

Optical Fibre Types

Channel Insertion Loss	Protocol	Max Transmission Distance (km)					
1 GBPS	1000 BASE-LH, 1000BASE-LH-LX	dB	1310	4.56	4.56	4.56	4.56
	1000BASE-ZX**	dB	1550				
10 GBPS	10G BASE-LR	dB	1310	6.2	6.2	6.2	6.2
	10G BASE-ER	dB	1550	10.9	10.9	10.9	10.9
	10G BASE-ZR**	dB	1550				
	10G BASE LX4	km	1295 to 1310	6.2	6.2	6.2	6.2
40 GBPS	40G BASE LR4	dB	1271 to 1331	6.7	6.7	6.7	6.7
	40G BASE FR		1550	4	4	4	4
100 GBPS	100GBASE-LR4	dB	1295 to 1310	6.3	6.3	6.3	6.3
	100G BASE-ER4	dB	1295 to 1310	18	18	18	18

Note 1 See ITU-T Recommendation

** Not specified by IEEE.



Optical Fibre Types

Single Mode Optical Fibre Selection Chart			Single mode optical fibre optimized for operation in the 1310 nm band				Low Water Peak Non dispersion Shifted Single Mode Fibre		Dispersion Shifted Single Mode Fibre		Non zero Dispersion Shifted Single Mode Fibre			Bending-loss insensitive single-mode optical fibre and cable for the access network						
			ISO/IEC 11801		Legacy		OS1/OS2							OS1/OS2						
					IEC		IEC 60793-2-50 B1.1		IEC 60793-2-50 B1.3		IEC 60793-2-50 B2		IEC 60793-2-50 B4			IEC 60793-2-50 B6_a1		IEC 60793-2-50 B6_a2		
					TIA		TIA 492 CAAA		TIA 492 CAAB				TIA 492 DAAA							
Performance Characteristics				Units	ITU-T	ITU-T G.652 A	ITU-T G.652 B	ITU-T G.652 C	ITU-T G.652 D	ITU-T G.653 A	ITU-T G.653 B	ITU-T G.655C	ITU-T G.655D	ITU-T G.655E	ITU-T G.657A1			ITU-T G.657A2		
Mode field diameter			Wavelength	nm		1310	1310	1310	1310	1550	1550	1550	1550	1550	1310	1310				
			Range of nominal values	µm		8.6-9.5	8.6-9.5	8.6-9.5	8.6-9.5	7.8-8.5	7.8-8.5	8-11	8-11	8-11	8.6-9.5	6.3-9.5				
			Tolerance	µm		±0.6	±0.6	±0.6	±0.6	±0.8	±0.6	±0.7	±0.6	±0.6	±0.4	±0.4				
Cladding diameter			Nominal	µm		125	125	125	125	125	125	125	125	125	125	125				
			Tolerance	µm		±1	±1	±1	±1	±1	±1	±1	±1	±1	±0.7	±0.7				
Core concentricity error			Maximum	µm		0.6	0.6	0.6	0.6	0.8	0.6	0.8	0.6	0.6	0.5	0.5				
Cladding noncircularity			Maximum			1.0%	1.0%	1.0%	1.0%	2.0%	1.0%	2.0%	1.0%	1.0%	1.0%	1.0%				
Cable cut-off wavelength			Maximum	nm		1260	1260	1260	1260	1270	1270	1450	1450	1450	1260	1260				
Macrobend loss			Radius	mm		30	30	30	30	30	30	30	30	30	15	10	15	10	7.5	
			Number of turns			100	100	100	100	100	100	100	100	100	10	1	10	1	1	
			Maximum at 1550 nm	dB		0.1	-	-	-	0.5	0.1					0.25	0.75	0.03	0.1	0.5
			Maximum at 1625 nm	dB		-	0.1	0.1	0.1	-		0.50	0.1	0.1	1.0	1.5	0.1	0.2	1.0	
			Proof stress	GPa		0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69				
Chromatic dispersion coefficient			λ0min	nm		1300	1300	1300	1300	1500					1300	1300				
			λ0max	nm		1324	1324	1324	1324	1600						1324	1324			
			S0max	ps/nm2 × km		0.092	0.092	0.092	0.092	0.085						0.092	0.092			
			λmin	nm						1525										
			λmax	nm						1575										
			Dmax	ps/nm × km						3.5										
			Specific details								Note 1	Note 1	Note 1	Note 1						
Attenuation coefficient			Maximum at 1310 nm	dB/km		0.5	0.4	0.4	0.4						0.4	0.4				
			Maximum at 1383 nm	dB/km				0.4	0.4							0.4	0.4			
			Maximum at 1550 nm	dB/km		0.4	0.35	0.3	0.3	0.35	0.35	0.35	0.35	0.35	0.3	0.3				
			Maximum at 1625 nm	dB/km		-	0.4	0.4	0.4			0.4	0.4	0.4	0.4	0.4				
PMD coefficient			M	cables		20	20	20	20	20	20	20	20	20	20	20				
			Q			0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%				
			Maximum PMDQ	ps/√km		0.5	0.20	0.5	0.20	0.5	0.20	0.20	0.20	0.20	0.20	0.20				

Note 1 See ITU-T Recommendation
 ** Not specified by IEEE.

Ethernet Distances		Protocol						Max Transmission Distance (km)			
1 GBPS	1000 BASE-LH, 1000BASE-LH-LX	km	1310	2	5	5	5				
	1000BASE-ZX**	km	1550	70	70	70	70				
10 GBPS	10G BASE-LR	km	1310	2	10	10	10				
	10G BASE-ER	km	1550	2	22	22	22				
	10G BASE-ZR**	km	1550	80	80	80	80				
	10G BASE LX4	km	1295 to 1310	2	10	10	10				
40 GBPS	40G BASE LR4	km	1271 to 1331	10	10	10	10				
	40G BASE FR	km	1550	2	2	2	2				
100 GBPS	100G BASE-LR4	km	1295 to 1310	10	10	10	10				
	100G BASE-ER4	km	1295 to 1310	40	40	40	40				

Note 1 See ITU-T Recommendation
 ** Not specified by IEEE.

Multimode Optical Fibre Selection Chart			Multimode Fibre with a 62.5-Micron Core		Multimode Fibre with a 50-Micron Core	Multimode Fibre with a 50-Micron Core Laser optimized	Multimode Fibre with a 50-Micron Core Laser optimized
			ISO/IEC 11801	OM1	OM2	OM3	OM4
			IEC	IEC 60793-2-10 A1b	IEC 60793-2-10 A1a.1a	IEC 60793-2-12 A1a.2	IEC 60793-2-12 A1a.3
			ITU-T		ITU-T G.651.1	ITU-T G.651.1	ITU-T G.651.1
Performance Characteristics		Units	TIA	TIA 492 AAAA	TIA 492 AAAB	TIA 492 AAAC-A	TIA 492 AAAD
Attenuation coefficient	Maximum	dB/km	tight buffer	3.5	3.5	3.5	3.5
				1.5	1.5	1.5	1.5
			loose tube	3	3	3	3
				1	1	1	1
Numerical Aperture	Nominal and tolerance			0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Macrobend Attenuation Change	Maximum	dB	100 turns on 75 mm Mandrel	0.5	0.5	0.5	0.5
Proof Strength	Minimum	Gpa		0.69	0.69	0.69	0.69
Cladding Diameter	Nominal and tolerance	microns		125±2	125±2	125±2	125±2
Core Diameter	Nominal and tolerance	microns		62.5±2.5	50±2.5	50±2.5	50±2.5
Core non-circularity	Maximum	%		6	6	6	6
Coating Diameter	Nominal and tolerance	microns		250+15	250+15	250+15	250+15
Core/Clad Concentricity Error	Maximum	microns		3	3	3	3
Cladding Non-Circularity	Maximum	%		2	2	2	2
Coating/Cladding Concentricity Error	Maximum	microns		12.5	12.5	12.5	12.5
Minimum Bandwidth: Overfilled Launch	Minimum	MHz.km	850nm	200	500	1500	3500
			1300nm	500	500	500	500
Minimum Bandwidth:Laser Effective Modal Bandwidth	Minimum	MHz.km	850	-	-	2000	4700
Ethernet Distances	Protocol			Max Transmission Distance (m)			
10 MBPS	IEEE 10BASE-FL	m	850nm	2000	2000	2000	2000
100 MBPS	IEEE 100BASE-SX**	m	850nm	500	750	1000	NA
	IEEE 100BASE-FX	m	1300nm	2000	2000	2000	2000
1 GBPS	IEEE 1000BASE-SX	m	850nm	275	550		
	IEEE 1000BASE-LX	m	1300nm	550	550	550	550
10 GBPS	IEEE 10G BASE-SR	m	850nm	33	82	300	400
	IEEE 10G BASE-LRM	m	1300nm	220	220	220	220
	IEEE 10G BASE LX4	m	1269 to 1355.9	300	300	300	300
	IEEE 40GBASE-SR4	m	850nm	-	-	100	150
100 GBPS (10 pairs)	IEEE 100GBASE-SR10	m	850nm	-	-	100	150
Ethernet Channel Insertion Loss	Protocol			Maximum Channel Insertion Loss			
10 MBPS	IEEE 10BASE-FL	dB	850nm	12.5	12.5	12.5	12.5
100 MBPS	IEEE 100BASE-SX**	dB	850nm				
	IEEE 100BASE-FX	dB	1300nm	11	6.3	6.3	6.3
1 GBPS	IEEE 1000BASE-SX	dB	850nm	2.6	3.56	3.56	3.56
	IEEE 1000BASE-LX	dB	1300nm	2.35	2.35	2.35	2.35
10 GBPS	IEEE 10G BASE-SR	dB	850nm	1.6	1.8	2.6	2.9
	IEEE 10G BASE-LRM	dB	1300nm	1.9	1.9	1.9	1.9
	IEEE 10G BASE LX4	dB	1269 to 1355.9	2	2	2	2
	IEEE 40GBASE-SR4	dB	850nm	-	-	1.9	1.5
100 GBPS (10 pairs)	IEEE 100GBASE-SR10	dB	850nm	-	-	1.9	1.5

** Not specified by IEEE.

Micro Cable Single Jacket LSZH (2-24 Fibres)

Optronics 2 to 24 fibre 250µm cables with aramid strength members and single LSZH jacket. The cables consist of 2 to 24, 250µm OS1/OS2 (ITU-T G.652D), ITU-T G.657A1 & ITU-T G.657A2 singlemode optical fibres in a 2.95mm Low Smoke Zero Halogen (LSZH) inner jacket with aramid strength members.

Applications

- > Ideal for internal inter-connect using MPO or MTP connectivity
- > Specialist cable for high density connectivity including Data Centres

Features

- > Individually coloured optical fibres
- > Compact 250µm high fibre density construction
- > All dielectric construction with aramid yarn for physical protection and mechanical strength
- > Single LSZH jacket for internal use

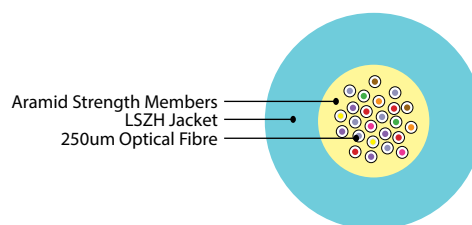
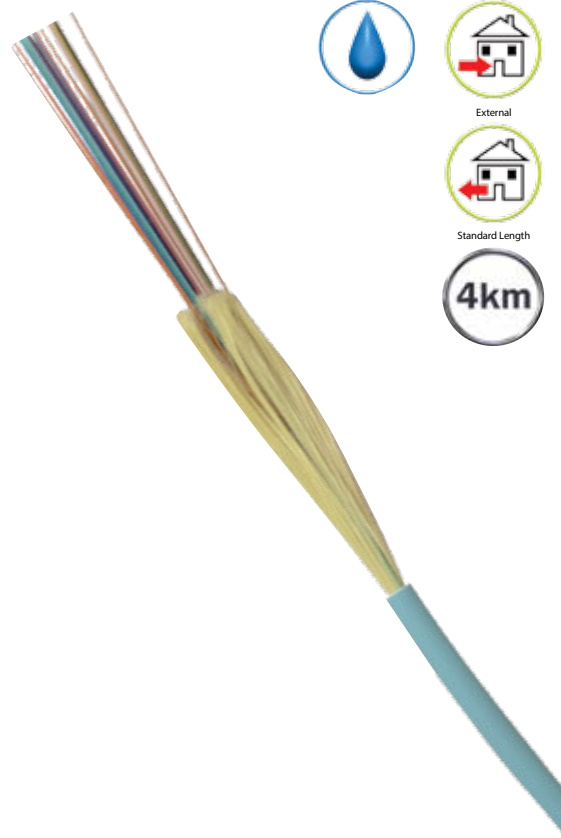
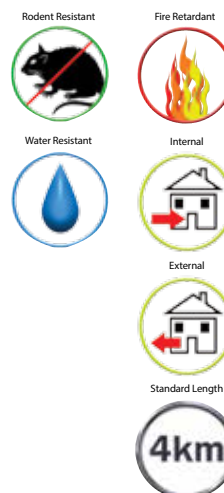
Technical Specifications

PARAMETER	UNIT	VALUE
Crush	N/100mm	500
Strength member		Aramid
Storage temperature	°C	-20 to 60
Installation temperature	°C	-40 to 60
Operating temperature	°C	-20 to 60
Primary buffer diameter	µm	250
Fibre count	n	2 to 24
Nominal outer diameter	mm	2.95 ± 0.1
Nominal weight	kg/km	7
Maximum tensile load	N	Short term 200 Long term 60
Minimum bend radius	mm	Installed 30mm Loaded 60mm
Plywood drum dimensions (Flange/Barrel/Width)	mm (approx)	F500/B220/W330
Drum weight with cable 4km	kg (approx)	10

Ordering Information

DESCRIPTION	PART NUMBER
OS1 ITU-T G.652D 2f to 24f Single Jacket Micro Cable Yellow	OS1MICROSJ**UYE
OS2 ITU-T G.652D 2f to 24f Single Jacket Micro Cable Yellow	OS2MICROSJ**UYE
ITU-T G.657A1 2f to 24f Single Jacket Micro Cable Yellow	7A1MICROSJ**UYE
ITU-T G.657A2 2f to 24f Single Jacket Micro Cable Yellow	7A2MICROSJ**UYE

Where ** is the fibre count between 1 and 4. Other jacket colours are available



Micro Cable Double Jacket LSZH (2-24 Fibres)

Optronics 2 to 24 fibre 250µm cables with aramid strength members and double LSZH jackets. The cables consist of 2 to 24, 250µm OS1/OS2 (ITU-T G.652D), ITU-T G.657A1 & ITU-T G.657A2 singlemode optical fibres in a 2.95mm Low Smoke Zero Halogen (LSZH) inner jacket with aramid strength members. Aramid non metallic strength members and final 4.5mm LSZH jacket.

Applications

- > Ideal for internal inter-connect using MPO or MTP connectivity
- > Specialist cable for high density connectivity including Data Centres

Features

- > Individually coloured optical fibres
- > Compact 250µm high fibre density construction
- > All dielectric construction with aramid yarn for physical protection and mechanical strength
- > Double LSZH jackets for internal use

Technical Specifications

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		Aramid
Storage temperature	°C	-20 to 60
Installation temperature	°C	-40 to 60
Operating temperature	°C	-20 to 60
Primary buffer diameter	µm	250
Fibre count	n	2 to 24
Nominal outer diameter	mm	4.5 ±0.2
Nominal weight	kg/km	22
Maximum tensile load	N	Short term 400 Long term 150
Minimum bend radius	mm	Installed 45mm Loaded 90mm
Plywood drum dimensions (Flange/Barrel/Width)	mm (approx)	F500/B220/W330
Drum weight with cable 4km	kg (approx)	25

Ordering Information

DESCRIPTION	PART NUMBER
OS1 ITU-T G.652D 2f to 24f Double Jacket Micro Cable Yellow	OS1MICRO**UYE
OS2 ITU-T G.652D 2f to 24f Double Jacket Micro Cable Yellow	OS2MICRO**UYE
ITU-T G.657A1 2f to 24f Double Jacket Micro Cable Yellow	7A1MICRO**UYE
ITU-T G.657A2 2f to 24f Double Jacket Micro Cable Yellow	7A2MICRO**UYE

Where ** is the fibre count between 1 and 4. Other jacket colours are available



Light Duty Non Metallic Armoured SLT Rodent Resistant Drop Cable

Optronics 2 to 12 fibre OS1/OS2 (ITU-T G.652D) singlemode 250µm single loose tube light duty non metallic armoured internal/external rodent resistant duct, direct burial and drop cable.

The single loose tube cable consists of 2 to 12, 250µm optical fibres in a single gel filled loose tube with waterblocking E-glass non metallic strength members. Ripcord for jacket removal and black LSZH (Low Smoke Zero Halogen) jacket with dual opposed embedded FRP (Fibre Reinforced Plastic) armour rods.

Applications

- > Suitable for internal/external duct and direct burial applications
- > Suitable for environments where impact and crush protection is required
- > Ideal for FTTH Drop applications

Features

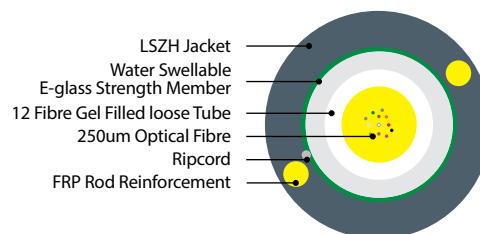
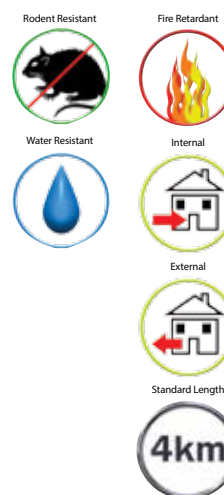
- > Choice of fibre types
- > Individually coloured optical fibres
- > Non metallic armouring for enhanced impact and crush resistance
- > FRP rods and E-glass yarn for rodent resistance
- > Compact 250µm loose tube construction
- > Flame retardant LSZH jacket for enhanced fire performance
- > Black jacket for external use and resistance to UV radiation including sunlight

Technical Specifications

PARAMETER	UNIT	VALUE
Crush	N/100mm	2000
Strength member		FRP/E-glass
Storage temperature	°C	-30 to 70
Installation temperature	°C	-10 to 50
Operating temperature	°C	-40 to 70
Primary buffer diameter	µm	250
Fibre count	n	2, 4, 6, 8 & 12
Nominal outer diameter	mm	5.8 ± 0.2
Nominal weight	kg/km	43
Maximum tensile load	N	600
Minimum bend radius	mm	Installed 58 Loaded 90
Plywood drum dimensions (Flange, Barrel, Width)	mm (approx)	F900, B450, W680
Drum weight with cable 4km	kg (approx)	188
Drum length	km	2 or 4

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D Singlemode 250µm Single tube Light Duty Armoured LSZH Jacketed Int/Ext Cable Black	OS1LTNMA**UBK



All Dielectric 250µm Flat Drop Cable (1-4 Fibres)

ITU-T G.652D, ITU-T G.657A1 & ITU-T G.657A2 all dielectric Fibre-To-The-Home (FTTH) drop cable consisting of 1 to 4, 250µm, individually coloured optical fibres with Fibre Reinforced Plastic (FRP) strength members and Low Smoke Zero Halogen (LSZH) jacket.

Features

- > Choice of fibre type
- > Individually coloured optical fibres
- > Notched construction for easy stripping
- > White LSZH jacket for internal use

Applications

- > Internal FTTH applications horizontal and riser
- > Clipping to surfaces including skirting boards

Technical Specifications

DESCRIPTION	UNIT	VALUE
Crush	N/100mm	400
Strength member		FRP
Storage temperature	°C	-20 to 70
Installation temperature	°C	-5 to 50
Operating temperature	°C	-20 to 70
Primary buffer diameter	µm	250
Fibre count	n	1 to 4
Nominal outer diameter	mm	2.0 x 3.0 ±0.2
Nominal weight	kg/km	11
Maximum tensile load	N	100
Minimum bend radius	mm	15
Plywood drum dimensions 4km 2f to 12f	mm (approx) (Flange/Barrel/Width)	630/300/330
Drum weight with cable 4km	kg (approx)	52

Ordering information

DESCRIPTION	PART NUMBER
250µm FTTH OM1 White jacket non metallic	OM1FLATDROPXXNUWH
250µm FTTH OM2 White jacket non metallic	OM2FLATDROPXXNUWH
250µm FTTH OM3 White jacket non metallic	OM3FLATDROPXXNUWH
250µm FTTH OM4 White jacket non metallic	OM4FLATDROPXXNUWH
250µm FTTH ITU-T OS1/OS2 G.652D Singlemode White jacket non metallic	OS1FLATDROPXXNUWH
250µm FTTH ITU-T G.657A1 White jacket non metallic	7A1FLATDROPXXNUWH
250µm FTTH ITU-T G.657A2 White jacket non metallic	7A2FLATDROPXXNUWH
2 Core 250µm FTTH ITU-T G.652D White jacket non metallic	SM02DRPWHT09
2 Core 250µm FTTH ITU-T G.657B White jacket non metallic	SM02DRPWHT



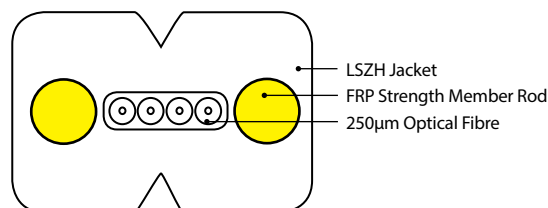
Fire Retardant



Internal



Standard Length



3.0mm Round Duplex Drop Cable with Aramid Strength Members

Optronics Round Duplex, 3.0mm, 2 fibre, ITU-T G.657A singlemode, 900µm, tight buffered internal cable with aramid strength members and a LSZH jacket.

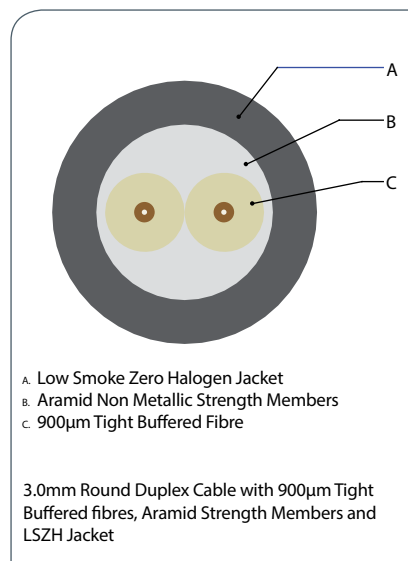
The Round Duplex cables consist of 2, 900µm optical fibres with longitudinally applied aramid non metallic strength members and white LSZH jacket.

Applications

- > FTTH horizontal drop
- > Pigtails and Patch cords
- > Internal inter-connect including pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		Aramid
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	8
Fibre count	n	2
Nominal outer diameter	mm	3.0 ±0.2
Maximum tensile load (Short Term)	N	250
Maximum tensile load (Long Term)	N	100
Minimum bend radius	mm	Installed 10D
Minimum bend radius	mm	Loaded 20D
Drum length	km	2 or 4



Features

- > Aramid strength members for ease of handling
- > Robust 900µm tight buffered fibres for ease of termination
- > Easy stripping
- > LSZH jacket for internal use

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.657A fibre datasheet

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Fibre Identification (IEC 60304)

NO	1	2
Fibre	Blue	Orange

Ordering Information

DESCRIPTION	PART NUMBER
2-Core 3.0mm ITU-T G.657A FTTH round duplex drop white Jacket 900µm	OL657A3DURLG016UWH

Other jacket colours are available



Breakout Cable (4-24 Fibres)

Full OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D), ITU-T G.657A1 singlemode Breakout cable consisting of up to 24, 2.0mm Low Smoke Zero Halogen (LSZH) simplex cables each consisting of 1, 900µm tight secondary buffered optical fibre with longitudinally applied aramid non metallic strength members and low smoke zero halogen (LSZH) jacket. The individually numbered simplex subunits are helically stranded in two layers around a LSZH jacketed Fibre Reinforced Plastic (FRP) non metallic central strength member with polyester wrapping tape, ripcord and LSZH final jacket.

Features

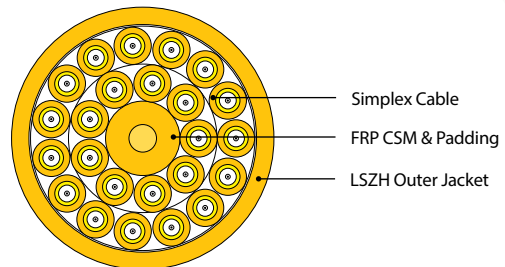
- > Choice of fibre type
- > Colour coded fibres
- > High strength aramid yarn strength member
- > LSZH jacket
- > Easy to strip

Applications

- > Internal cable for installation in trunking, under floor or ceiling spaces
- > Fibre backbones in riser and horizontal configurations

Technical Specifications

DESCRIPTION		4 CORE LSZH	6 CORE LSZH	8 CORE LSZH	12 CORE LSZH	24 CORE LSZH
Outer diameter	mm	7.0	8.2	9.4	11.8	14.1
Weight	kg/km	46	63	86	139	159
Max. Load (installation)	N	500	1000	1100	1400	1400
Max. Load (installed)	N	270	600	700	800	800
Min. Bend Radius (installation)	mm	70	80	95	120	120
Min. Bend Radius (installed)	mm	140	160	190	240	240
Jacket Type		LSZH	LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	0~+50	0~+50	0~+50	0~+50	0~+50
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Max Crush Resistance	N/ 100mm	1000	1000	1000	1000	1000



Ordering information

DESCRIPTION	PART NUMBER
2.0mm OM1 62.5/125 Breakout Orange jacket and subunits LSZH	OM1BO**UOR
2.0mm OM2 50/125 Breakout jacket and subunits LSZH	OM2BO**UOR
2.0mm OM3 50/125 Breakout Aqua jacket and subunits LSZH	OM3BO**UAQ
2.0mm OM3 50/125 Breakout Purple jacket and subunits LSZH	OM3BO**UPU
2.0mm OM4 50/125 Breakout Aqua jacket and subunits LSZH	OM4BO**UAQ
2.0mm OM4 50/125 Breakout Erika Violet jacket and subunits LSZH	OM4BO**UEV
2.0mm OS1/OS2 ITU-T G.652D Singlemode Breakout Yellow jacket and subunits LSZH	OS1BO**UYE
2.0mm ITU-T G.657A1 Singlemode Breakout Yellow jacket and subunits LSZH	7A1BO**UYE

Where ** is the fibre count either 4, 6, 8, 12 or 24



Tight Buffered Distribution Cable (4-24 Fibres)

Optronic's tight buffered internal distribution cables are constructed of 4, 8, 12 and 24 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D), ITUT G.657A1 singlemode 900µm tight secondary buffered rodent resistant cables with a Low Smoke Zero Halogen (LSZH) jacket. These distribution cables consist of 4 to 24, 900µm tight secondary buffered optical fibres with rodent resistant E-glass non metallic strength members and black LSZH jacket.

Features

- > Choice of fibre type
- > Colour coded fibres
- > High strength E-glass rodent resistant yarn strength member
- > Easy to strip
- > LSZH jacket

Applications

- > Internal cable for installation in trunking, under floor or ceiling spaces
- > Fibre backbones in riser and horizontal configurations

Technical Specifications

DESCRIPTION		4-CORE LSZH	8-CORE LSZH	12-CORE LSZH	24-CORE LSZH
Outer diameter	mm	4.8±0.3	5.8±0.3	6.5±0.3	8.9±0.3
Weight	kg/km	26	34	40	61
Max. Load (installation)	N	600	750	750	900
Max. Load (installed)	N	300	375	375	450
Min. Bend Radius (installation)		96D	116D	130D	150D
Min. Bend Radius (installed)		48D	58D	65D	75D
Jacket Type		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Max Crush Resistance	N/100mm	1000	1000	1000	1000

Ordering information

DESCRIPTION	PART NUMBER
OM1 900µm Distribution Black	OM1TB**UBK-C
OM2 900µm Distribution Black	OM2TB**UBK-C
OM3 900µm Distribution Black	OM3TB**UBK-C
OM4 900µm Distribution Black	OM4TB**UBK-C
OS1/OS2 ITU-T G.652D 900µm Distribution Black	OS1TB**UBK-C
ITU-T G.657A1 900µm Distribution Black ^A	7A1TB**UBK-C
ITU-T G.657A2 Yellow ^A	7A2TB**UBK-C

Where ** is the fibre count between 4 & 24
 RBS Multimode available on request
 Subunitised Distribution Cables available up to 144f
^ASuited for Telco applications



Fire Retardant



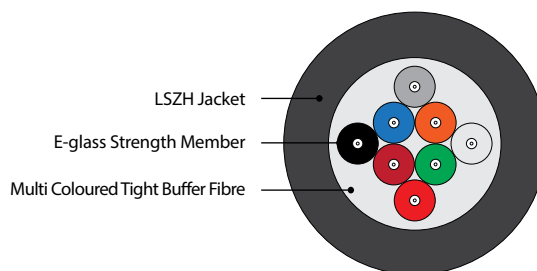
Internal



Standard Length



Standard Length



Tight Buffered Cable Multicore (36-96 Fibres)

36, 48, 72 or 96 fibre, 900µm OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D), ITU-T G.6527A1 singlemode stranded subunit rodent resistant distribution cable with E-glass strength members and Low Smoke Zero Halogen (LSZH) jacket. 36 & 48 fibre, stranded subunit rodent resistant distribution cable consisting of up to 4, 12 fibre subunits and filler when necessary. Each subunit consists of 12, 900µm tight secondary buffered optical fibres with E-glass non metallic strength members and LSZH jacket. The individually coloured 6mm outside diameter (OD) subunits are helically stranded around an FRP central strength member with polyester wrapping tape, ripcord and LSZH final jacket.

Features

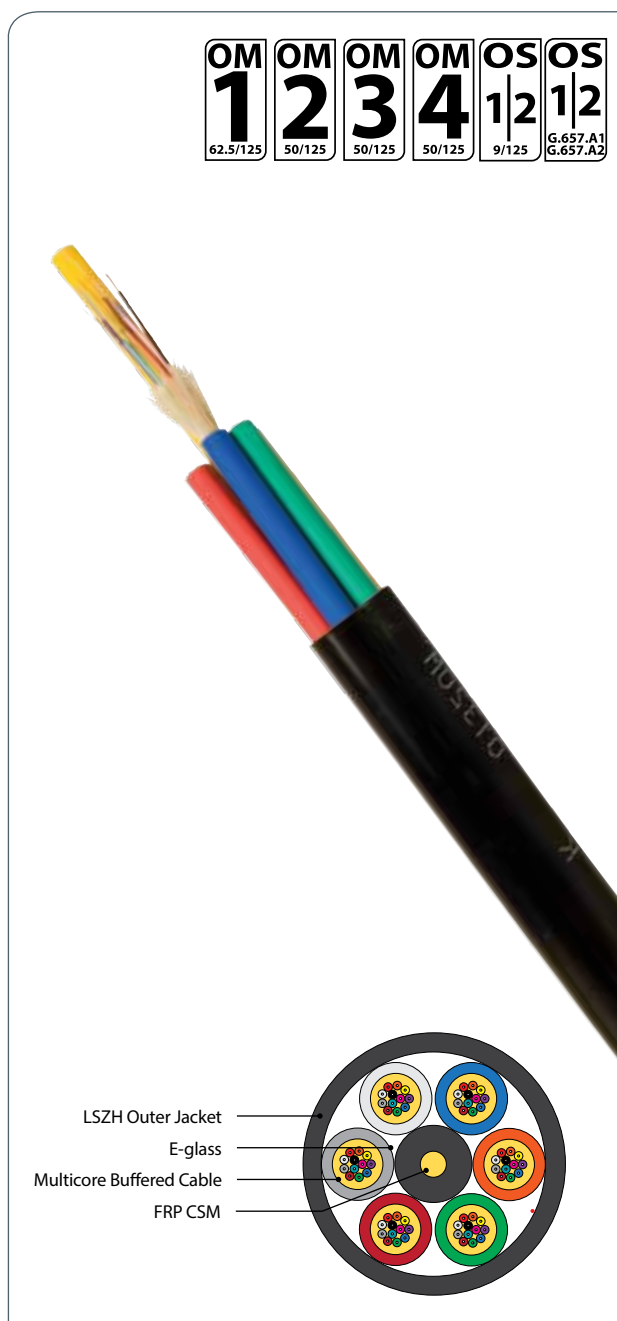
- > Choice of fibre type
- > Colour coded fibres for easy identification
- > E-glass
- > FRP Central Strength Member
- > Easy to strip
- > LSZH jacket
- > Lightweight and compact

Applications

- > Internal cable for horizontal distribution or riser applications

Technical Specifications

DESCRIPTION		36-CORE LSZH	48-CORE LSZH	72-CORE LSZH	96-CORE LSZH
Outer diameter	mm	17.4±0.5	17.4±0.5	21.6±0.5	25.5±0.5
Weight	kg/km	237	237	397	571
Max. Load (installation)	N	2800	2800	4600	5000
Max. Load (installed)	N	1500	1500	2000	2200
Min. Bend Radius (installation)	mm	350	350	440	500
Min. Bend Radius (installed)	mm	175	175	220	250
Jacket Type		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Max Crush Resistance	N/100mm	1500	1500	1500	1500



Ordering information

DESCRIPTION	PART NUMBER
OM1 900µm 4 element subunit Distribution Black	OM1TBME**UBK-C
OM2 900µm 4 element subunit Distribution Black	OM2TBME**UBK-C
OM3 900µm 4 element subunit Distribution Black	OM3TBME**UBK-C
OM4 900µm 4 element subunit Distribution Black	OM4TBME**UBK-C
OS1/OS2 ITU-T G.652D 900µm 4 element subunit Distribution Black	OS1TBME**UBK-C
ITU-T G.657A1 900µm 4 element subunit Distribution Black	7A1TBME**UBK-C

Where ** is the fibre count either 36, 48, 72 or 96



Single Loose Tube (2-24 Fibres)

2 to 24 fibre OM1, OM2, OM3, OM4 multimode, OS1/OS2 (ITU-T G.652D), ITU-T G.657A1 or ITU-T G.657A2 singlemode 250µm single dry loose tube internal/external duct cables. The single loose tube cables consist of 2 to 24, 250µm individually coloured optical fibres in a single waterblocked dry loose tube with helically applied waterblocking aramid non metallic strength members and Low Smoke Zero Halogen (LSZH) jacket.

Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > LSZH jacket for optimised fire performance

Applications

- > Ideal for internal/external duct applications
- > Suitable for one or both end pre termination

Technical Specifications

DESCRIPTION		2 TO 24 CORE ARAMID	2 TO 24 CORE E-GLASS
Outer Diameter	mm	6.4 ±0.3	6.4 ±0.3
Weight	kg/km	48	50
Max. Load (installation)	N	1000	1000
Max. Load (installed)	N	500	500
Min. Bend Radius (installation)	mm	130	130
Min. Bend Radius (installed)	mm	65	65
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	20~+60
Storage Temp.	°C	-20~+60	20~+60
Installation Temp.	°C	-20~+60	20~+60
Crush Resistance	N/100mm	2000	2000



Ordering information

DESCRIPTION	PART NUMBER
OM1 250µm Single Dry Loose Tube Aramid Orange LSZH	OM1DTA**UOR
OM2 250µm Single Dry Loose Tube Aramid Orange LSZH	OM2DTA**UOR
OM3 250µm Single Dry Loose Tube Aramid Aqua LSZH	OM3DTA**UAQ
OM3 250µm Single Dry Loose Tube Aramid Purple LSZH	OM3DTA**UPU
OM4 250µm Single Dry Loose Tube Aramid Aqua LSZH	OM4DTA**UAQ
OM4 250µm Single Dry Loose Tube Aramid Erika Violet LSZH	OM4DTA**UEV
OS1/OS2 ITU-T G.652D 250µm Single Dry LT Aramid	OS1DTA**UYE
ITU-T G.657A1 250µm Single Dry LT Aramid Yellow LSZH	7A1DTA**UYE
ITU-T G.657A2 250µm Single Dry LT Aramid Yellow LSZH	7A2DTA**UYE
OS1 ITUT G.652D 250m Single dry loose tube	OS1DT**OYE
OS1 ITUT G.652D 250m Single dry loose tube aramid	OS1DTA**OYE
OS2 ITUT G.652D 250m Single dry loose tube	OS2DT**OYE

DESCRIPTION	PART NUMBER
OM1 250µm Single Dry Loose Tube RR Orange PVC Riser	OM1DTE**ROR
OM2 250µm Single Dry Loose Tube RR Orange PVC Riser	OM2DTE**ROR
OM3 250µm Single Dry Loose Tube RR Aqua PVC Riser	OM3DTE**RAQ
OM3 250µm Single Dry Loose Tube RR Purple PVC Riser	OM3DTE**RPU
OM4 250µm Single Dry Loose Tube RR Aqua PVC Riser	OM4DTE**RAQ
OM4 250µm Single Dry Loose Tube RR Erika Violet PVC Riser	OM4DTE**REV
OS1/OS2 ITU-T G.652D 250µm Single Dry LT RR Yellow	OS1DTE**RYE
ITU-T G.657A1 250µm Single Dry LT RR Yellow PVC Riser	7A1DTE**RYE
ITU-T G.657A2 250µm Single Dry LT RR Yellow PVC Riser	7A2DTE**RYE
OS2 ITUT G.652D 250 m Single dry loose tube aramid	OS2DTA**OYE
G.657A 250m Single dry loose tube RR ULSZH	57ADT**OYE
G.657A 250m Single dry loose tube aramid ULSZH	57ADTA**OYE

Where ** is the fibre count between 2 & 24 - Optional black jacket code is UBK



4 Fibre All Dielectric 250µm Loose Tube Rodent Resistant Cable Drop Cable

ITU-T G.652D, ITU-T G.657A1 & ITU-T G.657A2 all dielectric Fibre To The Home (FTTH) indoor/outdoor drop cable containing 1, 2 or 4 250µm optical fibres in a single 1.7mm gel filled loose tube, waterblocking E-glass non metallic strength members and white Low Smoke Zero Halogen (LSZH) or black polyethylene (PE) jacket printed in black or white by the inkjet technique.

Features

- > Choice of fibre types
- > Individually coloured optical fibres
- > Robust loose tube construction for external water ingress protection
- > E-glass strength members for rodent resistance
- > White LSZH jacket (other colours are available) for internal use or black PE Jacket for environmental resistance

Applications

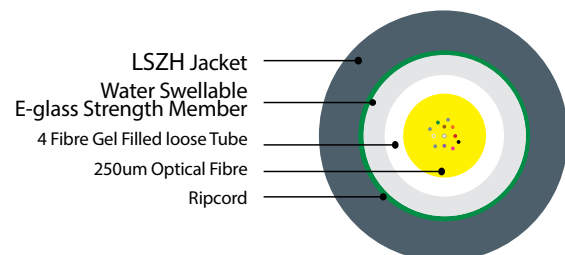
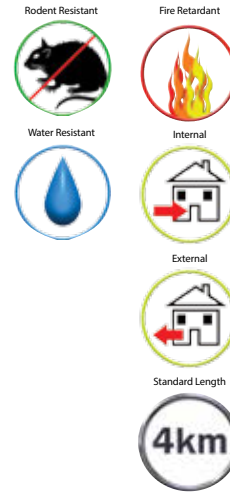
- > Internal FTTH applications horizontal and riser, including clipping to surfaces such as skirting boards

Technical Specifications

PARAMETER	UNIT	VALUE
Crush	N/100mm	800
Strength member		E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-5 to 50
Operating temperature	°C	-20 to 60
Primary buffer diameter	µm	250
Fibre count	n	1, 2 or 4
Nominal outer diameter	mm	4.2 ± 0.2
Nominal weight	kg/km	22
Maximum tensile load	N	500
Minimum bend radius	mm	15
Plywood drum dimensions (Flange/Barrel/Width)	mm (approx)	F760/B340/W380
Drum weight with cable 4km	kg (approx)	LSZH 100
Drum length	km	4

Ordering Information

DESCRIPTION	PART NUMBER
250um FTTH ITU-T G.652D LT Int/Ext Drop White	OS1DROPLT**UWH
250um FTTH ITU-T G.657A1 LT Int/Ext Drop White	7A1DROPLT**UWH
250um FTTH ITU-T G.657A2 LT Int/Ext Drop White	7A2DROPLT**UWH
250um FTTH ITU-T G.652D LT Ext Drop Black	OS1DROPLT**PBK
250um FTTH ITU-T G.657A1 LT Ext Drop Black	7A1DROPLT**PBK
250um FTTH ITU-T G.657A2 LT Ext Drop Black	7A2DROPLT**PBK



Internal Drop Dry Loose Tube Cables with Aramid Strength Members

Optronics up to 8 fibre ITU-T G.652D singlemode, 250µm, single dry loose tube internal duct cables

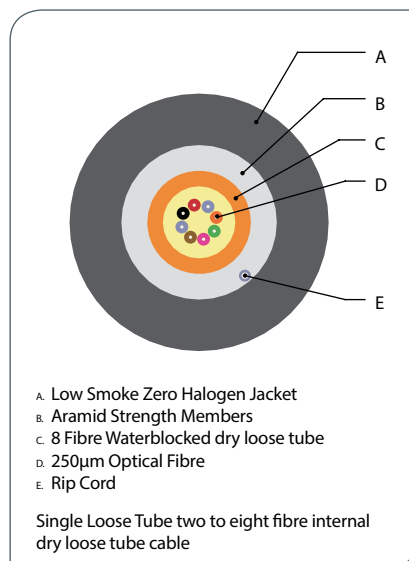
The single loose tube cables consist of 2 to 8, 250µm, individually coloured optical fibres in a single waterblocked dry loose tube with helically applied aramid non metallic strength members and a yellow Low Smoke Zero Halogen (LSZH) jacket with ripcord.

Applications

- > Suitable for internal FTTH drop applications
- > Suitable for one or both end pre terms and on site termination
- > Suitable for internal riser collapsed backbone applications

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		Aramid
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	138
Fibre count	n	88, 96
Nominal outer diameter	mm	5.0 ±0.3
Maximum tensile load (Short Term)	N	500
Maximum tensile load (Long Term)	N	250
Minimum bend radius	mm	Installed 50
Minimum bend radius	mm	Loaded 100
Drum length	km	2 or 4



Features

- > ITU-T G.652D optical fibre
- > Colour coded optical fibres
- > Gel free loose tube construction with aramid strength members for ease of handling and termination
- > Compact 250µm dry loose tube construction
- > Flame retardant LSZH jacket for enhanced fire performance

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm Single dry tube drop LSZH	OS1LG016**UYE

Where ** is the fibre count between 2 and 8



Single Loose Tube Cable (2-24 Fibres)

2 to 24 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D singlemode 250µm single loose tube external duct cables with E-glass strength members and polyethylene (PE) or Low Smoke Zero Halogen (LSZH) jacket. The single loose tube cables consist of 2 to 24, 250µm optical fibres in a single gel filled loose tube with E-glass non-metallic strength members and black PE or LSZH jacket with ripcord.

Features

- > Choice of fibre type
- > Choice of coded fibres
- > E-glass strength members for rodent resistance
- > Flame retardant LSZH jacket option for enhanced fire performance
- > Compact 250µm loose tube construction

Applications

- > Suitable for internal / external duct applications
- > Suitable for environments where rodent resistance is required
- > Ideal for intra building links in campus environments

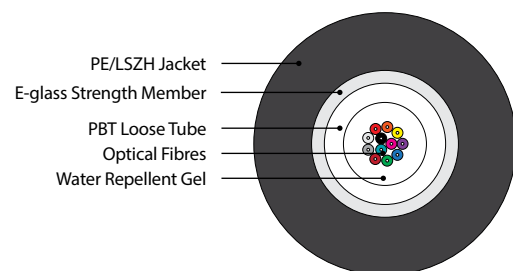
Technical Specifications

DESCRIPTION		4-12 CORE	14-24 CORE
Outer diameter	mm	6.5±0.3	6.7±0.3
Weight (PE/LSZH)	kg/km	29/47	35/48
Max. Load (installation)	N	1000	1000
Max. Load (installed)	N	500	500
Min. Bend Radius (installation)	mm	20D	20D
Min. Bend Radius (installed)	mm	10D	10D
Jacket Type		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60
Max Crush Resistance	N/100mm	1000	1000

Ordering information

DESCRIPTION	PART NUMBER
OM1 PE	OM1LT**PBK-C
OM1 LSZH	OM1LT**UBK-C
OM2 PE	OM2LT**PBK-C
OM2 LSZH	OM2LT**UBK-C
OM3 PE	OM3LT**PBK-C
OM3 LSZH	OM3LT**UBK-C
OM4 PE	OM4LT**PBK-C
OM4 LSZH	OM4LT**UBK-C
OS1/OS2 PE	OS1LT**PBK-C
OS1/OS2 LSZH	OS1LT**UBK-C

Where ** is the fibre count between 2 & 24



STA SLT Rodent Resistant Cable (2-24 Fibres)

2 to 24 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm single loose tube metallic armoured internal/external rodent resistant duct and direct burial cables with E-glass strength members, and Low Smoke Zero Halogen (LSZH) or High Density Polyethylene (HDPE) jacket. The single loose tube cables consists of 2 to 24, 250µm optical fibres in a single gel filled loose tube with longitudinally applied E-glass non-metallic strength members, Corrugated Steel Tape (CST) armouring and LSZH or HDPE jacket.

Features

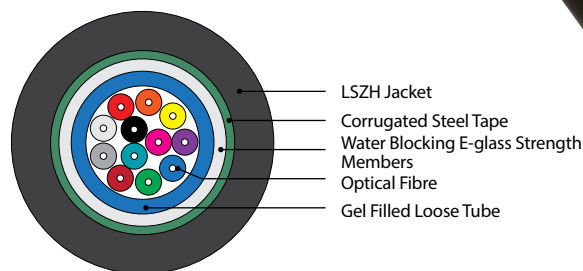
- > Choice of fibre type
- > Choice of outer diameter
- > CST armouring for enhanced impact, crush and rodent resistance
- > Compact 250µm loose tube construction
- > Flame retardant LSZH jacket for enhanced fire performance or HDPE jacket for environmental protection and water permeation resistance

Applications

- > Suitable for internal/external duct or direct burial applications
- > Suitable for environments where impact protection is required
- > Ideal for intra building links in campus environments

Technical Specifications

DESCRIPTION	UNIT	VALUE
Crush	N/100mm	2000
Strength member		E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-20 to 60
Nominal weight 2f to 12f (LSZH/HDPE)	kg/km	95/73
Nominal weight 14f to 24f (LSZH/HDPE)	kg/km	110/86
Fibre count	n	2, 4, 6, 8, 12, 16 & 24
Nominal outer diameter 2f to 12f	mm	8.5 ±0.3
Nominal outer diameter 14f to 24f	mm	9.2 ±0.3
Maximum tensile load (Short Term)	N	1000
Maximum tensile load (Long Term)	N	500
Minimum bend radius (Installed)	mm	10D
Minimum bend radius (Loaded)	mm	20D



Ordering information

DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
OM1 PE	OM1LTSTA**PBK	OM3 LSZH	OM3LTSTA**UBK
OM1 LSZH	OM1LTSTA**UBK	OM4 PE	OM4LTSTA**PBK
OM2 PE	OM2LTSTA**PBK	OM4 LSZH	OM4LTSTA**UBK
OM2 LSZH	OM2LTSTA**UBK	OS1/OS2 PE	OS1LTSTA**PBK
OM3 PE	OM3LTSTA**PBK	OS1/OS2 LSZH	OS1LTSTA**UBK

Where ** is the fibre count between 2 & 24

Where ** is the fibre count between 2 & 24



STA SLT Cable with Steel Wire (2-24 Fibres)

2 to 12 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm single loose tube metallic armoured external duct and direct burial cables with steel wire strength members, and Low Smoke Zero Halogen (LSZH) or polyethylene (PE) jacket.

The single loose tube cable consists of 2 to 12, 250µm optical fibres in a single gel filled loose tube with longitudinally applied water swellable tape, Corrugated Steel Tape (CST) armouring and black LSZH or PE jacket with radially opposed steel wire strength members.

Features

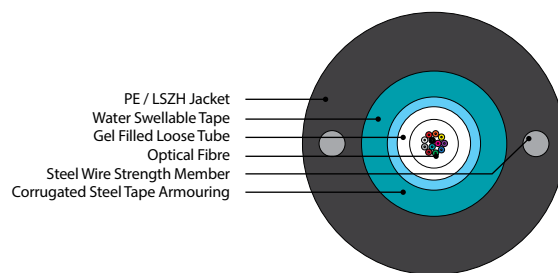
- > Choice of fibre types
- > Colour coded fibres
- > CST armouring for enhanced impact and crush resistance
- > Compact 250µm loose tube construction
- > Flame retardant LSZH jacket for enhanced fire performance or PE jacket for environmental protection and water permeation resistance

Applications

- > Suitable for internal/external duct and direct burial applications
- > Suitable for environments where impact protection is required
- > Ideal for intra building links in campus environments

Technical Specifications

DESCRIPTION	UNIT	VALUE
Crush	N/100mm	2000
Strength member		Steel
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-20 to 60
Nominal weight (LSZH/PE)	kg/km	150/106
Fibre count	n	2, 4, 6, 8, & 12
Nominal outer diameter	mm	10.0 ±0.3
Maximum tensile load (Short Term)	N	1200
Maximum tensile load (Long Term)	N	600
Minimum bend radius (Installed)	mm	100
Minimum bend radius (Loaded)	mm	200



Ordering information

DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
OM1 PE	OM1LTSTW**PBK	OM3 LSZH	OM3LTSTW**UBK
OM1 LSZH	OM1LTSTW**UBK	OM4 PE	OM4LTSTW**PBK
OM2 PE	OM2LTSTW**PBK	OM4 LSZH	OM4LTSTW**UBK
OM2 LSZH	OM2LTSTW**UBK	OS1/OS2 PE	OS1LTSTW**PBK
OM3 PE	OM3LTSTW**PBK	OS1/OS2 LSZH	OS1LTSTW**UBK

Where ** is the fibre count between 2 & 12



5 Element External Completely Dry Multi Loose Tube Cable

Optronics up to 40 fibre, 5 element, completely dry, ITU-T G.652D singlemode, 250µm, multi dry loose tube, rodent resistant, external dry core duct cables with rodent resistant E-glass strength members and a High Density Polyethylene (HDPE) jacket

The 5 element multi loose tube cable construction consists of up to 40, 250µm optical fibres in 8 fibre waterblocked dry loose tubes and fillers where appropriate. The tubes are SZ stranded around a Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non metallic strength members with ripcord and black High Density Polyethylene (HDPE) jacket.

Applications

- > Ideal for external duct FTTH Access and Distribution applications
- > Suitable for external applications where environmental resistance is required
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP/E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	73
Fibre count	n	8, 16, 24, 32, 40
Nominal outer diameter	mm	9.6 ± 0.4
Maximum tensile load (Short Term)	N	2700
Maximum tensile load (Long Term)	N	1200
Minimum bend radius	mm	Installed 95
Minimum bend radius	mm	Loaded 190
Drum length	km	2 or 4

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5
Fibre	Blue	Orange	Green	Brown	Grey

Natural fillers to be used where appropriate

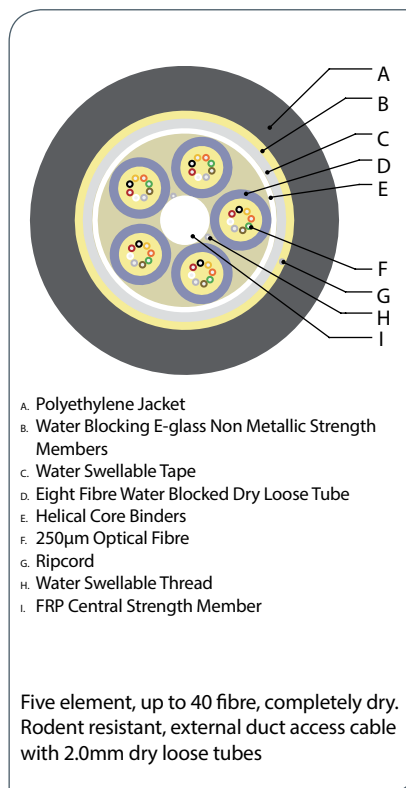
Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 5 element multi tube FTTH RR PE	5LOS1LG009**PBK

Where ** is the fibre count between 8 and 40



Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > PE jacket for environmental protection and water permeation resistance



6 Element External Completely Dry Multi Loose Tube Cable

Optronics 48 fibre, 6 element, completely dry, ITU-T G.652D singlemode, 250µm, multi dry loose tube, rodent resistant, external dry core duct cables with rodent resistant E-glass strength members and a High Density Polyethylene (HDPE) jacket

The 6 element multi loose tube cable construction consists of 48 250µm optical fibres in 8 fibre waterblocked dry loose tubes. The tubes are SZ stranded around a Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non metallic strength members with ripcord and black High Density Polyethylene (HDPE) jacket.

Applications

- > Ideal for external duct FTTH Access and Distribution applications
- > Suitable for external applications where environmental resistance is required
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP/E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	72
Fibre count	n	72
Nominal outer diameter	mm	10.3 ± 0.4
Maximum tensile load (Short Term)	N	2700
Maximum tensile load (Long Term)	N	1400
Minimum bend radius	mm	Installed 103
Minimum bend radius	mm	Loaded 206
Drum length	km	2 or 4

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6
Fibre	Blue	Orange	Green	Brown	Grey	White

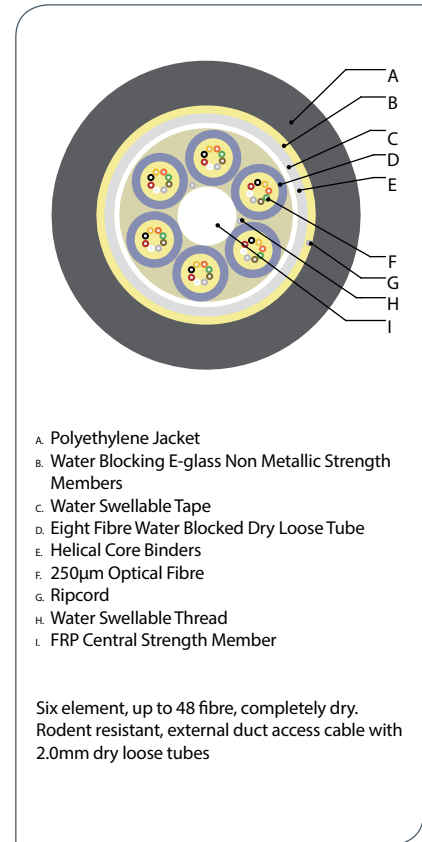
Natural fillers to be used where appropriate

Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 6element multi tube FTTH RR PE	6LOS1LG01072PBK



Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > PE jacket for environmental protection and water permeation resistance



8 Element External Completely Dry Multi Loose Tube Cable

Optronics 56 to 64 fibre, 5 element, completely dry, ITU-T G.652D singlemode, 250µm, multi dry loose tube, rodent resistant, external dry core duct cables with rodent resistant E-glass strength members and a High Density Polyethylene (HDPE) jacket

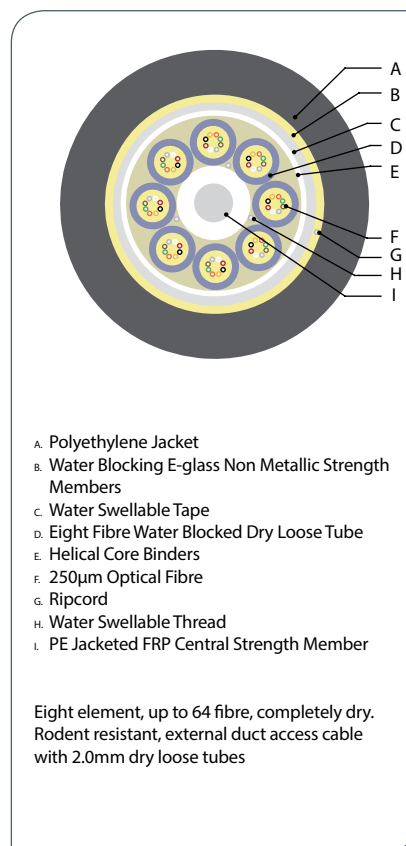
The 8 element multi loose tube cable construction consists of up to 56 to 64, 250µm optical fibres in 8 fibre waterblocked dry loose tubes and fillers where appropriate. The tubes are SZ stranded around a polyethylene (PE) jacketed Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non metallic strength members with ripcord and black High Density Polyethylene (HDPE) jacket.

Applications

- > Ideal for external duct FTTH Access and Distribution applications
- > Suitable for external applications where environmental resistance is required
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP/E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	95
Fibre count	n	56 & 64
Nominal outer diameter	mm	11.5 ± 0.4
Maximum tensile load (Short Term)	N	2700
Maximum tensile load (Long Term)	N	1500
Minimum bend radius	mm	Installed 115
Minimum bend radius	mm	Loaded 230
Drum length	km	2 or 4



Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > PE jacket for environmental protection and water permeation resistance

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 8 element multi tube FTTH RR PE	8LOM1LG011**PBK

Where ** is the fibre count between 8 and 40



10 Element External Completely Dry Multi Loose Tube Cable

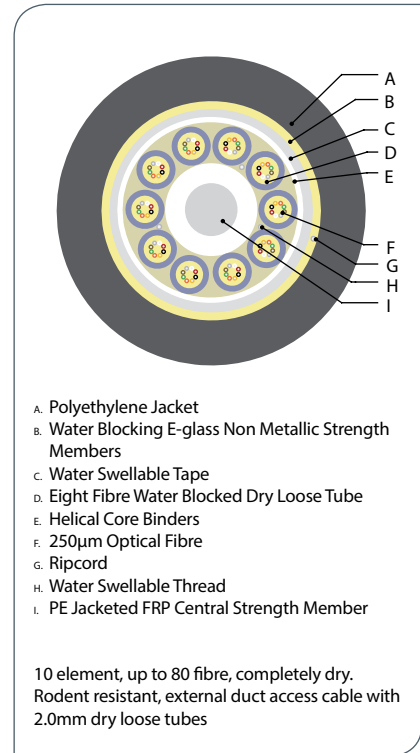
Optronics 72 to 80 fibre, 10 element, completely dry, ITU-T G.652D singlemode, 250µm, multi dry loose tube, rodent resistant, external dry core duct cables with rodent resistant E-glass strength members and a High Density Polyethylene (HDPE) jacket. The 10 element multi loose tube cable construction consists of 72 to 80, 250µm optical fibres in 8 fibre waterblocked dry loose tubes and fillers where appropriate. The tubes are SZ stranded around a polyethylene (PE) jacketed Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non metallic strength members with ripcord and black High Density Polyethylene (HDPE) jacket.

Applications

- > Ideal for external duct FTTH Access and Distribution applications
- > Suitable for external applications where environmental resistance is required
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP/E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	116
Fibre count	n	72, 80
Nominal outer diameter	mm	12.9 ± 0.4
Maximum tensile load (Short Term)	N	2700
Maximum tensile load (Long Term)	N	1600
Minimum bend radius	mm	Installed 130
Minimum bend radius	mm	Loaded 260
Drum length	km	2 or 4



Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > PE jacket for environmental protection and water permeation resistance

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8	9	10
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet

Natural fillers to be used where appropriate

Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 10 element multi tube FTTH RR PE	10LOM1LG012**PBK

Where ** is the fibre count between 8 and 40



12 Element External Completely Dry Multi Loose Tube Cable

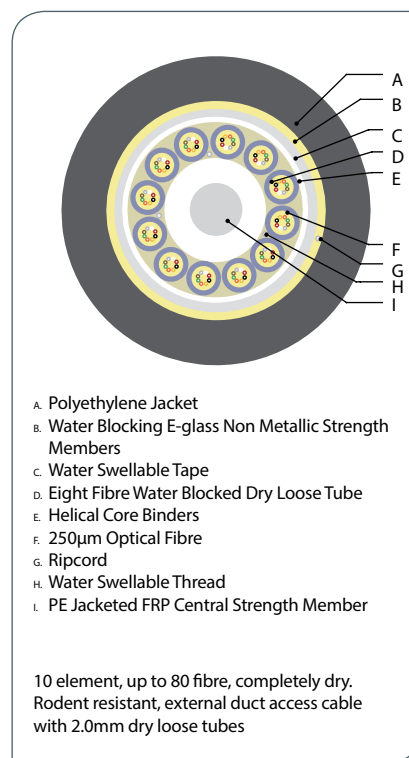
Optronics 88 to 96 fibre, 12 element, completely dry, ITU-T G.652D singlemode, 250µm, multi dry loose tube, rodent resistant, external dry core duct cables with rodent resistant E-glass strength members and a High Density Polyethylene (HDPE) jacket. The 12 element multi loose tube cable construction consists of 88 to 96, 250µm optical fibres in 8 fibre waterblocked dry loose tubes and fillers where appropriate. The tubes are SZ stranded around a polyethylene (PE) jacketed Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non metallic strength members with ripcord and black High Density Polyethylene (HDPE) jacket.

Applications

- > Ideal for external duct FTTH Access and Distribution applications
- > Suitable for external applications where environmental resistance is required
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP/E-glass
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	138
Fibre count	n	88, 96
Nominal outer diameter	mm	14.2 ± 0.4
Maximum tensile load (Short Term)	N	2700
Maximum tensile load (Long Term)	N	1600
Minimum bend radius	mm	Installed 140
Minimum bend radius	mm	Loaded 280
Drum length	km	2 or 4



Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > PE jacket for environmental protection and water permeation resistance

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8	9	10	11	12
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

Natural fillers to be used where appropriate

Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 12 element multi tube FTTH RR PE	12LOS1LG013**PBK

Where ** is the fibre count between 8 and 40



Multi Loose Tube Cable (24-144 Fibres)

Optronics up to 144 fibre, 5 to 12 element dry core OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm multi loose tube rodent resistant external duct cables with E-glass strength members, and high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket. The multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non-metallic strength members with ripcord and black high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

Features

- > Choice of fibre type
- > Colour coded fibres
- > Compact 250µm loose tube construction
- > PE jacket for environmental protection and water permeation resistance
- > Flame retardant LSZH jacket option for enhanced fire performance

Applications

- > PE jacket: suitable for external duct applications
- > LSZH jacket: suitable for Internal/external applications
- > Suitable for applications where environmental resistance is required

Technical Specifications

DESCRIPTION		24 TO 60-CORE	72 CORE	96 CORE	122 CORE	144 CORE
Outer diameter	mm	10.5±0.4	11.1±0.4	12.6±0.4	14.1±0.4	15.6±0.4
Weight (PE/LSZH)	kg/km	90/116	97/125	121/157	148/196	178/239
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	210	220	250	280	310
Min. Bend Radius (installed)	mm	105	110	125	140	155
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Max Crush Resistance	N/100mm	2000	2000	2000	2000	2000



Ordering information

DESCRIPTION	PART NUMBER
OM1 PE	OM1MLT**PBK-C
OM1 LSZH	OM1MLT**UBK-C
OM2 PE	OM2MLT**PBK-C
OM2 LSZH	OM2MLT**UBK-C
OM3 PE	OM3MLT**PBK-C
OM3 LSZH	OM3MLT**UBK-C
OM4 PE	OM4MLT**PBK-C
OM4 LSZH	OM4MLT**UBK-C
OS1/OS2 PE	OS1MLT**PBK-C
OS1/OS2 LSZH	OS1MLT**UBK-C

Where ** is the fibre count between 24 & 144



Multi Loose Tube CST Cable (24-144 Fibres)

Optronics multi loose tube cable construction consists of up to 12 elements and a maximum of 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non-metallic strength members with ripcord. Corrugated Steel Tape (CST) armouring and black High Density Polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

Features

- > Choice of fibre type
- > Colour coded fibres
- > High water resistant
- > High crush resistant
- > PE / LSZH jacket

Applications

- > Suitable for external applications

Technical Specifications

DESCRIPTION		24 TO 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer diameter	mm	12.0±0.4	12.6±0.4	14.1±0.4	15.6±0.4	17.1±0.4
Weight (PE/LSZH)	kg/km	166/199	173/208	207/251	243/299	284/344
Max. Load (installation)	N	1500	2900	2900	3300	3300
Max. Load (installed)	N	600	1400	1500	1600	1600
Min. Bend Radius	mm	240	252	280	320	340
Min. Bend Radius (installed)	mm	120	126	140	160	170
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Max Crush Resistance	N/ 100mm	3000	3000	3000	3000	3000



Ordering information

DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER
OM1 PE	OM1MLTSTA***PBK-C	OM3 LSZH	OM3MLTSTA***UBK-C
OM1 LSZH	OM1MLTSTA***UBK-C	OM4 PE	OM4MLTSTA***PBK-C
OM2 PE	OM2MLTSTA***PBK-C	OM4 LSZH	OM4MLTSTA***UBK-C
OM2 LSZH	OM2MLTSTA***UBK-C	OS1/OS2 PE	OS1MLTSTA***PBK-C
OM3 PE	OM3MLTSTA***PBK-C	OS1/OS2 LSZH	OS1MLTSTA***UBK-C

Where ** is the fibre count between 24 & 144



Dry Multi Loose Tube (24-144 Fibres)

Optronics up to 12 element internal/external multi loose tube cable construction consists of up to 144, 250µm optical fibres in up to 12 fibre waterblocked dry loose tubes with fillers where appropriate. The tubes are SZ stranded around an LSZH jacketed fibre reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass or aramid non-metallic strength members with ripcord and LSZH jacket.

Features

- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > E-glass yarn for rodent resistance
- > LSZH jacket option for optimised fire performance

Applications

- > Ideal for internal/external duct applications
- > Suitable for one or both end pre-termination

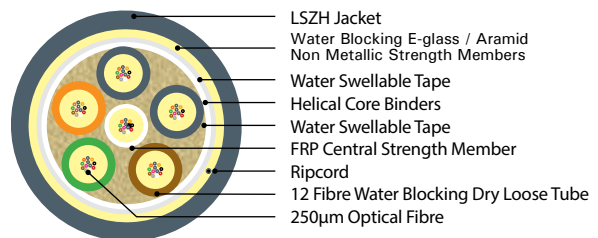
Technical Specifications

DESCRIPTION		24 TO 60 CORE	72 CORE	96 CORE	144 CORE
Outer Diameter	mm	9.6±0.4	10.3±0.4	11.5±0.4	14.2 ±0.4
Weight	kg/km	96	104	127	190
Max. Load (installation)	N	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600
Min. Bend Radius (installation)	mm	190	206	230	280
Min. Bend Radius (installed)	mm	95	103	115	140
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	2000	2000	2000	2000

Ordering information

DESCRIPTION	PART NUMBER
OM1 E-glass	OM1MDLTE***UOR
OM1 Aramid	OM1MDLTA***UOR
OM2 E-glass	OM2MDLTE***UOR
OM2 Aramid	OM2MDLTA***UOR
OM3 E-glass	OM3MDLTE***UAQ
OM3 Aramid	OM3MDLTA***UAQ
OM4 E-glass	OM4MDLTE***UAQ
OM4 Aramid	OM4MDLTA***UAQ
OS1/OS2 E-glass	OS1MDLTE***UYE
OS1/OS2 Aramid	OS1MDLTA***UYE

Where *** is the fibre count between 24 & 144



MLT Double Jacket Cable (24-144 Fibres)

Optronics multi loose tube cable construction consists of up to 12 elements and a maximum of 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied waterblocking E-glass non-metallic strength members with ripcord. Inner PE jacket, Corrugated Steel Tape (CST) armouring and black High Density Polyethylene (HDPE).

Features

- > Choice of fibre type
- > Colour coded fibres
- > High water resistant

Applications

- > Suitable for external applications in ducts, direct burial or river crossing

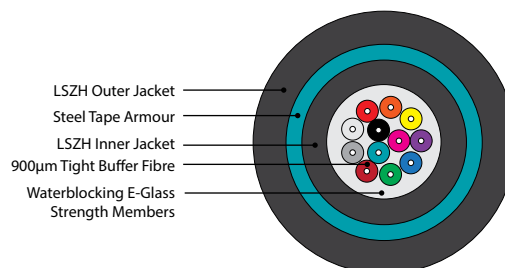
Technical Specifications

DESCRIPTION		24 TO 60 CORE	72 CORE	96 CORE	120 CORE	144 CORE
Outer Diameter	mm	14.0 ±0.5	14.6 ±0.5	16.1 ±0.5	17.6 ±0.5	19.1 ±0.5
Weight	kg/km	210	219	257	298	343
Max. Load (installation)	N	2700	2800	2900	3300	3300
Max. Load (installed)	N	1300	1400	1500	1600	1600
Min. Bend Radius (installation)	mm	280	290	320	350	380
Min. Bend Radius (installed)	mm	140	145	160	175	190
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	4000	4000	4000	4000	4000

Ordering information

DESCRIPTION	PART NUMBER
OM1 250 µm Multi tube PE CST PE	OM1DSTA***PBK
OM2 250 µm Multi tube PE CST PE	OM2DSTA***PBK
OM3 250 µm Multi tube PE CST PE	OM3DSTA***PBK
OM4 250 µm Multi tube PE	OM4DSTA***PBK
OS1/OS2 ITU-T G.652D 250µm multi tube PE CST PE	OS1DSTA***PBK

Where ** is the fibre count between 24 & 144



Armoured Direct Burial Cable (24-144 Fibres)

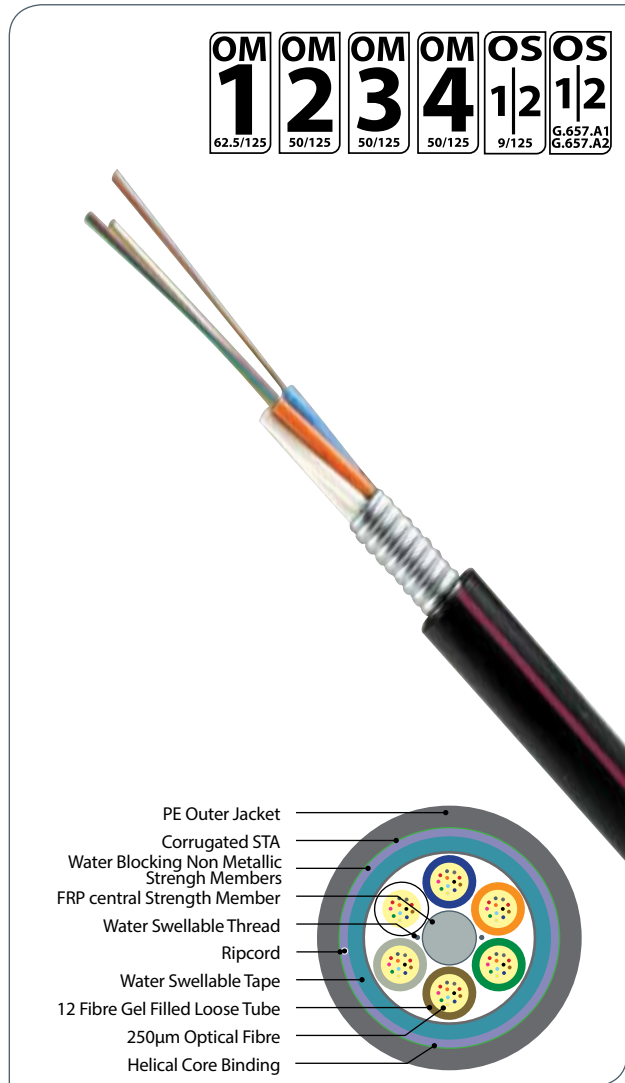
Optronics multi element multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied non-metallic strength members with ripcord. Corrugated steel tape (CST) armouring and black High Density Polyethylene (HDPE) jacket.

Features

- > Step layer stranded construction (up to 144 fibres)
- > Corrugated steel tape as protection against rodents and mechanical damage
- > Thin and robust cable
- > Dry core construction
- > Wrapped in water swellable tape
- > Filled loose tube
- > Fibre relevant standards ITU-T G 652, G655, G656 or a combination
- > Cable relevant standards IEC 60793 and IEC 60794

Applications

- > Direct buried
- > Used in application with high mechanical loads



Technical Specifications

DESCRIPTION		12 CORE	24 CORE	36 CORE	48 CORE	60 CORE	72 CORE	96 CORE	120 CORE	144 CORE
Cable diameter*	mm	12.3	12.3	12.3	12.3	12.3	12.3	13.8	15.4	17.1
Cable Weight	kg/km	91	91	91	91	91	91	125	155	190
Max Tensile Load [installation]	N	2700	2700	2700	2700	2700	2700	2700	2700	2700
Fibres per loose tube		12	12	12	12	12	12	12	12	12
Number of loose buffer tube		1	2	3	4	5	6	8	10	12
Number of standing elements		6	6	6	6	6	6	8	10	12
Min. Bend Radius		20 x cable outer diameter (during laying and installation) 17.5 x cable outer diameter (installed)								
Installation Temp Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C
Operation Temp Range	°C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C
Transportation Temp Range	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C

*Other diameters available on request.

Ordering Information

Call for ordering information



5 Element Internal Completely Dry Multi Loose Tube Riser Cable

Optronics 40 fibre, 5 element, completely dry, ITU-T G.652D singlemode, 250µm, multi loose tube, rodent resistant, internal FTTH riser cables with Low Smoke Zero Halogen (LSZH) jacket.

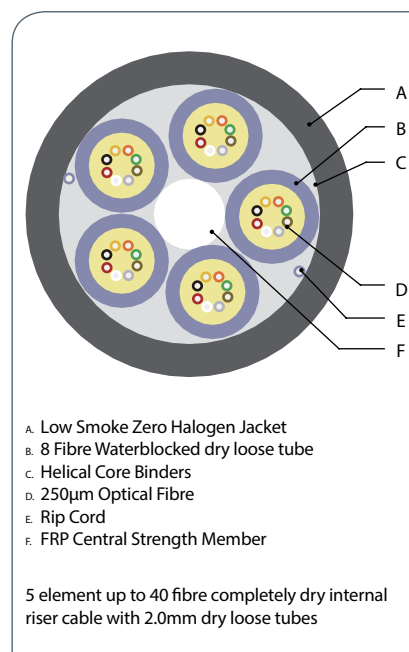
The 5 element multi loose tube cable construction consists of the 40, 250µm optical fibres in 8 waterblocked dry loose tubes that are SZ stranded around a Fibre Reinforced Plastic (FRP) central strength member with a yellow LSZH jacket.

Applications

- > Ideal for use in internal riser applications in FTTH installations
- > Suitable for internal applications
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	39
Fibre count	n	8, 16, 24, 32, 40
Nominal outer diameter	mm	8.9 ± 0.3
Maximum tensile load (Short Term)	N	550
Maximum tensile load (Long Term)	N	230
Minimum bend radius	mm	Installed 90
Minimum bend radius	mm	Loaded 180
Drum length	km	2 or 4



Features

- > SZ stranded core for easy tube breakout at each floor
- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > Reduced thickness flame retardant LSZH jacket for enhanced fire performance and easy removal to reveal the cable core

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 5 element multi tube FTTH Riser LSZH	5LOS1LG004**UYE

Other jacket colours are available



6 Element Internal Completely Dry Multi Loose Tube Riser Cable

Optronics 48 fibre, 6 element, completely dry, ITU-T G.652D singlemode, 250µm, multi loose tube, rodent resistant, internal FTTH riser cables with a Low Smoke Zero Halogen (LSZH) jacket.

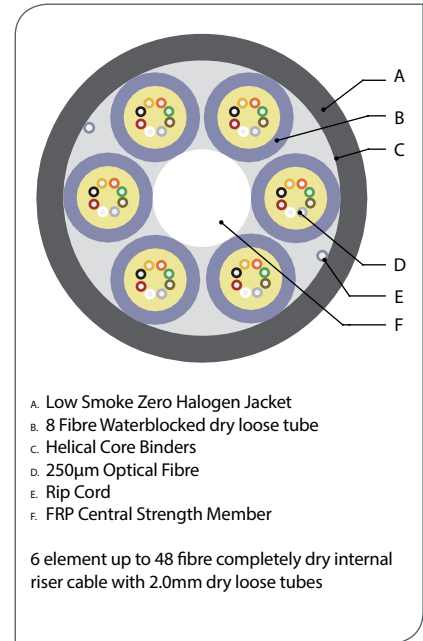
The 6 element multi loose tube cable construction consists of the 48, 250µm optical fibres in 8 fibre waterblocked dry loose tubes, that are SZ stranded around a Fibre Reinforced Plastic (FRP) central strength member with a LSZH jacket.

Applications

- > Ideal for use in internal riser applications in FTTH installations
- > Suitable for internal applications
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	76
Fibre count	n	48
Nominal outer diameter	mm	7.6 ± 0.3
Maximum tensile load (Short Term)	N	1350
Maximum tensile load (Long Term)	N	650
Minimum bend radius	mm	Installed 75
Minimum bend radius	mm	Loaded 150
Drum length	km	2 or 4



Features

- > SZ stranded core for easy tube breakout at each floor
- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > Reduced thickness flame retardant LSZH jacket for enhanced fire performance and easy removal to reveal the cable core

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 6 element multi tube FTTH Riser LSZH	6LOS1LG00548UYE

Other jacket colours are available



8 Element Internal Completely Dry Multi Loose Tube Riser Cable

Optronics 56 to 64 fibre, 8 element, completely dry, ITU-T G.652D singlemode, 250µm, multi loose tube, rodent resistant, internal FTTH riser cables with a Low Smoke Zero Halogen (LSZH) jacket.

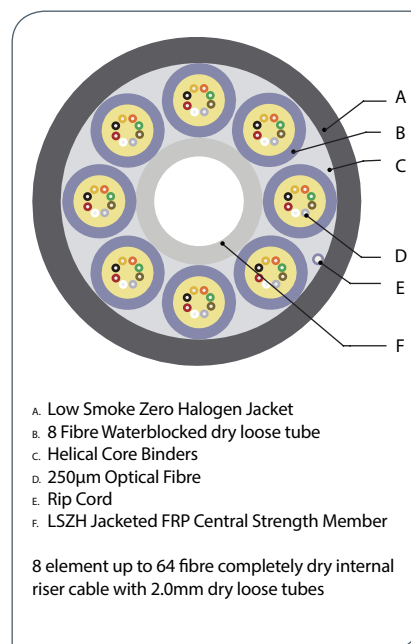
The 8 element multi loose tube cable construction consists of the 56 to 64, 250µm optical fibres in 8 waterblocked dry loose tubes (with fillers where appropriate) which are SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with a yellow LSZH jacket.

Applications

- > Ideal for use in internal riser applications in FTTH installations
- > Suitable for internal applications
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	66
Fibre count	n	56, 64
Nominal outer diameter	mm	8.8 ± 0.3
Maximum tensile load (Short Term)	N	1800
Maximum tensile load (Long Term)	N	1000
Minimum bend radius	mm	Installed 90
Minimum bend radius	mm	Loaded 180
Drum length	km	2 or 4



Features

- > SZ stranded core for easy tube breakout at each floor
- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > Reduced thickness flame retardant LSZH jacket for enhanced fire performance and easy removal to reveal the cable core

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Fibre Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Tube Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 5 element multi tube FTTH Riser LSZH	8LOS1LG006**UYE

Where ** is the fibre count between 56 and 64



10 Element Internal Completely Dry Multi Loose Tube Riser Cable

Optronics 72 to 80 fibre, 10 element, completely dry, ITU-T G.652D singlemode, 250µm, multi loose tube, rodent resistant, internal FTTH riser cables with a Low Smoke Zero Halogen (LSZH) jacket.

The 10 element multi loose tube cable construction consists of the 72 to 80, 250µm optical fibres in 8 waterblocked dry loose tubes (with fillers where appropriate) which are SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with a yellow LSZH jacket.

Applications

- > Ideal for use in internal riser applications in FTTH installations
- > Suitable for internal applications
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	90
Fibre count	n	72, 80
Nominal outer diameter	mm	10.2 ± 0.3
Maximum tensile load (Short Term)	N	2100
Maximum tensile load (Long Term)	N	1300
Minimum bend radius	mm	Installed 100
Minimum bend radius	mm	Loaded 200
Drum length	km	2 or 4

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Fibre Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Tube Identification (IEC 60304)

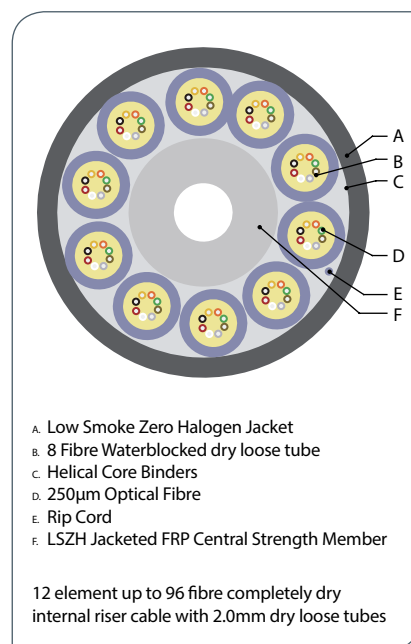
NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Natural fillers to be used where appropriate

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 10 element multi tube FTTH Riser LSZH	10LOS1LG007**UYE

Where ** is the fibre count between 72 and 80



Features

- > SZ stranded core for easy tube breakout at each floor
- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > Reduced thickness flame retardant LSZH jacket for enhanced fire performance and easy removal to reveal the cable core

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2



12 Element Internal Completely Dry Multi Loose Tube Riser Cable

Optronics 88 to 96 fibre, 12 element, completely dry, ITU-T G.652D singlemode, 250µm, multi loose tube, rodent resistant, internal FTTH riser cables with a Low Smoke Zero Halogen (LSZH) jacket.

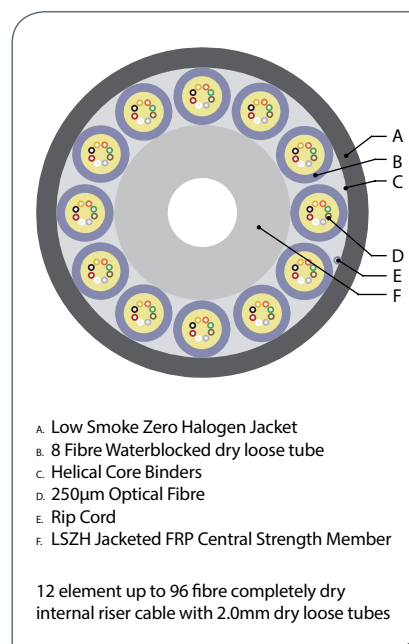
The 12 element multi loose tube cable construction consists of the 88 to 96, 250µm optical fibres in 8 waterblocked dry loose tubes (with fillers where appropriate), SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with a yellow LSZH jacket.

Applications

- > Ideal for use in internal riser applications in FTTH installations
- > Suitable for internal applications
- > Suitable for one or both end pre-termination

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		FRP
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	117
Fibre count	n	88 & 96
Nominal outer diameter	mm	11.5 ± 0.3
Maximum tensile load (Short Term)	N	2300
Maximum tensile load (Long Term)	N	1500
Minimum bend radius	mm	Installed 115
Minimum bend radius	mm	Loaded 230
Drum length	km	2 or 4



Features

- > SZ stranded core for easy tube breakout at each floor
- > Colour coded fibres
- > Compact 250µm dry loose tube construction
- > Reduced thickness flame retardant LSZH jacket for enhanced fire performance and easy removal to reveal the cable core

Fire Performance

FIRE TEST DESCRIPTION	FIRE TEST SPECIFICATION
Smoke emission	IEC 61034-1 & 2
Flammability	IEC 60332-1
Acid gas emission	IEC 60754-1 & 2

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Fibre Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8	9	10	11	12
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

Tube Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Natural fillers to be used where appropriate

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm 12 element multi tube FTTH Riser LSZH	12LOS1LG008**UYE

Where ** is the fibre count between 56 and 64



External Single Loose Tube Figure of 8 Metallic Aerial Drop Cable

Optronics 2 to 8 fibre ITU-T G.652D singlemode, 250µm, single loose tube, external F8 aerial drop cable

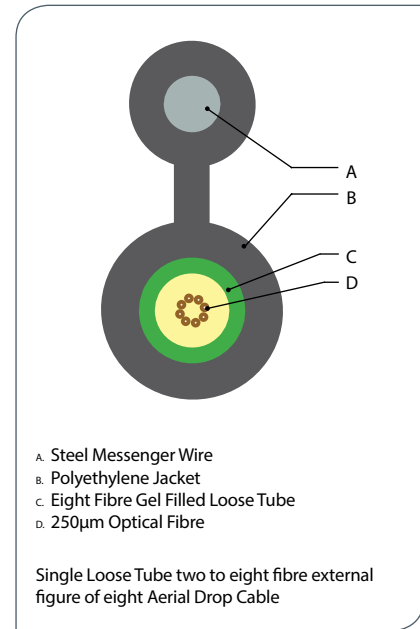
The single loose tube cable consists of 2 to 8, 250µm optical fibres in a single gel filled loose tube with a steel messenger wire strength member and a PE jacket.

Applications

- > Suitable for aerial cable applications up to 50m single span
- > Ideal for dropping down from telegraph poles in FTTH networks
- > Ideal for FTTH intra building aerial links
- > Suitable for outdoor duct environments

Cable Specifications (IEC 60794)

PARAMETER	UNIT	VALUE
Crush	N/100mm	1000
Strength member		Steel
Storage temperature	°C	-20 to 60
Installation temperature	°C	-20 to 60
Operating temperature	°C	-40 to 70
Nominal weight	kg/km	47
Fibre count	n	2, 4, 6, 8
Nominal outer diameter	mm	10.2 ±0.3 5.1 ±0.3
Maximum tensile load (Short Term)	N	1000
Maximum tensile load (Long Term)	N	500
Minimum bend radius	mm	Installed 50
Minimum bend radius	mm	Loaded 100
Drum length	km	2 or 4



Features

- > ITU-T G.652D optical fibre
- > Colour coded fibres
- > Compact 250µm loose tube construction
- > PE jacket for environmental protection and water permeation resistance

Optical Fibre Specifications (IEC 60793)

Please refer to fibre ITU-T G.652D fibre datasheet

Tube Identification (IEC 60304)

NO	1	2	3	4	5	6	7	8
Fibre	Blue	Orange	Green	Brown	Grey	White	Red	Black

Natural fillers to be used where appropriate

Fibre Identification (IEC 60304)

NO	1	2	3	4
Fibre	Blue	Orange	Green	Brown
NO	5	6	7	8
Fibre	Grey	White	Red	Black

Ordering Information

DESCRIPTION	PART NUMBER
ITU-T G.652D 250µm Single tube PE metallic FTTH aerial Drop	OLOS1LTD**PBK

Where ** is the fibre count between 2 and 8



Optronics Copper

Network Fundamentals	215
Optronics Copper Cabling System	218
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Faceplates and Accessories	335
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Optronics Cabling System Warranty	341

Network Fundamentals

Cabling Standards

The concept of a generic communication infrastructure for buildings was formed in the early 1990's resulting in the first EIA/TIA 568 standard.

Further advancements in this area saw the ISO/IEC 11801 and EN50173 standard which was created in 1993.

The purpose of these standards is to share guidelines for IT professionals to keep pace with fast developing network challenges.

Cabling Classification

Network operators first need to establish what service will run on the network, and determine the performance level needed to make it available to all connected outlets/users.

Stability and performance is always a matter of teamwork – cable and connecting hardware should meet similar requirements; improving just one of these is simply not sufficient.

Over the years, several cabling classes have emerged which are listed below.

CLASS	HERTZ	CATEGORY	KBPS
Class D+	100 MHz	Category 5e	1000 Mbps
Class E	250 MHz	Category 6	1 Gbps
Class EA	500 MHz	Category 6 _A	10 Gbps
Class F	600 MHz	Category 7	10 Gbps+

However, operators should not only consider applications for today, but anticipate ever increasing network speed and make provisions for future applications. With the network lasting in excess of 15 years, performance headroom is key to creating sustainability in networking.

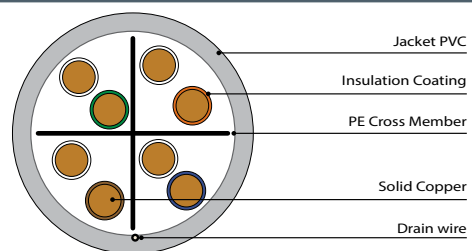
Typical network Cables in use

Twisted pair cabling has been used for been extensively used for in building cabling applications and offers ease of installation and versatility over a distances of up to 100m, applications also include remote powering through power over Ethernet (PoE) enabled devices.

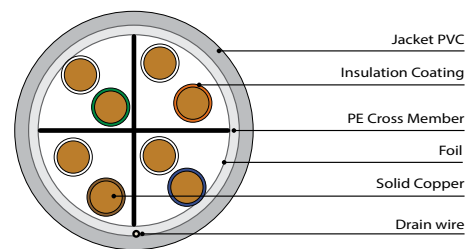
Twisted Pair

A twisted pair cable is made by physically twisting together two individually insulated copper wires. The two wires are twisted together to help minimize signals from interfering with or radiating from the pair. A number of twisted pairs are bundled together under one jacket to form a cable.

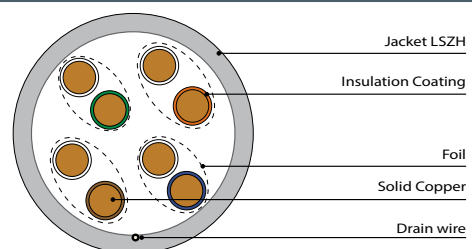
U/UTP Unshielded Twisted Pair



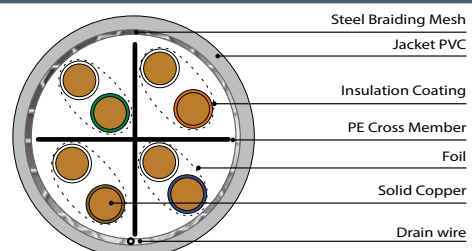
F/UTP Foil/Unshielded Twisted Pair, Drain wire



U/FTP Unscreened/Foil Twisted Pair



S/FTP Screened (copper braid, tinned)/Foil Shielded Twisted Pair



Structured Cabling Systems

Structured cabling systems, predominately utilise copper cabling for both the backbone cabling as well as the horizontal cabling. In the hybrid copper/optical fibre cabling system, copper cabling is used for the horizontal cabling and optical fibre cabling is utilized for the backbone cabling.

The following paragraphs will highlight more detail on horizontal cabling.

Work Area Cabling

The work area cabling consists of work cables (patch cords) which are used to connect a computing / VoIP device to the telecommunications outlet.

Horizontal Cabling

The horizontal cabling is the portion of the cabling which links the work area cabling to the backbone cabling. The horizontal cabling consists of the telecommunications outlet the horizontal cable and patch cords or cross-connect wire.

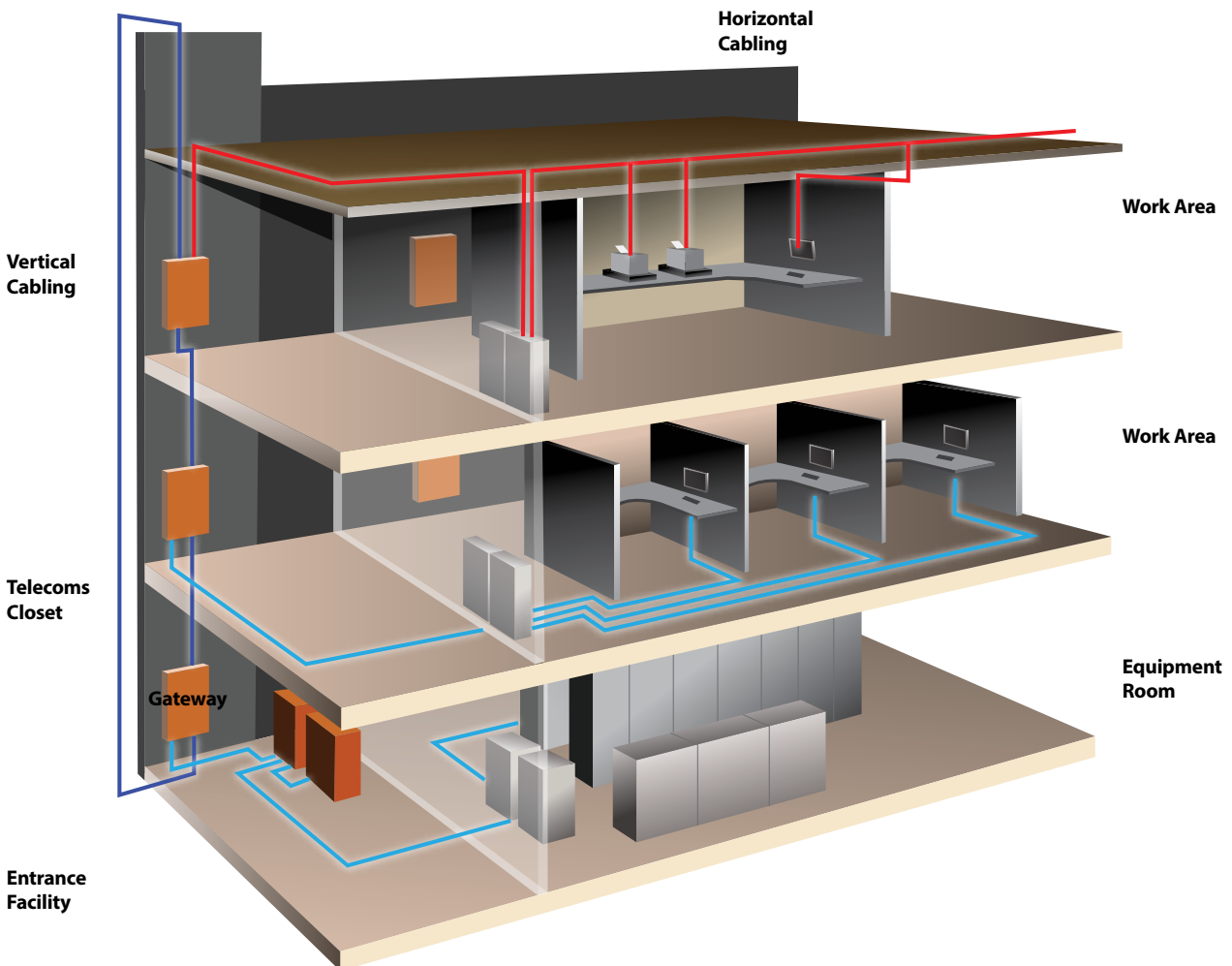
Equipment Cabling

Equipment cabling consists of the cable between the equipment fields of the horizontal, intermediate and main cross-connects and the equipment itself. Examples of the equipment connected with equipment cabling are hubs, switches, servers. Equipment cable is typically factory terminated with the appropriate connector(s).

Backbone Cabling

The backbone cabling is the portion of the cabling that links the cross-connect within a building and between buildings in a campus environment. The backbone cabling consists of the feeder field of the horizontal cross-connect, intrabuilding and interbuilding backbone cable, and intermediate and main cross-connects.

Copper backbone cabling is used for voice and data applications while optical fibre backbone cabling is used for data application where the reach or data rate of copper backbone cabling is exceeded.



Horizontal Cabling Systems

Horizontal distribution systems are those that run from a telecommunications closet to a workstation outlet. This may be installed in a horizontal or vertical plane. The horizontal cabling systems consist of 2 basic elements:

- > Horizontal Cable and connecting hardware
- > Horizontal pathways and spaces – the container system

The maximum horizontal cable length is 90 metres (295 feet). 10 metres is allowed for cords in the work area, and for patch cords or jumpers in the telecommunications closet.

Horizontal cabling does not include the work area cabling or equipment cabling, which are used to connect telecommunications equipment at either end of the horizontal cabling. However, the work area and equipment cabling affect the end-to-end channel performance and must be taken into account when planning any system.

Horizontal cables link the telecommunications outlets to the horizontal cross-connect. A dedicated 4-pair 100 ohm UTP cable connects each telecommunications outlet to the horizontal cross-connect.

It is recommended to install horizontal cables to accommodate the maximum capacity of the floor size. This will facilitate easy moves, adds and changes however this is not always sufficient for expansion and re-cabling may need to be considered.

It is recommended to provide the same number of horizontal cables to each work area and to provide a minimum of two horizontal cables per work area to meet the service needs of today and the future.

At least one telecommunication outlet/connector shall be a 4 pairs, 100 Ω UTP cable, Category 5e or higher and the other/second telecommunication outlet/connector shall be one of

these 2 proposed horizontal media:

- > 4 Pairs, 100 Ω UTP Category 5e cable
- > 2 multimode optical fibres either 62.5/125 μm or 50/125 μm

The maximum horizontal cable length between an outlet and the telecommunications room shall not exceed 90 m (295ft).

This may be used as follows:

- > 6m (20ft) max for patch cords
- > 3m (10ft) max for work area cables
- > 1m (3ft) for active equipment

The maximum backbone cable length is 90 metres (295 feet). This 90 metre length assumes that 5 metres (16 feet) are needed at each end for equipment cables connecting to the backbone.

The maximum allowed length of a Cat.-6 cable is 100 metres (330ft) when used for 10/100/1000BASE-T. This consists of 90 metres (295ft) of solid "horizontal" cabling between the patch panel and the wall jack, plus 10 metres (33ft) of stranded patch cable between each jack and the attached device. Since stranded cable has higher attenuation than solid cable, exceeding 10 metres of patch cabling will reduce the permissible length of horizontal cable.

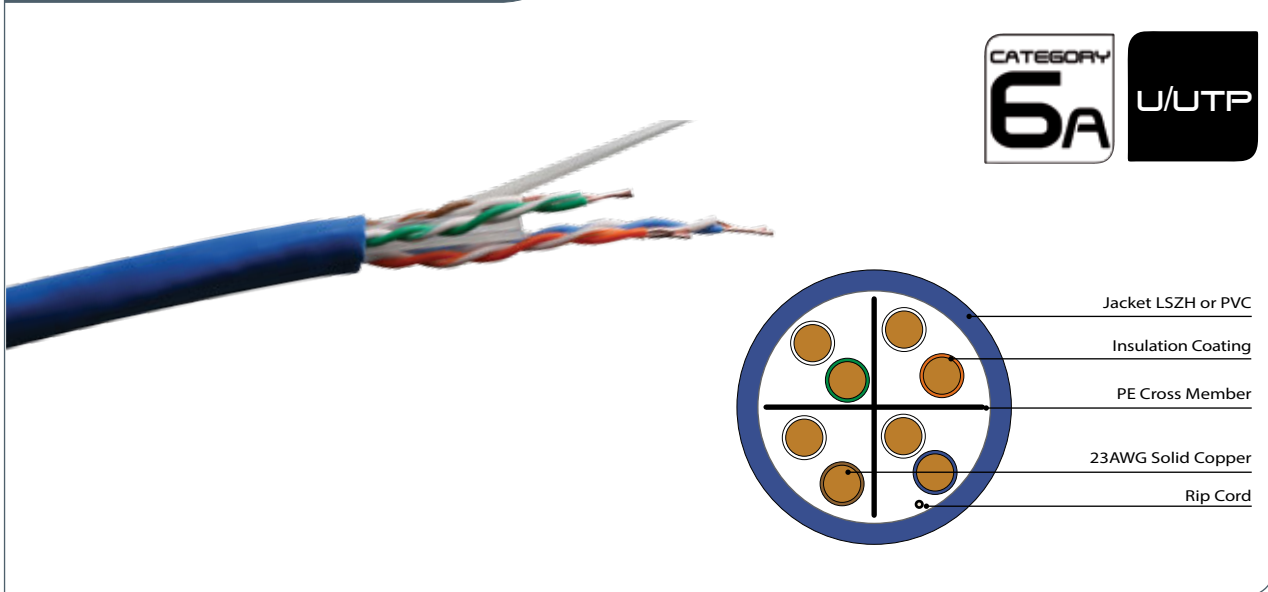
A minimum of slack is recommended when installing a horizontal cable run. At the telecommunications room, a cable slack of 3m (10ft) stored in an 8 shape form is recommended and at the outlet, a cable slack of 30cm (12in.) is recommended. The slacks will allow for repairs and relocations needs. Splices on unshielded twisted –pair are not permitted.

Optronics Copper Cabling System

Category 6_A

Cable	219
Patch Panels	223
Keystone Jacks	225
Faceplates	227
Patch Cords	228

Category 6_A U/UTP Cable



Category 6_A Unshielded Twisted Pair (U/UTP) cable is produced using a 4 x 2 x 23 AWG copper wire structure to a class EA

standard, and supports protocol's up to 500 MHz. It is ideal for horizontal and backbone installations.

Features

- > 23 AWG conductor (0.57mm) – solid bare copper cable
- > PVC or LSZH external jacket options
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)
- > ATM 155
- > 10G Base T (IEEE 802.3an)

Conformance

- > Category 6_A
- > EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2 / REACH

Applicable Standards

- > The Category 6_A U/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:
- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA 568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Fire Performance

- > Category 6_A U/UTP LSZH cables exceed the requirements of:
- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.5mm \pm 0.3mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 \pm 15 Ω 100 \pm 18 Ω
DC Loop Resistance		\leq 19.0 Ω /100m
Resistance Unbalance		\leq 2%
Capacitance Unbalance to Earth		\leq 1600 pF/km
Delay Skew		\leq 40ns/100m @ 500MHz
Nominal Velocity of Propagation		78%
Propagation Delay (Nominal)		\leq 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000V
Insulation Resistance (500V d.c)		\geq 500M Ω .km
Transfer Impedance		\geq 55dB

Mechanical Characteristics

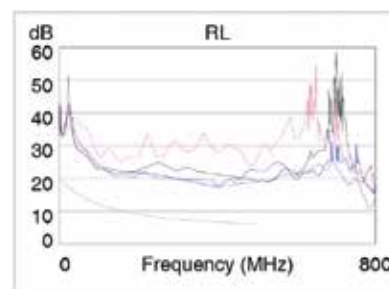
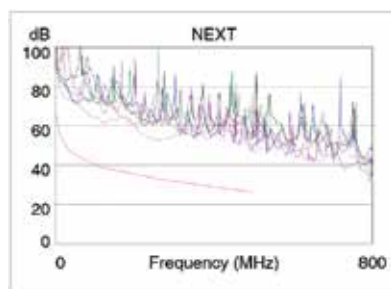
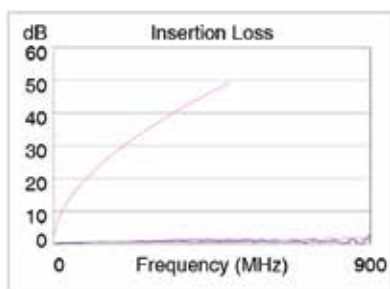
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	NEXT MIN dB	ACR MIN dB	PSNEXT MIN dB	ELFEXT MIN dB	PSELFEXT MIN dB	PSANEXT MIN dB	RETURN LOSS
1	1.8	95.	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	39.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3

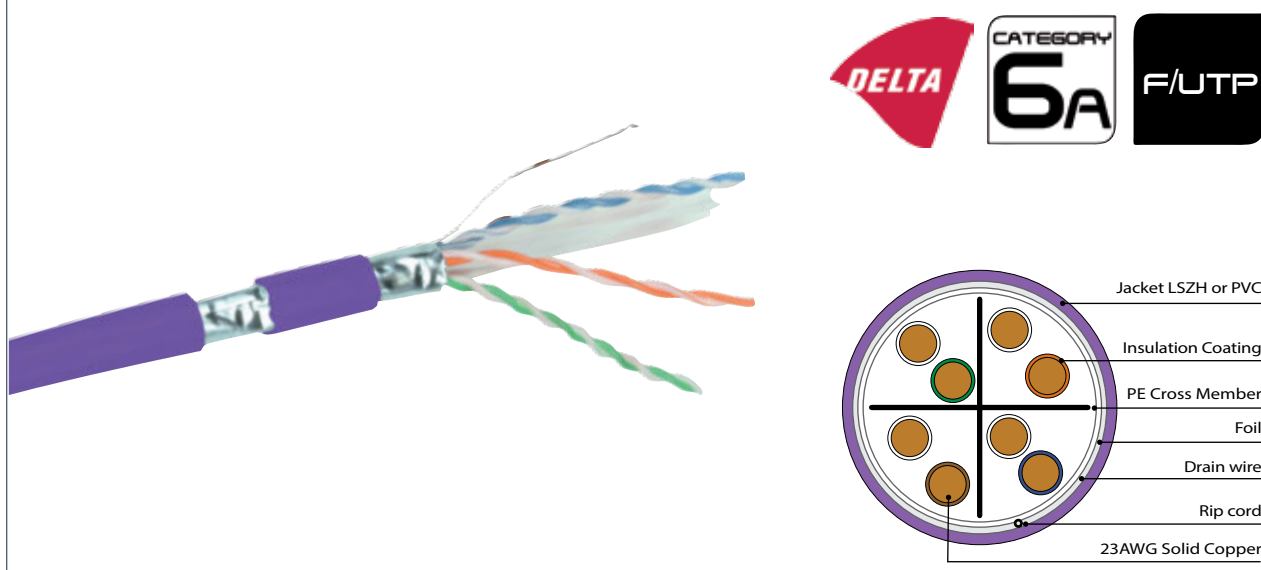


Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A Unshielded Twisted Pair (U/UTP) PVC 23 AWG cable - 305m Box	UTP6A305PVC
Category 6 _A Unshielded Twisted Pair (U/UTP) LSZH 23 AWG cable - 305m Box	UTP6A305LSZH
Category 6 _A Unshielded Twisted Pair (U/UTP) PVC 23 AWG cable - 500m Box	UTP6A500PVC
Category 6 _A Unshielded Twisted Pair (U/UTP) LSZH 23 AWG cable - 500m Box	UTP6A500LSZH



Category 6_A F/UTP Cable



Category 6_A Foiled Twisted Pair (F/UTP) cable is produced using a 4 x 2 x 23 AWG copper wire structure to a class EA standard,

and supports protocol's up to 500 MHz. It is ideal for horizontal and backbone installations.

Features

- > 23 AWG conductor (0.57mm) – solid bare copper cable
- > PVC or LSZH external jacket options
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)
- > ATM 155
- > 10G Base T (IEEE 802.3an)

Conformance

- > Category 6_A
- > EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2 / REACH

Applicable Standards

- > The Category 6_A F/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:
- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA 568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Fire Performance

- > Category 6_A F/UTP LSZH cables exceed the requirements of:
- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.5mm ± 0.3mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 ± 15Ω 100 ± 18Ω
DC Loop Resistance		≤ 19.0Ω/100m
Resistance Unbalance		≤ 2%
Capacitance Unbalance to Earth		≤ 1600 pF/km
Delay Skew		≤ 40ns/100m @ 500MHz
Nominal Velocity of Propagation		78%
Propagation Delay (Nominal)		≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000V
Insulation Resistance (500V d.c)		≥ 500MΩ.km
Transfer Impedance		≥ 55dB

Mechanical Characteristics

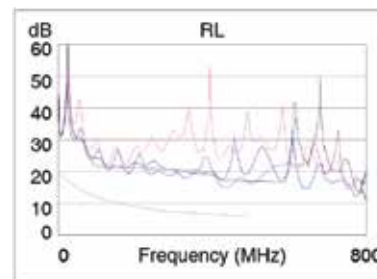
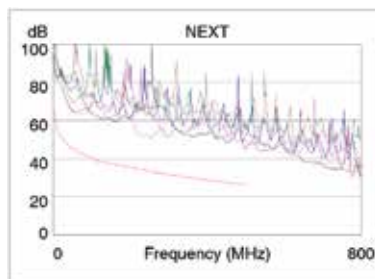
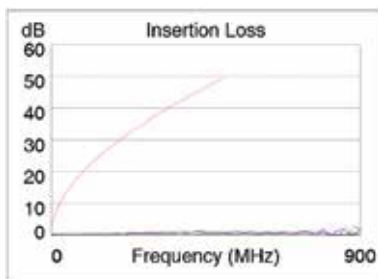
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	NEXT MIN dB	ACR MIN dB	PSNEXT MIN dB	ELFEXT MIN dB	PSELFEXT MIN dB	PSANEXT MIN dB	RETURN LOSS
1	1.8	95.	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	39.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3



Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A Foiled Twisted Pair (F/UTP) PVC - 23 AWG cable - 305m Box	FTP6A305PVC
Category 6 _A Foiled Twisted Pair (F/UTP) LSZH - 23 AWG cable - 305m Box (Delta Approved)	FTP6A305LSZH
Category 6 _A Foiled Twisted Pair (F/UTP) PVC 23 AWG cable - 500m Box	FTP6A500PVC
Category 6 _A Foiled Twisted Pair (F/UTP) LSZH 23 AWG cable - 500m Box (Delta Approved)	FTP6A500LSZH



Category 6_A UTP Keystone Jack Patch Panel



Category 6_A Unshielded Twisted Pair (UTP) tool free patch panels conform to class EA performance. These panels offer termination using the latest in tool free keystone jack technology. The use of an insertion tool is not required when terminating these panels.

All 8 wires can be loaded and terminated simultaneously, drastically reducing installation time. Available in 1U 24 port format, panels are supplied fully loaded with rear management bars and fixings.

Features

- > RJ45 24 port fully loaded 1U Panel
- > Saves valuable installation time
- > Supplied with fixings
- > Loaded with 180° tool free keystone jacks
- > 19" rack mountable
- > Rear cable management bar included
- > Port numerically identified

Conformance

- > Category 6_A
- > EIA/TIA 568A/B wiring standard
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Able to connect FCC Port for category 6_A UTP patch cords
- > IDC for horizontal distribution cables

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A UTP Full Loaded 1U 24 Port patch panel Black	CAT6AUTP24

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Carbon Steel Frame, Plastic Coated Clad
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations



Category 6_A STP Tool Free Panel

Category 6_A Shielded Twisted Pair (STP) tool free patch panels conform to class EA performance. These panels offer termination using the latest in tool free keystone jack technology. The use of an insertion tool is not required when termination these panels.

All 8 wires can be loaded and termination simultaneously, drastically reducing installation time. Available in 1U 24 port format, panels are supplied fully loaded with rear management bars and fixings.

Features

- > RJ45 24 port fully loaded 1U Panel
- > Saves valuable installation time
- > Supplied with fixings
- > Loaded with 180° tool free keystone jacks
- > 19" rack mountable
- > Rear cable management bar included
- > Port numerically identified

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	High carbon, Plastic Powder Clad
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 200 Terminations

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Able to connect FCC port for category 6_A STP patch cords
- > IDC for horizontal distribution cables

Conformance

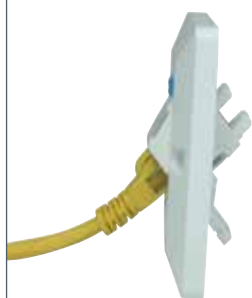
- > Category 6_A
- > EIA/TIA 568A/B wiring standard
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A STP Full Loaded 1U 24 Port patch panel Black	CAT6ASTP24TJ



Category 6_A UTP Keystone Jack



Representative image of a loaded angled module with a category 6_A UTP keystone jack (please note angled module is sold separately).



Category 6_A Unshielded Twisted Pair (UTP) keystone jacks conform to class EA performance. They follow the industry standard keystone jack footprint and the small design makes

them the ideal for high density applications. Each keystone jack is available with wiring diagram and conductor protection cap and can be supplied in black or white variants.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > Small form RJ45 footprint design
- > IDC punch down
- > 180° termination
- > High performance
- > Available in black/white
- > Wiring diagram and conductor cap supplied
- > Supplied in boxes of 20pcs
- > A compact design, with punching sequence direction marks on the side of the keystone jack

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Ideal for high density installations

Conformance

- > Category 6_A
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A UTP keystone jack White Box of 20pcs	CAT6AJACK180WH
Category 6 _A UTP keystone jack Black Box of 20pcs	CAT6AJACK180BK



Category 6_A STP Keystone Jack

Category 6_A Shielded Twisted Pair (STP) keystone jacks conform to class EA performance. They follow the industry standard keystone jack footprint, the small form design making them

perfect for high density applications. Each keystone jack is available with 180° termination design, wiring diagram and conductor protection cap.

Features

- > Small form RJ45 footprint design
- > IDC punch down
- > 180° termination
- > High performance
- > Wiring diagram and conductor cap supplied
- > Supplied in boxes of 20pcs
- > A compact design, with punching sequence direction marks on the side of the keystone jack

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Ideal for high density installations

Conformance

- > Category 6_A
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 _A STP keystone jack - Box of 20pcs	CAT6ASTPTJ



Category 6_A Faceplates

Features

- > Fully loaded / completed outlets
- > Reduced installation time
- > Wiring diagram and mini cable tie supplied
- > Supplied in boxes of 10pcs
- > Fixing screws, labelling supplied

Conformance

- > Category 6_A
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Ordering Information

Applications

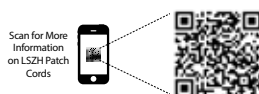
- > Supports category 6_A networks running up to 500 MHz applications
- > Backwards compatible with category 6 distribution systems

Technical Specifications

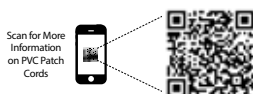
MECHANICAL	VALUE
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

PRODUCT	DESCRIPTION	PART NUMBER	PRODUCT	DESCRIPTION	PART NUMBER
	Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PBEV		Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PFLAT
	Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PBEV		Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PFLAT
	Angled module and jack 86x86mm - Box of 10pcs	CAT6AFACE1PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT6AFACE1PFLTJ
	Angled module and jack 86x86mm - Box of 10pcs	CAT6AFACE2PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT6AFACE2PFLTJ
	Angled module and jack 86x147mm - Box of 10pcs	CAT6AFACE4PBEVJ		Angled module and jack 86x147mm - Box of 10pcs	CAT6AFACE4PFLTJ
	Box of 20pcs	ANGLEDMODULE		50x25mm Box of 50pcs	HALFBLANK
	50x12.5mm Box of 100pcs	SINGLEBLANK		86x86mm - Box of 10pcs	FACEPLATE1SL
	86x86mm - Box of 10pcs	FACEPLATE2SL			

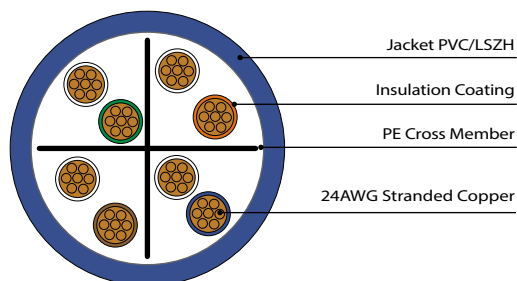


Category 6_A U/UTP Patch Cords

Scan for More
Information
on LSZH Patch
Cords



Scan for More
Information
on PVC Patch
Cords



Category 6_A Unshielded Twisted Pair (U/UTP) patch cords conform to class EA standards. Our patch cords are made to the highest standards using only quality stranded cable, giving them the best in flexibility, plus top grade 50μ gold plated RJ45 connector plugs for high quality connections. This combination makes for outstanding performance and reduced degradation.

All patch cords are produced with an injection moulded boot with an easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend these as part of a full Optronics category 6_A system.

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	24
	Size (mm)	7/0.20 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.98 +/- 0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC / LSZH

Features

- > Quality 24 AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > Injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 6_A, 6 and 5e networks running up to 500 MHz applications
- > Backwards compatible with category 6 distribution systems

Conformance

- > Category 6_A
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2



PVC

BLUE	PART NUMBER	METRE
	UTP6ABL0.5-PVC	0.5
	UTP6ABL1-PVC	1
	UTP6ABL2-PVC	2
	UTP6ABL3-PVC	3
	UTP6ABL5-PVC	5
GREEN	UTP6ABL10-PVC	10
	UTP6AGN0.5-PVC	0.5
	UTP6AGN1-PVC	1
	UTP6AGN2-PVC	2
	UTP6AGN3-PVC	3
	UTP6AGN5-PVC	5
ORANGE	UTP6AGN10-PVC	10
	UTP6AOR0.5-PVC	0.5
	UTP6AOR1-PVC	1
	UTP6AOR2-PVC	2
	UTP6AOR3-PVC	3
	UTP6AOR5-PVC	5
	UTP6AOR10-PVC	10

YELLOW	PART NUMBER	METRE
	UTP6AYE0.5-PVC	0.5
	UTP6AYE1-PVC	1
	UTP6AYE2-PVC	2
	UTP6AYE3-PVC	3
	UTP6AYE5-PVC	5
RED	UTP6AYE10-PVC	10
	UTP6ARD0.5-PVC	0.5
	UTP6ARD1-PVC	1
	UTP6ARD2-PVC	2
	UTP6ARD3-PVC	3
	UTP6ARD5-PVC	5
WHITE	UTP6ARD10-PVC	10
	UTP6AWH0.5-PVC	0.5
	UTP6AWH1-PVC	1
	UTP6AWH2-PVC	2
	UTP6AWH3-PVC	3
	UTP6AWH5-PVC	5
	UTP6AWH10-PVC	10

GREY	PART NUMBER	METRE
	UTP6AGY0.5-PVC	0.5
	UTP6AGY1-PVC	1
	UTP6AGY2-PVC	2
	UTP6AGY3-PVC	3
	UTP6AGY5-PVC	5
BLACK	UTP6AGY10-PVC	10
	UTP6ABK0.5-PVC	0.5
	UTP6ABK1-PVC	1
	UTP6ABK2-PVC	2
	UTP6ABK3-PVC	3
	UTP6ABK5-PVC	5
	UTP6ABK10-PVC	10

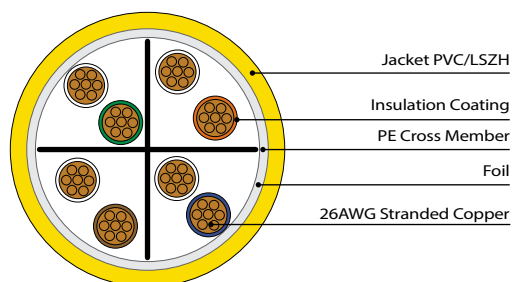
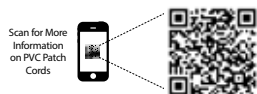
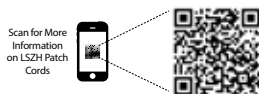
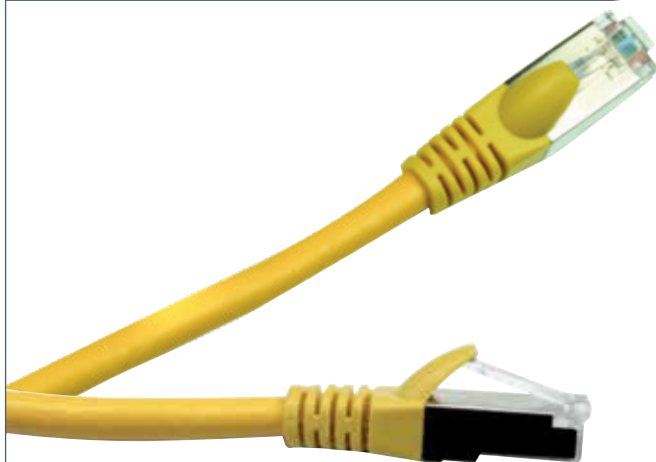
LSZH

BLUE	PART NUMBER	METRE
	UTP6ABL0.5-LSZH	0.5
	UTP6ABL1-LSZH	1
	UTP6ABL2-LSZH	2
	UTP6ABL3-LSZH	3
	UTP6ABL5-LSZH	5
GREEN	UTP6ABL10-LSZH	10
	UTP6AGN0.5-LSZH	0.5
	UTP6AGN1-LSZH	1
	UTP6AGN2-LSZH	2
	UTP6AGN3-LSZH	3
	UTP6AGN5-LSZH	5
ORANGE	UTP6AGN10-LSZH	10
	UTP6AOR0.5-LSZH	0.5
	UTP6AOR1-LSZH	1
	UTP6AOR2-LSZH	2
	UTP6AOR3-LSZH	3
	UTP6AOR5-LSZH	5
	UTP6AOR10-LSZH	10

YELLOW	PART NUMBER	METRE
	UTP6AYE0.5-LSZH	0.5
	UTP6AYE1-LSZH	1
	UTP6AYE2-LSZH	2
	UTP6AYE3-LSZH	3
	UTP6AYE5-LSZH	5
RED	UTP6AYE10-LSZH	10
	UTP6ARD0.5-LSZH	0.5
	UTP6ARD1-LSZH	1
	UTP6ARD2-LSZH	2
	UTP6ARD3-LSZH	3
	UTP6ARD5-LSZH	5
WHITE	UTP6ARD10-LSZH	10
	UTP6AWH0.5-LSZH	0.5
	UTP6AWH1-LSZH	1
	UTP6AWH2-LSZH	2
	UTP6AWH3-LSZH	3
	UTP6AWH5-LSZH	5
	UTP6AWH10-LSZH	10

GREY	PART NUMBER	METRE
	UTP6AGY0.5-LSZH	0.5
	UTP6AGY1-LSZH	1
	UTP6AGY2-LSZH	2
	UTP6AGY3-LSZH	3
	UTP6AGY5-LSZH	5
BLACK	UTP6AGY10-LSZH	10
	UTP6ABK0.5-LSZH	0.5
	UTP6ABK1-LSZH	1
	UTP6ABK2-LSZH	2
	UTP6ABK3-LSZH	3
	UTP6ABK5-LSZH	5
	UTP6ABK10-LSZH	10



Category 6_A F/UTP Patch Cords

Category 6_A Foiled Twisted Pair (F/UTP) patch cords conform to class EA standards. Our patch cords are made to the highest standards, using only quality stranded cable, giving you the best in flexibility, plus top grade 50μ gold plated RJ45 connector plugs for high quality connections. This combination makes for outstanding performance and reduced degradation. Aluminium tape is used to shield all 4 pairs; this gives a screened protection against external interference such as EMI.

All patch cords are produced with an injection moulded boot with easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend you use these as part of a full Optronics category 6_A system.

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size (mm)	7/0.20 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.98 +/- 0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC / LSZH
Tape	Material	Aluminium Mylar
	Coverage (%)	125

Features

- > Quality 26 AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > Injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 6_A, 6 and 5e networks running up to 500 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > Backwards compatible with category 6_A distribution system

Conformance

- > Category 6_A
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2



PVC

BLUE	PART NUMBER	METRE
	FTP6ABL0.5-PVC	0.5
	FTP6ABL1-PVC	1
	FTP6ABL2-PVC	2
	FTP6ABL3-PVC	3
	FTP6ABL5-PVC	5
	FTP6ABL10-PVC	10
	FTP6AGN0.5-PVC	0.5
	FTP6AGN1-PVC	1
	FTP6AGN2-PVC	2
GREEN	FTP6AGN3-PVC	3
	FTP6AGN5-PVC	5
	FTP6AGN10-PVC	10
	FTP6AOR0.5-PVC	0.5
ORANGE	FTP6AOR1-PVC	1
	FTP6AOR2-PVC	2
	FTP6AOR3-PVC	3
	FTP6AOR5-PVC	5
	FTP6AOR10-PVC	10

YELLOW	PART NUMBER	METRE
	FTP6AYE0.5-PVC	0.5
	FTP6AYE1-PVC	1
	FTP6AYE2-PVC	2
	FTP6AYE3-PVC	3
	FTP6AYE5-PVC	5
	FTP6AYE10-PVC	10
RED	FTP6ARD0.5-PVC	0.5
	FTP6ARD1-PVC	1
	FTP6ARD2-PVC	2
	FTP6ARD3-PVC	3
	FTP6ARD5-PVC	5
	FTP6ARD10-PVC	10
	FTP6AWH0.5-PVC	0.5
WHITE	FTP6AWH1-PVC	1
	FTP6AWH2-PVC	2
	FTP6AWH3-PVC	3
	FTP6AWH5-PVC	5
	FTP6AWH10-PVC	10

GREY	PART NUMBER	METRE
	FTP6AGY0.5-PVC	0.5
	FTP6AGY1-PVC	1
	FTP6AGY2-PVC	2
	FTP6AGY3-PVC	3
	FTP6AGY5-PVC	5
BLACK	FTP6AGY10-PVC	10
	FTP6ABK0.5-PVC	0.5
	FTP6ABK1-PVC	1
	FTP6ABK2-PVC	2
	FTP6ABK3-PVC	3
	FTP6ABK5-PVC	5
	FTP6ABK10-PVC	10

LSZH

BLUE	PART NUMBER	METRE
	FTP6ABL0.5-LSZH	0.5
	FTP6ABL1-LSZH	1
	FTP6ABL2-LSZH	2
	FTP6ABL3-LSZH	3
	FTP6ABL5-LSZH	5
	FTP6ABL10-LSZH	10
	FTP6AGN0.5-LSZH	0.5
	FTP6AGN1-LSZH	1
	FTP6AGN2-LSZH	2
GREEN	FTP6AGN3-LSZH	3
	FTP6AGN5-LSZH	5
	FTP6AGN10-LSZH	10
	FTP6AOR0.5-LSZH	0.5
ORANGE	FTP6AOR1-LSZH	1
	FTP6AOR2-LSZH	2
	FTP6AOR3-LSZH	3
	FTP6AOR5-LSZH	5
	FTP6AOR10-LSZH	10

YELLOW	PART NUMBER	METRE
	FTP6AYE0.5-LSZH	0.5
	FTP6AYE1-LSZH	1
	FTP6AYE2-LSZH	2
	FTP6AYE3-LSZH	3
	FTP6AYE5-LSZH	5
	FTP6AYE10-LSZH	10
RED	FTP6ARD0.5-LSZH	0.5
	FTP6ARD1-LSZH	1
	FTP6ARD2-LSZH	2
	FTP6ARD3-LSZH	3
	FTP6ARD5-LSZH	5
	FTP6ARD10-LSZH	10
	FTP6AWH0.5-LSZH	0.5
WHITE	FTP6AWH1-LSZH	1
	FTP6AWH2-LSZH	2
	FTP6AWH3-LSZH	3
	FTP6AWH5-LSZH	5
	FTP6AWH10-LSZH	10

GREY	PART NUMBER	METRE
	FTP6AGY0.5-LSZH	0.5
	FTP6AGY1-LSZH	1
	FTP6AGY2-LSZH	2
	FTP6AGY3-LSZH	3
	FTP6AGY5-LSZH	5
BLACK	FTP6AGY10-LSZH	10
	FTP6ABK0.5-LSZH	0.5
	FTP6ABK1-LSZH	1
	FTP6ABK2-LSZH	2
	FTP6ABK3-LSZH	3
	FTP6ABK5-LSZH	5
	FTP6ABK10-LSZH	10

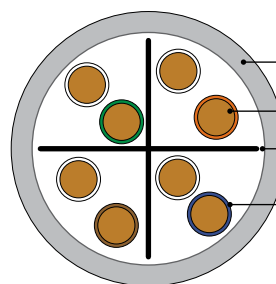
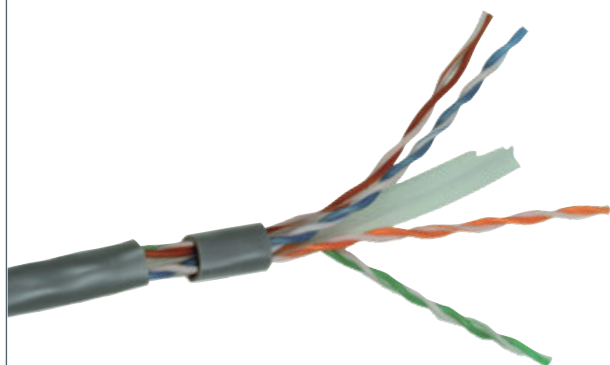


Optronics Copper Cabling System

Category 6

Cable	233
Patch Panels	237
Keystone Jacks	242
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Faceplates	246
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Patch Cords	249

Category 6 U/UTP Cable



Jacket PVC, LSZH or PE

23AWG Solid Copper

PE Cross Member

Insulation Coating

Category 6 Unshielded Twisted Pair (U/UTP) cable is produced using 4 x 2 x 23 AWG copper wire structure to a class E standard.

More than capable of supporting protocol's up to 250 MHz for horizontal and backbone installations.

Features

- > 23 AWG conductor – solid bare copper cable
- > PVC, LSZH and PE external jacket options
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Conformance

- > Category 6
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > ETL/UL approved

Applicable Standards

The Category 6 U/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-586-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Fire Performance

Category 6 U/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Sheath	A uniform layer of grey coloured polyvinyl chloride (PVC) compound (RAL 7035)
Diameter	6.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 40dB

Mechanical Characteristics

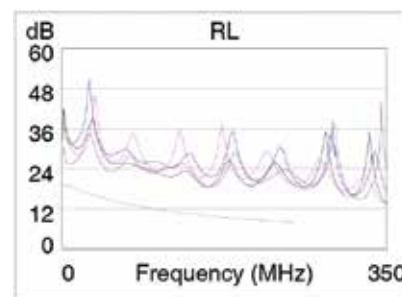
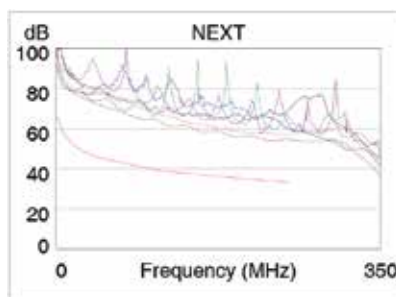
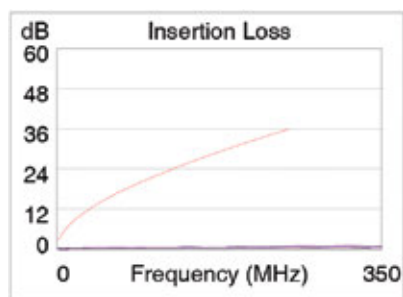
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3

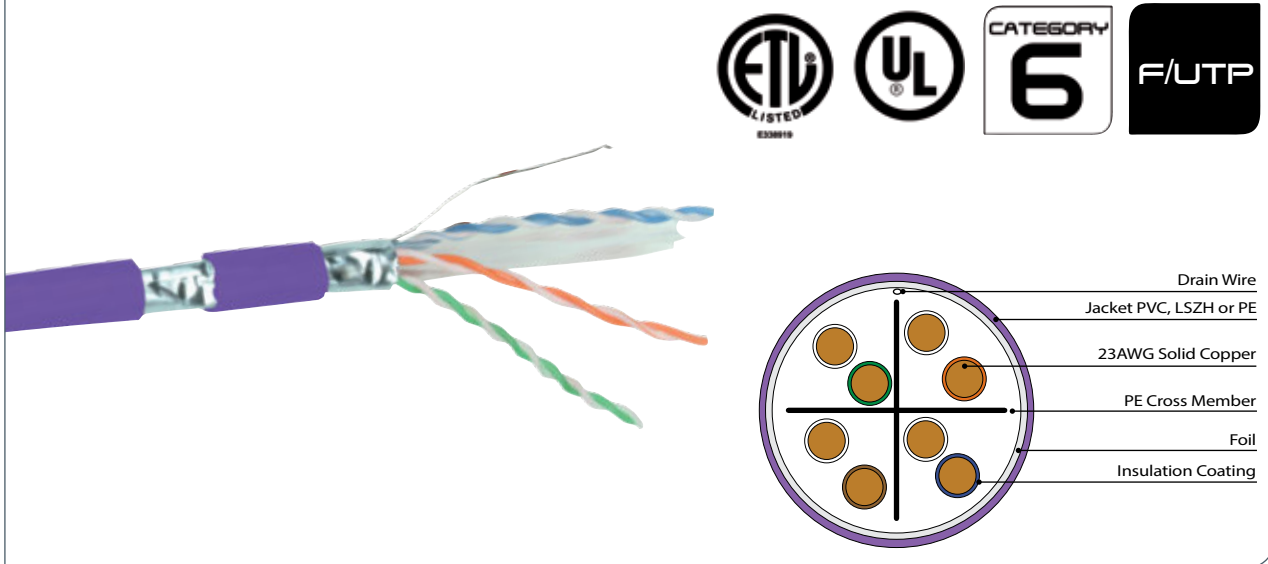


Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair (U/UTP) 23 AWG cable PVC Grey - 305m box - ETL, UL approved	UTP6305PVC
Category 6 Unshielded Twisted Pair (U/UTP) 23 AWG cable LSZH Violet - 305m box - ETL approved	UTP6305LSZH
Category 6 solid Unshielded Twisted Pair (U/UTP) 23 AWG cable LSZH Grey - 500m reels - ETL approved	UTP6500LSZH
Category 6 Unshielded Twisted Pair (U/UTP) External Grade 23 AWG cable - PE black 305m box	UTP6305EXT



Category 6 F/UTP Cable



Category 6 Foiled Twisted Pair (F/UTP) cable is produced using 4 x 2 x 23 AWG copper to a class E standard. An aluminium tape is used to shield all 4 pairs; this gives a screened protection

against external interference such as EMI. Capable of supporting protocols up to 250 MHz for horizontal and backbone installations.

Features

- > 23 AWG conductor – solid bare copper cable
- > PVC, LSZH and PE external jacket options
- > Supplied in 305m boxes or 500 reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Conformance

- > Category 6
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > ETL/UL approved

Applicable Standards

The Category 6 F/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Fire Performance

Category 6 F/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.57mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of grey coloured polyvinyl chloride (PVC) compound (RAL 7035)

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 55dB

Mechanical Characteristics

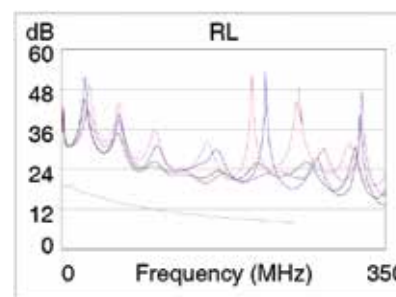
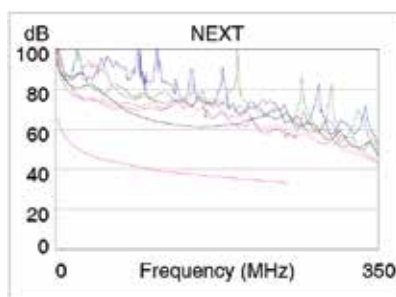
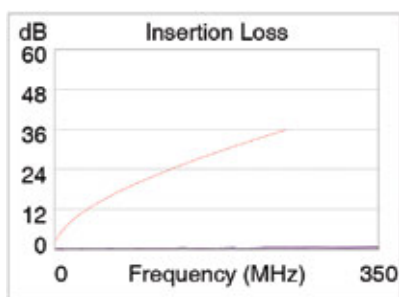
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3



Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Foiled Twisted Pair (F/UTP) 23 AWG cable PVC Grey 305m box - ETL, UL approved	FTP6305PVC
Category 6 Foiled Twisted Pair (F/UTP) 23 AWG cable LSZH Violet - 305m box	FTP6305LSZH
Category 6 Foiled Twisted Pair (F/UTP) External Grade 23 AWG cable - PE black 305m box	FTP6350EXT



Category 6 UTP Keystone Jack Patch Panel

24
Ports



Category 6 modular keystone jack Unshielded Twisted Pair (UTP) patch panels conform to class E performance. Each port is made up from individual modular RJ45 keystone jacks. Each

jack can be easily removed from the patch panel for individual termination and has a wiring diagram to assist termination to either 568A or B wiring standards.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Carbon Steel Frame, Plastic Powder Clad
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > RJ45 24 port fully loaded 1U panel
- > 19" rack mountable
- > Krone style IDC
- > Rear cable management bar included
- > Supplied with fixings
- > Ports numerically identified

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems

Conformance

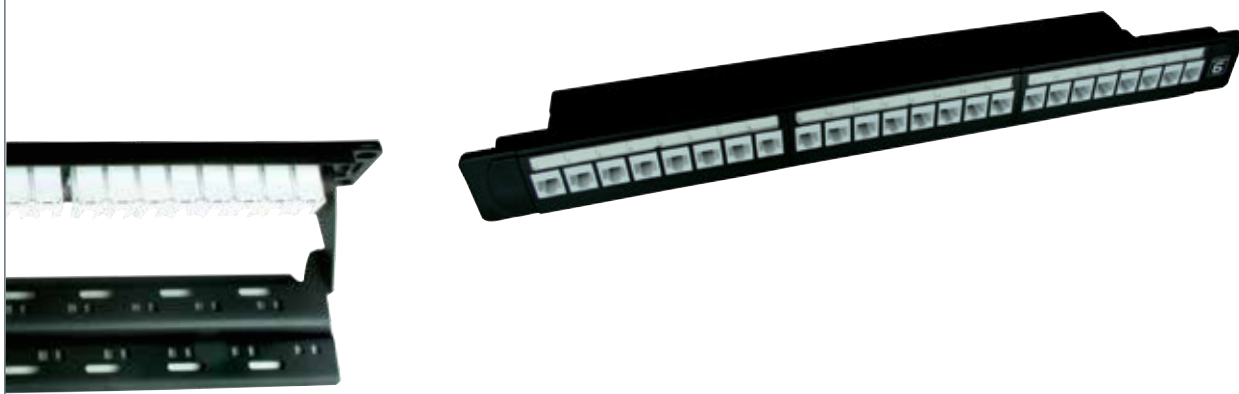
- > Category 6
- > EN50173-1 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair (UTP) Fully Loaded 1U 24 port patch panel - UL approved	CAT6+UTP24K
Unloaded 1U 24 Port Keystone Panel Frame for use with keystone jacks	PANEL24KEYSTONE



Category 6 UTP Tool Free Panel

24
Ports

Category 6 Unshielded Twisted Pair (UTP) tool free patch panels conform to class E performance. These panels offer termination using the latest in tool free keystone jack technology.

The use of an insertion tool is not required when terminating these panels. Available in a 1U 24 port format, panels are supplied fully loaded with rear management bars and fixings.

Features

- > RJ45 24 port fully loaded 1U panel
- > 19" rack mountable
- > Saves valuable installation time
- > Supplied with fixings
- > Loaded with 180° tool free keystone jacks
- > Ports numerically identified
- > Includes rear cable management bar

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Carbon Steel Frame, Plastic Powder Clad
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair UTP Tool Free Keystone 1U 24 port patch panel - UL approved	CAT6+UTP24TJ



Category 6 UTP Patch Panel PCB Type

24
Ports

Category 6 Printed Circuit Board (PCB) Unshielded Twisted Pair (UTP) patch panels conform to class E performance. Backwards compatible with category 5e distribution systems. The PCB is fully sealed for extra protection, and in-line IDC

blocks. Wiring diagram, assists termination to either 568A or B wiring standards. Available in 1U 24 port or 2U 48 port. All panels are supplied with rear cable management bars and fixings.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PBT + 15% GF UL94V-0
Panel Frame	Carbon Steel, Powder Coating
Contact Material	PC UL94V-0 Contact: Phosphor Bronze + Nickel Plating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 200 Terminations

Features

- > 19" rack mountable
- > Ports numerically identified
- > RJ45 24 port 1U or 48 port 2U options
- > 110 style IDC punch down
- > Removable label area
- > Supplied with fixings
- > Rear cable management bar included

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 1U 24 Port Printed Circuit Board (PCB) patch panel - UL approved	CAT6+UTP24PCB
Category 6 2U 48 Port Printed Circuit Board (PCB) patch panel - UL approved	CAT6+UTP48PCB



Category 6 24 Ports Right Angle Panel

24
Ports

Category 6 Unshielded Twisted Pair (UTP) patch panels conform to class E performance. Each panel is produced using a right angled (90°) frame design for flat termination onto the IDC blocks. This ensures termination and general management is quick and easy when

working with bulky horizontal cables. Integral cable management also provides a solid platform for fixing and managing cable entry. Each port has its own 8 pin IDC block including a wiring diagram. Available in 1U 24 port format, panels are supplied with fixings.

Features

- > 19" rack mountable
- > Integral cable management
- > RJ45 24 port 1U
- > Ports numerically identified
- > Right angle (90°) design
- > Printed label area
- > Supplied with fixings

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Zinc Plating, Powder Coating
Contact Material	PC UL94V-0 Contact: Phosphor Bronze + Nickel Plating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 200 Terminations

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair (UTP) 1U 24 Port 90 degree patch panel UL approved	CAT6+UTP24RA



Category 6 STP Patch Panel

24
Ports

Category 6 Shielded Twisted Pair (STP) patch panels conform to class E performance and are backwards compatible with category 5e distribution systems. Each shielded panel is produced using a right angled (90°) frame design for flat termination onto the IDC blocks. This ensures termination, grounding and general management is quick and easy, when

working with category 6 shielded cables. Cable grounding is achieved by using the shielding clamps located to the rear of the integral cable management. Each port has its own 8 pin IDC block. The panel includes an overall sliding cover which gives extra screening against EMI and protects the terminations.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Zinc Plating, Powder Coating
Contact Material	PC UL94V-0 Contact: Phosphor Bronze + Nickel Plating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 200 Terminations

Features

- > 19" rack mountable
- > Ports numerically identified
- > RJ45 24 port 1U
- > Right angle (90°) design
- > Supplied with fixings and earthing wire
- > Integral cable management
- > Grounding clamps

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems
- > Fully screened for EMI protection

Conformance

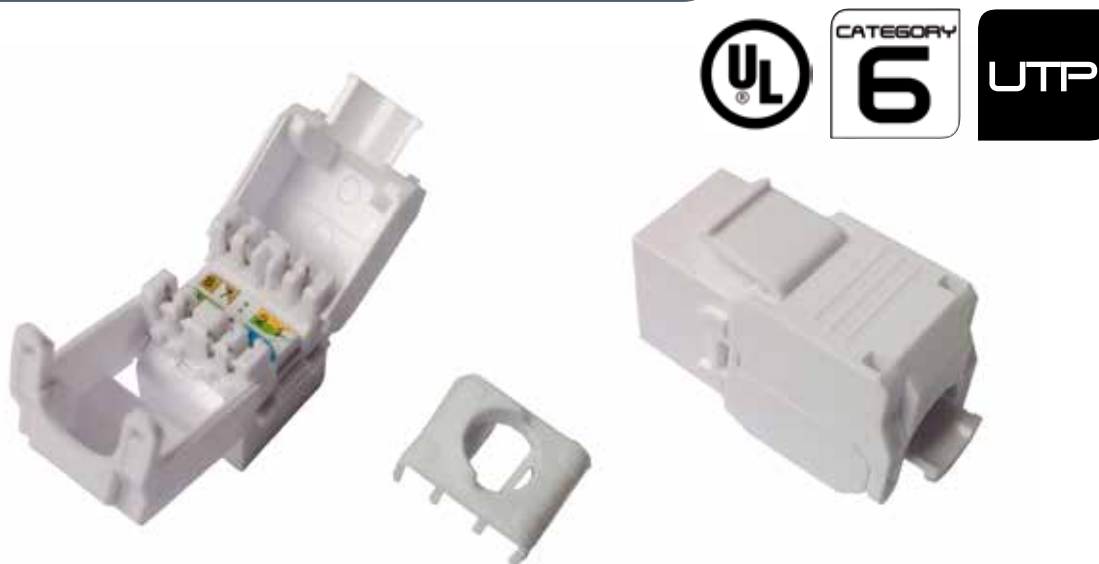
- > Category 6
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Shielded Twisted Pair (STP) 1U 24 Port patch panel - UL approved	CAT6+STP24



Category 6 UTP Keystone Tool Free Jack



Category 6 Unshielded Twisted Pair (UTP) tool free keystone jacks conform to class E standards. They follow the industry standard RJ45 footprint and, due to the small form design, they

are perfect for high density Applications. The keystone jack requires no insertion tool for termination.

Features

- > Small form RJ45 footprint design
- > 180° termination
- > IDC tool free punch down
- > Reduces installation time
- > Supplied in boxes of 20pcs
- > Wiring diagram and conductor cap supplied

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 200 Terminations

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Ideal for high density installations
- > Backwards compatible with category 5e distribution system

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair Free keystone jack – White - Box of 20pcs - UL approved	CAT6+JACKTJ



Category 6 STP Keystone Jack



Representative image of a loaded angled module with a category 6 UTP keystone jack (please note angled module is sold separately).



Category 6 Shielded Twisted Pair (STP) keystone jacks conform to class E performance. They follow the industry standard RJ45

footprint and due to the small form design they are perfect for high density applications.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Shielding Material	Brass 0.30mm + Nickel Plating
Insert Material	Flame retardant ABS UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > Small form RJ45 footprint design
- > Tool less termination
- > High performance
- > Fully shielded for EMI protection
- > Wiring diagram and conductor cap supplied

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Ideal for high density installations
- > Ideal for environments sensitive to EMI
- > Backwards compatible with category 5e distribution systems

Conformance

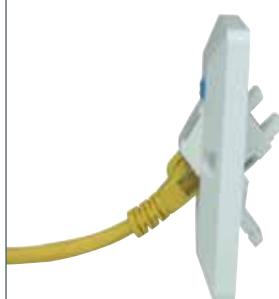
- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Shielded Twisted Pair (STP) keystone jack UL approved	CAT6+JACK180STP



Category 6 UTP Keystone Jack



Representative image of a loaded angled module with a category 6 UTP keystone jack (please note angled module is sold separately).



Category 6 Unshielded Twisted Pair (UTP) keystone jacks conform to class E performance. They follow the industry standard keystone jack footprint and, due to their small form design, they are perfect for high density applications.

Each jack is available with a 180° termination design, wiring diagram and conductor protection cap and can be supplied in black or white variants.

Features

- > Small form RJ45 footprint design
- > IDC punch down
- > 180° termination
- > High performance
- > Available in black/white, with or without shutter
- > Wiring diagram and conductor cap supplied
- > Supplied in boxes of 20pcs

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Ideal for high density installations
- > Backwards compatible with category 5e distribution systems

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > 3P approved (3rd party approval as part of permanent link using cable and panel)
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair (UTP) keystone jack White Box of 20pcs - UL approved - 3P	CAT6+JACK180WH
Category 6 Unshielded Twisted Pair (UTP) keystone jack Black - Box of 20pcs - UL approved - 3P	CAT6+JACK180BK
Category 6 Unshielded Twisted Pair (UTP) Shuttered keystone jack White - Box of 20pcs - UL approved - 3P	CAT6+JACK180WHS
Category 6 Unshielded Twisted Pair (UTP) Shuttered keystone jack Black - Box of 20pcs - UL approved - 3P	CAT6+JACK180BKS



Category 6 UTP Euro Module



Category 6 Unshielded Twisted Pair (UTP) 25x50mm shuttered, moulded, modules (Euro Mod) conform to class E performance. They feature a slim line design, which is an ideal solution for shallow floor box or dado trunking applications.

Each module is supplied with a slide-in label area, for easy and clear outlet identification, and a mini cable-tie. Suits British Standard faceplates only.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > Complete shuttered module with PCB technology
- > Slim line design for shallow Applications
- > IDC punch down
- > Wiring diagram and mini cable tie supplied
- > Supplied in boxes of 20pcs
- > Compatible with UK faceplates

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Installations with limited space
- > Backwards compatible with category 5e distribution systems

Conformance

- > Category 6
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 Unshielded Twisted Pair (UTP) 50x25mm Shuttered Moulded Module - White - Box of 20pcs - UL approved	CAT6+FACEMODULE



Category 6 Faceplates

Features

- > Fully loaded / completed outlets
- > Reduced installation time
- > Wiring diagram and mini cable tie supplied
- > Supplied in boxes of 10pcs
- > Fixing screws, labelling supplied

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Applications

- > Supports category 6 networks running up to 500 MHz applications
- > Backwards compatible with category 5e distribution systems

Technical Specifications







MECHANICAL	VALUE
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

PRODUCT	DESCRIPTION	PART NUMBER	PRODUCT	DESCRIPTION	PART NUMBER
	Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PBEV		Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PFLAT
	Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PBEV		Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PFLAT
	Angled module and jack 86x86mm - Box of 10pcs	CAT6+FACE1PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT6+FACE1PFLTJ
	Angled module and jack 86x86mm - Box of 10pcs	CAT6+FACE2PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT6+FACE2PFLTJ
	Angled module and jack 86x147mm - Box of 10pcs	CAT6+FACE4PBEVJ		Angled module and jack 86x147mm - Box of 10pcs	CAT6+FACE4PFLTJ
	Box of 20pcs	ANGLEDMODULE		50x25mm Box of 50pcs	HALFBLANK
	50x12.5mm Box of 100pcs	SINGLEBLANK		Euro module and Jack 86x86mm - Box of 10pcs	CAT6+FACE2PBEVM
	Euro module and Jack 86x86mm - Box of 10pcs	CAT6+FACE1PBEVM		Euro module and Jack 86x147mm - Box of 10pcs	CAT6+FACE4PBEVM



OPTRONICS COPPER CABLING SYSTEM | CAT6 FACEPLATES

PRODUCT	DESCRIPTION	PART NUMBER	PRODUCT	DESCRIPTION	PART NUMBER
	Euro module and jack 86x86mm - Box of 10pcs	CAT6+FACE1PFLTM		Category 6 Single Port European Outlet with Jack - Box of 10pcs	CAT6+FACE1PFRA
	Euro module and jack 86x86mm - Box of 10pcs	CAT6+FACE2PFLTM		Category 6 Double Port European Outlet with Jack - Box of 10pcs	CAT6+FACE2PFRA
	Euro module and jack 86x147mm - Box of 10pcs	CAT6+FACE4PFLTM		Category 6 Quad Port European Outlet with Jack - Box of 10pcs	CAT6+FACE4PFRA



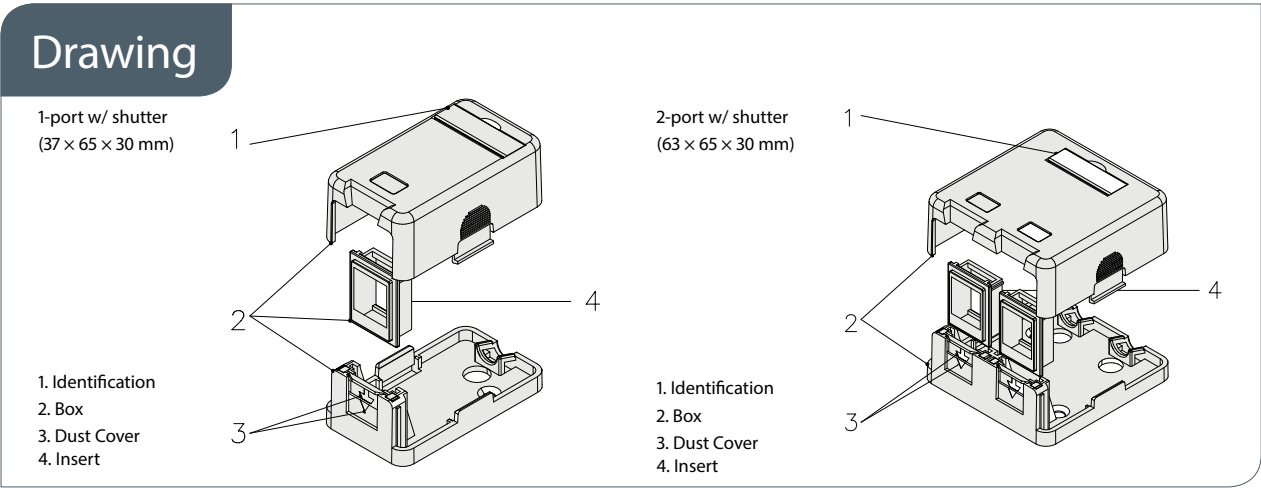
Single and Double Port Mounted Keystone Box

Technical Specification

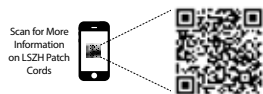
DESCRIPTION	1-PORT BOX W/O SHUTTER	2-PORT BOX W/O SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	30	30
Width (mm)	50	50
Depth (mm)	30	30
Colour	White	White

Ordering Information

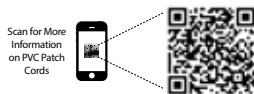
DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	CAT6BOX1PJ
Double port mounted box, without shutter - White	CAT6BOX2PJ



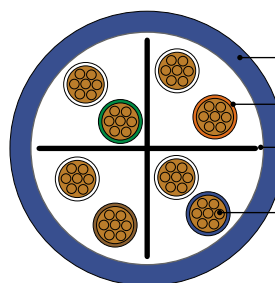
Category 6 U/UTP Patch Cords



Scan for More
Information
on LSZH Patch
Cords



Scan for More
Information
on PVC Patch
Cords



Jacket PVC or LSZH

Insulation Coating

PE Cross Member

24AWG Stranded Copper

Category 6 Unshielded Twisted Pair (U/UTP) patch cords conform to class E standards. Our patch cords are made to the highest standards, using only quality stranded cable, giving you the best in flexibility, plus top grade 50μ gold plated RJ45 connector plugs, for high quality connections. This combination makes for outstanding performance and reduced degradation.

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	24
	Size (mm)	7/0.20 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.98+/-0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC or LSZH

All patch cords are produced with a injection moulded boot with an easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend you use these as part of a full Optronics category 6 system.

Features

- > Quality 24AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > Injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 6 (class E) networks running up to 250MHz applications
- > Backwards compatible with category 5e distribution system

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > UL listed



PVC

	PART NUMBER	METRE
BLUE	UTP6BL0.5-PVC	0.5
	UTP6BL1-PVC	1
	UTP6BL2-PVC	2
	UTP6BL3-PVC	3
	UTP6BL5-PVC	5
	UTP6BL10-PVC	10
	UTP6GN0.5-PVC	0.5
	UTP6GN1-PVC	1
	UTP6GN2-PVC	2
	UTP6GN3-PVC	3
GREEN	UTP6GN5-PVC	5
	UTP6GN10-PVC	10
	UTP6OR0.5-PVC	0.5
	UTP6OR1-PVC	1
	UTP6OR2-PVC	2
ORANGE	UTP6OR3-PVC	3
	UTP6OR5-PVC	5
	UTP6OR10-PVC	10

PART NUMBER		METRE
YELLOW	UTP6YE0.5-PVC	0.5
	UTP6YE1-PVC	1
	UTP6YE2-PVC	2
	UTP6YE3-PVC	3
	UTP6YE5-PVC	5
	UTP6YE10-PVC	10
RED	UTP6RD0.5-PVC	0.5
	UTP6RD1-PVC	1
	UTP6RD2-PVC	2
	UTP6RD3-PVC	3
	UTP6RD5-PVC	5
	UTP6RD10-PVC	10
WHITE	UTP6WH0.5-PVC	0.5
	UTP6WH1-PVC	1
	UTP6WH2-PVC	2
	UTP6WH3-PVC	3
	UTP6WH5-PVC	5
	UTP6WH10-PVC	10

PART NUMBER		METRE
GREY	UTP6GY0.5-PVC	0.5
	UTP6GY1-PVC	1
	UTP6GY2-PVC	2
	UTP6GY3-PVC	3
	UTP6GY5-PVC	5
BLACK	UTP6GY10-PVC	10
	UTP6BK0.5-PVC	0.5
	UTP6BK1-PVC	1
	UTP6BK2-PVC	2
	UTP6BK3-PVC	3
	UTP6BK5-PVC	5
	UTP6BK10-PVC	10

LSZH

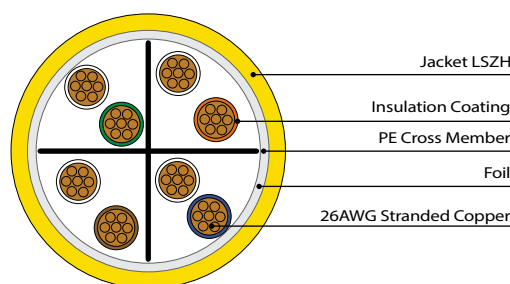
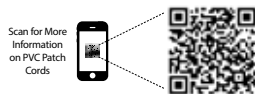
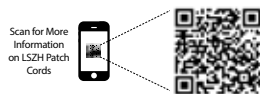
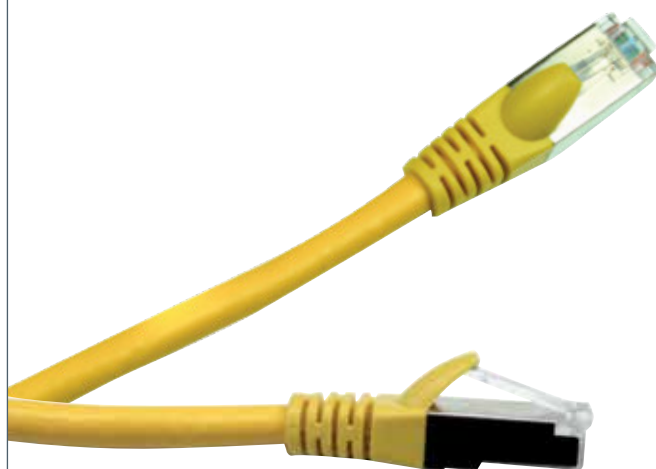
PART NUMBER		METRE
BLUE	UTP6BL0.5-LSZH	0.5
	UTP6BL1-LSZH	1
	UTP6BL2-LSZH	2
	UTP6BL3-LSZH	3
	UTP6BL5-LSZH	5
	UTP6BL10-LSZH	10
GREEN	UTP6GN0.5-LSZH	0.5
	UTP6GN1-LSZH	1
	UTP6GN2-LSZH	2
	UTP6GN3-LSZH	3
	UTP6GN5-LSZH	5
	UTP6GN10-LSZH	10
ORANGE	UTP6OR0.5-LSZH	0.5
	UTP6OR1-LSZH	1
	UTP6OR2-LSZH	2
	UTP6OR3-LSZH	3
	UTP6OR5-LSZH	5
	UTP6OR10-LSZH	10

PART NUMBER		METRE
YELLOW	UTP6YE0.5-LSZH	0.5
	UTP6YE1-LSZH	1
	UTP6YE2-LSZH	2
	UTP6YE3-LSZH	3
	UTP6YE5-LSZH	5
	UTP6YE10-LSZH	10
RED	UTP6RD0.5-LSZH	0.5
	UTP6RD1-LSZH	1
	UTP6RD2-LSZH	2
	UTP6RD3-LSZH	3
	UTP6RD5-LSZH	5
	UTP6RD10-LSZH	10
WHITE	UTP6WH0.5-LSZH	0.5
	UTP6WH1-LSZH	1
	UTP6WH2-LSZH	2
	UTP6WH3-LSZH	3
	UTP6WH5-LSZH	5
	UTP6WH10-LSZH	10

PART NUMBER		METRE
GREY	UTP6GY0.5-LSZH	0.5
	UTP6GY1-LSZH	1
	UTP6GY2-LSZH	2
	UTP6GY3-LSZH	3
	UTP6GY5-LSZH	5
BLACK	UTP6GY10-LSZH	10
	UTP6BK0.5-LSZH	0.5
	UTP6BK1-LSZH	1
	UTP6BK2-LSZH	2
	UTP6BK3-LSZH	3
	UTP6BK5-LSZH	5
	UTP6BK10-LSZH	10



Category 6 F/UTP Patch Cords



Category 6 Foiled Twisted Pair (F/UTP) patch cords conform to class E standards. Our patch cords are made to the highest standards, using only quality stranded cable, giving you the best in flexibility, plus, top grade 50μ gold plated RJ45 connector plugs, giving high quality connections. This combination makes for outstanding performance and reduced degradation. Aluminium tape is used to shield all 4 pairs; this gives a screened

protection against external interference such as EMI.

All patch cords are produced with a injection moulded boot with easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend you use these as part of a full Optronics category 6 system.

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size (mm)	0.915 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.97 +/- 0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC or LSZH
Tape	Material	Mylar & Aluminium Mylar
	Coverage (%)	125

Features

- > Quality 26 AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > Backwards compatible with category 5e distribution system

Conformance

- > Category 6
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > UL listed



PVC

BLUE	PART NUMBER	METRE
	FTP6BL0.5-PVC	0.5
	FTP6BL1-PVC	1
	FTP6BL2-PVC	2
	FTP6BL3-PVC	3
	FTP6BL5-PVC	5
	FTP6BL10-PVC	10
	FTP6GN0.5-PVC	0.5
	FTP6GN1-PVC	1
	FTP6GN2-PVC	2
GREEN	FTP6GN3-PVC	3
	FTP6GN5-PVC	5
	FTP6GN10-PVC	10
	FTP6OR0.5-PVC	0.5
ORANGE	FTP6OR1-PVC	1
	FTP6OR2-PVC	2
	FTP6OR3-PVC	3
	FTP6OR5-PVC	5
	FTP6OR10-PVC	10

YELLOW	PART NUMBER	METRE
	FTP6YE0.5-PVC	0.5
	FTP6YE1-PVC	1
	FTP6YE2-PVC	2
	FTP6YE3-PVC	3
	FTP6YE5-PVC	5
	FTP6YE10-PVC	10
	FTP6RD0.5-PVC	0.5
	FTP6RD1-PVC	1
	FTP6RD2-PVC	2
RED	FTP6RD3-PVC	3
	FTP6RD5-PVC	5
	FTP6RD10-PVC	10
	FTP6WH0.5-PVC	0.5
WHITE	FTP6WH1-PVC	1
	FTP6WH2-PVC	2
	FTP6WH3-PVC	3
	FTP6WH5-PVC	5
	FTP6WH10-PVC	10

GREY	PART NUMBER	METRE
	FTP6GY0.5-PVC	0.5
	FTP6GY1-PVC	1
	FTP6GY2-PVC	2
	FTP6GY3-PVC	3
	FTP6GY5-PVC	5
	FTP6GY10-PVC	10
	FTP6BK0.5-PVC	0.5
	FTP6BK1-PVC	1
	FTP6BK2-PVC	2
BLACK	FTP6BK3-PVC	3
	FTP6BK5-PVC	5
	FTP6BK10-PVC	10

LSZH

BLUE	PART NUMBER	METRE
	FTP6BL0.5-LSZH	0.5
	FTP6BL1-LSZH	1
	FTP6BL2-LSZH	2
	FTP6BL3-LSZH	3
	FTP6BL5-LSZH	5
	FTP6BL10-LSZH	10
	FTP6GN0.5-LSZH	0.5
	FTP6GN1-LSZH	1
	FTP6GN2-LSZH	2
GREEN	FTP6GN3-LSZH	3
	FTP6GN5-LSZH	5
	FTP6GN10-LSZH	10
	FTP6OR0.5-LSZH	0.5
ORANGE	FTP6OR1-LSZH	1
	FTP6OR2-LSZH	2
	FTP6OR3-LSZH	3
	FTP6OR5-LSZH	5
	FTP6OR10-LSZH	10

YELLOW	PART NUMBER	METRE
	FTP6YE0.5-LSZH	0.5
	FTP6YE1-LSZH	1
	FTP6YE2-LSZH	2
	FTP6YE3-LSZH	3
	FTP6YE5-LSZH	5
	FTP6YE10-LSZH	10
	FTP6RD0.5-LSZH	0.5
	FTP6RD1-LSZH	1
	FTP6RD2-LSZH	2
RED	FTP6RD3-LSZH	3
	FTP6RD5-LSZH	5
	FTP6RD10-LSZH	10
	FTP6WH0.5-LSZH	0.5
WHITE	FTP6WH1-LSZH	1
	FTP6WH2-LSZH	2
	FTP6WH3-LSZH	3
	FTP6WH5-LSZH	5
	FTP6WH10-LSZH	10

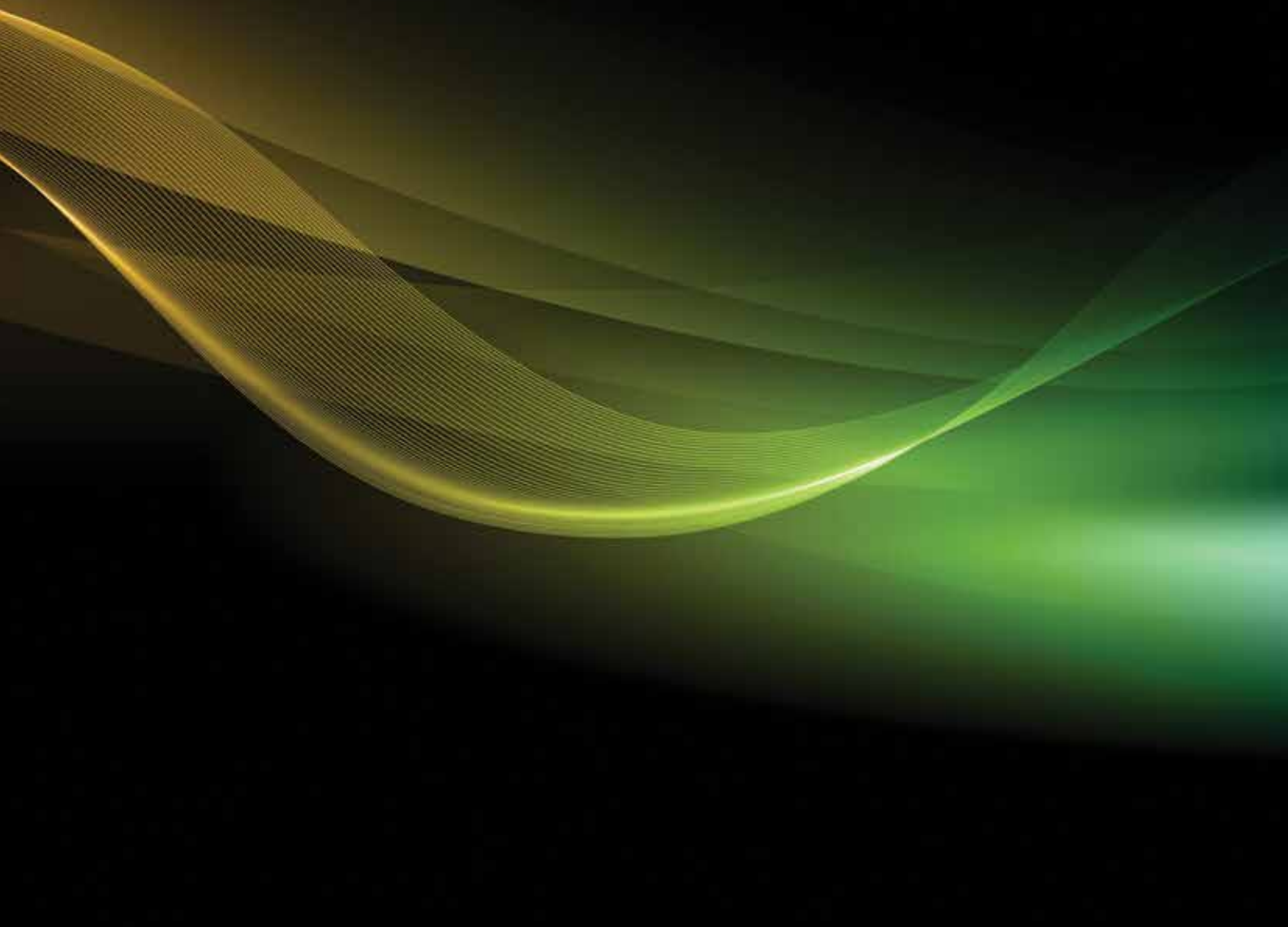
GREY	PART NUMBER	METRE
	FTP6GY0.5-LSZH	0.5
	FTP6GY1-LSZH	1
	FTP6GY2-LSZH	2
	FTP6GY3-LSZH	3
	FTP6GY5-LSZH	5
	FTP6GY10-LSZH	10
	FTP6BK0.5-LSZH	0.5
	FTP6BK1-LSZH	1
	FTP6BK2-LSZH	2
BLACK	FTP6BK3-LSZH	3
	FTP6BK5-LSZH	5
	FTP6BK10-LSZH	10



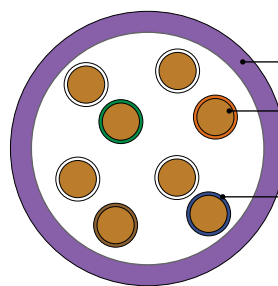
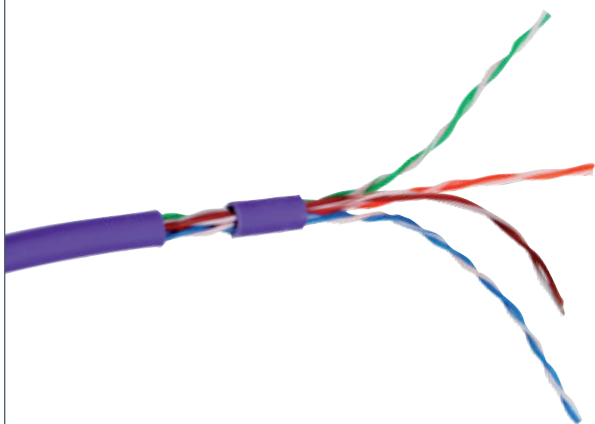
Optronics Copper Cabling System

Category 5e

Cable	254
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Faceplates	266
Work Area Outlets Keystone Boxes	268
Patch Cords	269



Category 5e U/UTP Cable



Jacket PVC, LSZH or PE

24AWG Solid Copper

Insulation Coating

Category 5e Unshielded Twisted Pair (U/UTP) 100 Ohm cable is produced using a 4 x 2 x 24 AWG copper wire structure to a

class D standard. It supports the gigabit Ethernet protocol for horizontal and backbone installations.

Features

- > 24 AWG conductor – solid bare copper cable
- > PVC, LSZH and PE external jacket options
- > Supplied in 305m box
- > Printed metre marks

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Conformance

- > Category 5e
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > ETL/UL approved

Applicable Standards

The Category 5e U/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-3-1

Fire Performance

Category 5e U/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km

Mechanical Characteristics

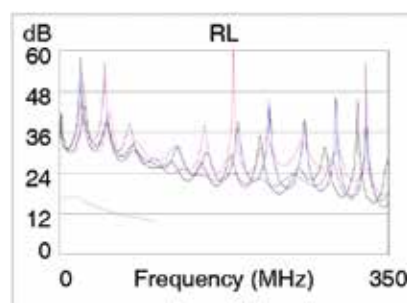
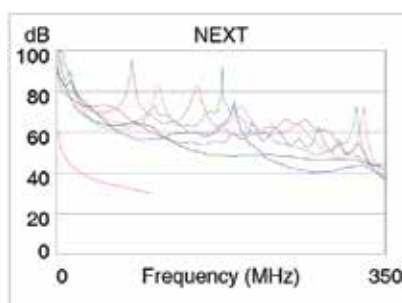
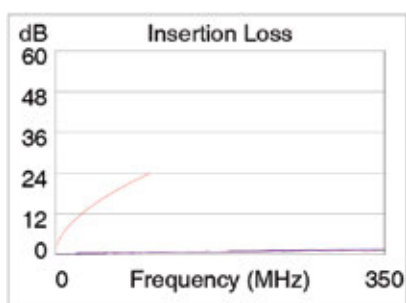
TEMPERATURE RANGE	
Operation	-20°C to +60°C
Installation	0°C to +50°C
Storage	-20°C to +70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

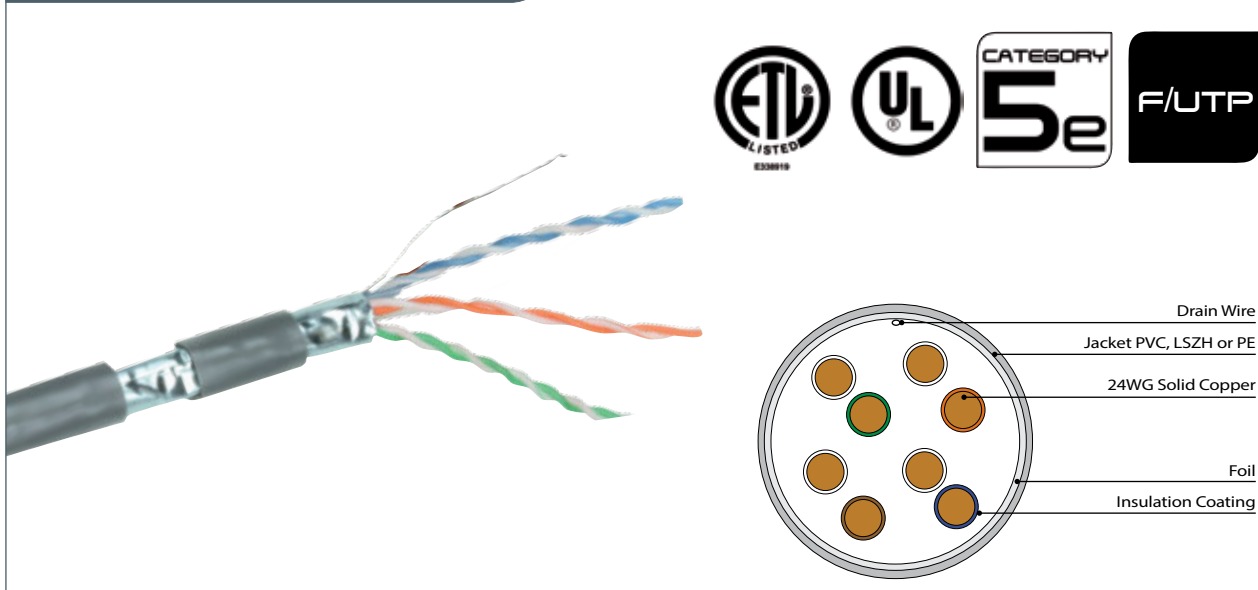


Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Unshielded Twisted Pair (U/UTP) 24 AWG cable PVC 305m Box - Grey - ETL, UL approved	UTP5E305PVC
Category 5e Unshielded Twisted Pair (U/UTP) 24 AWG cable LSZH 305m Box - Violet - ETL approved	UTP5E305LSZH
Category 5e Unshielded Twisted Pair (U/UTP) 24 AWG cable External PE - 305m box	UTP5E305EXT



Category 5e F/UTP Cable



Category 5e Foiled Twisted Pair (F/UTP) 100 Ohm cable is produced using a 4 x 2 x 24 AWG copper wire structure to a class D standard. Aluminium tape is used to shield all 4 pairs; this

gives a screened protection against external interference such as EMI. It supports the gigabit Ethernet protocol for horizontal and backbone installations.

Features

- > 24 AWG conductor – solid bare copper
- > PVC, LSZH and PE external jacket options
- > Supplied in 305m box
- > Printed metre marks
- > PVC, LSZH and PE options

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > External horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Conformance

- > Category 5e
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > ETL/UL approved

Applicable Standards

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green

Fire Performance

- Category 5e F/UTP PVC cables exceed the requirements of:
- > IEC 60332-1-2



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 24AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of grey coloured PVC compound (RAL 7035)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km

Mechanical Characteristics

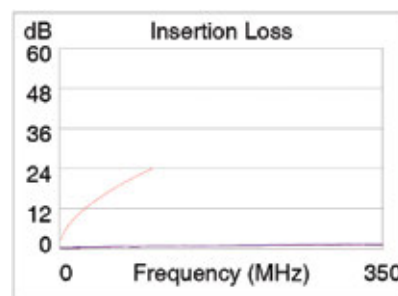
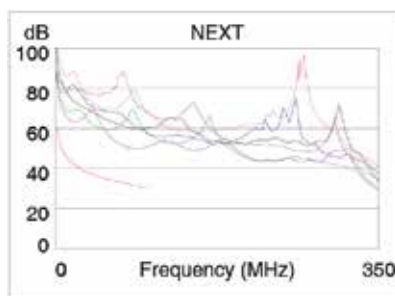
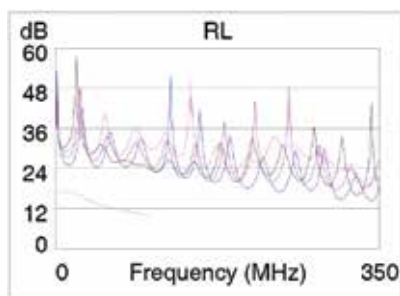
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
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10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1



Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Foiled Twisted Pair (F/UTP) cable PVC 305m Box - Grey - ETL, UL approved	FTP5E305PVC
Category 5e Foiled Twisted Pair (F/UTP) cable LSZH 305m Box - Violet - ETL, UL approved	FTP5E305LSZH
Category 5e Foiled Twisted Pair (F/UTP) cable PE External Grade - 305m Box - Black	FTP5E305EXT



Category 5e UTP Patch Panel PCB Type

24
Ports48
Ports

Category 5e Printed Circuit Board (PCB) Unshielded Twisted Pair (UTP) patch panels conform to class D performance. The PCB is fully sealed for extra protection. In-line IDC blocks with wiring

diagram, make termination very quick and easy. Available in 1U 24 ports or 2U 48 ports, all panels are supplied with rear cable management bars and fixings.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PBT + 15% GF UL94V-0
Panel Frame	Carbon Steel, Powder Coating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	PC UL94V-0 Contact: Phosphor Bronze + Nickel Plating
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > 19" rack mountable
- > Accepts 24-26 AWG
- > RJ45 24 port 1U or 48 port 2U options
- > Ports numerically identified
- > 110 style IDC punch down
- > Removable label area
- > Rear cable management bar included
- > Supplied with fixings

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Printed Circuit Board (PCB) 1U 24 port patch panel - Black - UL approved	CAT5E+UTP24
Category 5e Printed Circuit Board (PCB) 2U 48 port patch panel Black - UL approved	CAT5E+UTP48



Category 5e UTP Tool Free Panel

24
Ports



Category 5e Unshielded Twisted Pair (UTP) tool free patch panels conform to class D performance. These panels offer termination using the latest in tool free keystone jack technology. The use of an insertion tool is not required when terminating these

panels, all 8 wires can be loaded and terminated simultaneously, drastically reducing installation time. Available in 1U 24 port format, these panels are supplied fully loaded with 90° tool free jacks, rear management bars and fixings.

Features

- > 19" rack mountable
- > Accepts 24-26 AWG
- > RJ45 24 port 1U
- > Ports numerically identified
- > Loaded with 90° tool free keystone jacks
- > Supplied with fixings
- > Saves valuable installation time
- > Includes rear cable management bar

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Steel Frame, Plastic Coated Clad
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Unshielded Twisted Pair (UTP) Tool Free Keystone 1U 24 Port patch panel - UL approved	CAT5E+UTP24TJ



Category 5e UTP Right Angle Panel

24
Ports

Category 5e Unshielded Twisted Pair (UTP) patch panels conform to class D performance. Each panel is produced using a right angled (90°) frame design, for flat termination onto the IDC blocks. This ensures that termination and general management is quick and easy when working with bulky horizontal cables.

Integral cable management also provides a solid platform for fixing and managing cable entry. Each port has its own 8 pin IDC block which includes a wiring diagram. Available in 1U 24 port format, panels are supplied with fixings.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PBT + 15% GF UL94V-0
Panel Frame	Carbon Steel, Powder Coating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > 19" rack mountable
- > Accepts 24-26 AWG
- > Right angle (90°) design
- > Ports numerically identified
- > Supplied with fixings
- > Integral cable management
- > RJ45 24 port 1U Panel

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > EIA/TIA 568A/B Wiring standard
- > ANSI/EIA/TIA 568B.2 : 2002
- > EN50173-1 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Unshielded Twisted Pair (UTP) 1U 24 Port 90 degree patch panel - UL approved	CAT5E +UTP24RA



Category 5e STP Patch Panel

24
Ports



Category 5e Shielded Twisted Pair (STP) patch panels conform to class D performance. Each shielded panel is produced using a right angled (90°) frame design for flat termination onto the IDC blocks, this ensures termination, grounding and general management is quick and easy when working with category

5e shielded cables. Cable grounding is achieved by using the shielding clamps located to the rear of the integral cable management each port has its own 8 pin IDC block which includes wiring diagram. An overall sliding cover gives extra shielding against EMI and protects terminations.

Features

- > 19" rack mountable clamps
- > Fully shielded
- > Accepts 24-26 AWG
- > Right angle (90°) design
- > Ports numerically identified
- > Supplied with fixings and earthing wire
- > Integral cable management and grounding
- > RJ45 24 port 1U Panel

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Fully Screened for high EMI environments

Conformance

- > Category 5e
- > EIA/TIA 568A/B Wiring standard
- > EN50173-1 : 2002
- > SO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Panel Frame	Zinc Plating, Powder Coating
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Shielded Twisted Pair (STP) 1U 24 Port patch panel - UL approved	CAT5E+STP24



Category 5e UTP Tool Free Jack



Category 5e Unshielded Twisted Pair (UTP) tool free keystone jacks conform to class D standards. They follow the industry standard RJ45 footprint and due to the small form design

the keystone jack is perfect for high density applications. No insertion tool is required for diagram. Supplied in white with blue termination cap in packs of 20pcs.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > Small form RJ45 footprint design
- > 90° termination
- > IDC tool free punch down
- > Accepts 24-26 AWG
- > Reduces installation time
- > Supplied in boxes of 20pcs
- > Wiring diagram supplied

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for high density installations

Conformance

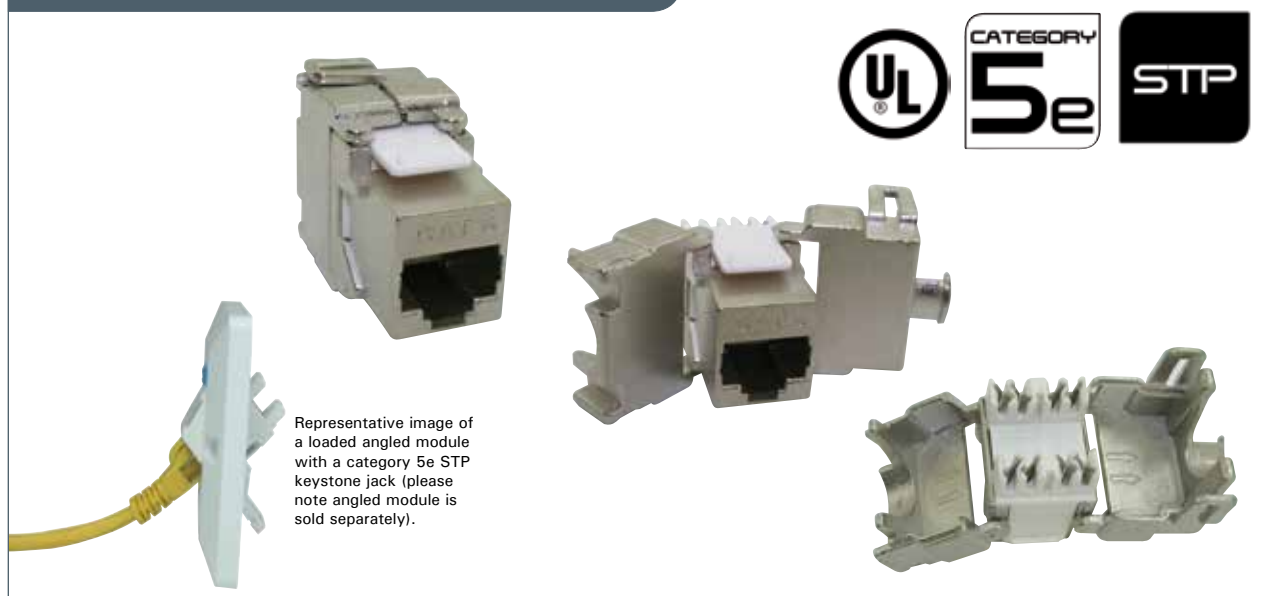
- > Category 5e
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Ordering Information

DESCRIPTION	PART NUMBER
Cat 5e Unshielded Twisted Pair (UTP) Tool Free keystone jack, White, box of 20pcs, UL approved	CAT5E+TOOLESSJACK



Category 5e STP Keystone Jack



Category 5e Shielded Twisted Pair (STP) keystone jacks conform to class D performance. They follow the industry standard RJ45

footprint and due to the small form design the keystone jack is perfect for high density applications.

Features

- > Small form RJ45 footprint design
- > 90° termination
- > High performance
- > Fully shielded for EMI protection
- > Wiring diagram and conductor cap supplied
- > Supplied in boxes of 20pcs
- > IDC punch down

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for high density installations
- > Ideal for environments sensitive to EMI

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
Shielding Material	Brass 0.30mm + Nickel Plating
Insert Material	Flame retardancy ABS UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Shielded Twisted Pair (STP) keystone jack Box of 20pcs - UL approved	CAT5E+JACK180STP



Category 5e UTP Keystone Jack



Representative image of a loaded angled module with a category 5e UTP keystone jack (please note angled module is sold separately).



Category 5e Unshielded Twisted Pair (UTP) keystone jacks conform to class D performance. They follow the industry standard keystone jack footprint. Due to their small form design they are perfect for high density applications.

Each keystone jack is available with 180° termination design, with wiring diagram and conductor protection cap. They can be supplied in black or white variants.

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Features

- > Small form RJ45 footprint design
- > IDC punch down
- > 180° termination
- > High performance
- > Available in black/white, with or without shutter
- > Wiring diagram and conductor cap supplied
- > Supplied in boxes of 20pcs

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for high density installations

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Unshielded Twisted Pair (UTP) keystone jack White Box of 20pcs - UL approved	CAT5E+JACK180WH
Category 5e Unshielded Twisted Pair (UTP) keystone jack Black - Box of 20pcs - UL approved	CAT5E+JACK180BK
Category 5e Unshielded Twisted Pair (UTP) Shuttered keystone jack White - Box of 20pcs - UL approved	CAT5E+JACK180WHS
Category 5e Unshielded Twisted Pair (UTP) Shuttered keystone jack Black - Box of 20pcs - UL approved	CAT5E+JACK180BKS

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved



Category 5e UTP Euro Module



Category 5e Unshielded Twisted Pair (UTP) 25x50mm shuttered, moulded, modules (Euro Mod) conform to class D performance. They feature a slim line design, which is an ideal solution for shallow floor box or dado trunking Applications.

Each module is supplied with a slide in label area, for easy and clear outlet identification, and a mini cable-tie. Suits British standard faceplates only.

Features

- > Complete shuttered module with PCB technology
- > Slim line design for shallow Applications
- > IDC punch down
- > Wiring diagram and mini cable tie supplied
- > Supplied in boxes of 20pcs
- > Compatible with Optronics UK faceplates

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications

Conformance

- > Category 5e
- > ANSI/EIA/TIA 568B.2 : 2002
- > ISO/IEC 11801 : 2002
- > This product conforms to the materials requirements of RoHS2
- > UL approved

Technical Specifications

MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

DESCRIPTION	PART NUMBER
Category 5e Unshielded Twisted Pair (UTP) 50x25mm Shuttered Moulded Module White - Box of 20pcs - UL approved	CATSEFACEMODULE



Category 5e Faceplates

Features

- > Fully loaded / completed outlets
- > Reduced installation time
- > Wiring diagram and mini cable tie supplied
- > Supplied in boxes of 10pcs
- > Fixing screws, labelling supplied

Conformance

- > Category 5e
- > SO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2

Applications

- > Supports category 5e (class D) networks running up to 100MHz applications

Technical Specifications







MECHANICAL	VALUE
Housing Material	PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
RJ45 Jack Life	Min 750 Insertions
IDC Life	Min 250 Terminations

Ordering Information

PRODUCT	DESCRIPTION	PART NUMBER	PRODUCT	DESCRIPTION	PART NUMBER
	Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PBEV		Single gang - 2 position 86x86mm - Box of 10pcs	FACEPLATE2PFLAT
	Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PBEV		Double gang - 4 position 86x147mm - Box of 10pcs	FACEPLATE4PFLAT
	Angled module and jack 86x86mm - Box of 10pcs	CAT5EFACE1PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT5EFACE1PFLTJ
	Angled module and jack 86x86mm - Box of 10pcs	CAT5EFACE2PBEVJ		Angled module and jack 86x86mm - Box of 10pcs	CAT5EFACE2PFLTJ
	Angled module and jack 86x147mm - Box of 10pcs	CAT5EFACE4PBEVJ		Angled module and jack 86x147mm - Box of 10pcs	CAT5EFACE4PFLTJ
	Box of 20pcs	ANGLEDMODULE		50x25mm Box of 50pcs	HALFBLANK
	50x12.5mm Box of 100pcs	SINGLEBLANK		Euro module and Jack 86x86mm - Box of 10pcs	CAT65EFACE2PBEVM
	Euro module and Jack 86x86mm - Box of 10pcs	CAT5EFACE1PBEVM		Euro module and Jack 86x147mm - Box of 10pcs	CAT5EFACE4PBEVM



OPTRONICS COPPER CABLING SYSTEM | CAT5E FACEPLATES

PRODUCT	DESCRIPTION	PART NUMBER	PRODUCT	DESCRIPTION	PART NUMBER
	Euro module and jack 86x86mm - Box of 10pcs	CAT5EFACE1PFLTM		Category 6 Single Port European Outlet with Jack - Box of 10pcs	CAT5EFACE1PFRA
	Euro module and jack 86x86mm - Box of 10pcs	CAT5EFACE2PFLTM		Category 6 Double Port European Outlet with Jack - Box of 10pcs	CAT5EFACE2PFRA
	Euro module and jack 86x147mm - Box of 10pcs	CAT5EFACE4PFLTM		Category 6 Quad Port European Outlet with Jack - Box of 10pcs	CAT5EFACE4PFRA



Single and Double Port Mounted Keystone Box

Technical Specification

DESCRIPTION	1-PORT BOX W/O SHUTTER	2-PORT BOX W/O SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	30	30
Width (mm)	50	50
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	CAT5EBOX1PJ
Double port mounted box, without shutter - White	CAT5EBOX2PJ

Drawing

1-port w/ shutter
(37 × 65 × 30 mm)

1. Identification
2. Box
3. Dust Cover
4. Insert

2-port w/ shutter
(63 × 65 × 30 mm)

1. Identification
2. Box
3. Dust Cover
4. Insert



Category 5e U/UTP Patch Cords



Category 5e Unshielded Twisted Pair (U/UTP) patch cords conform to class D standards. Our patch cords are made to the highest standards, using only quality stranded cable, giving you the best in flexibility, plus, top grade 50μ gold plated RJ45 connector plugs for high quality connections. This combination makes for outstanding performance and reduced degradation.

All patch cords are produced with a injection moulded boot with an easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend these as part of a full Optronics category 5e system.

Features

- > Quality 24 AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > Injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > UL listed

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	24
	Size (mm)	7/0.20 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.98+/-0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC or LSZH



PVC

BLUE	PART NUMBER	METRE
	UTP5EBL0.5-PVC	0.5
	UTP5EBL1-PVC	1
	UTP5EBL2-PVC	2
	UTP5EBL3-PVC	3
	UTP5EBL5-PVC	5
	UTP5EBL10-PVC	10
GREEN	UTP5EGN0.5-PVC	0.5
	UTP5EGN1-PVC	1
	UTP5EGN2-PVC	2
	UTP5EGN3-PVC	3
	UTP5EGN5-PVC	5
ORANGE	UTP5EGN10-PVC	10
	UTP5EOR0.5-PVC	0.5
	UTP5EOR1-PVC	1
	UTP5EOR2-PVC	2
	UTP5EOR3-PVC	3
	UTP5EOR5-PVC	5
	UTP5EOR10-PVC	10

YELLOW	PART NUMBER	METRE
	UTP5EYE0.5-PVC	0.5
	UTP5EYE1-PVC	1
	UTP5EYE2-PVC	2
	UTP5EYE3-PVC	3
	UTP5EYE5-PVC	5
	UTP5EYE10-PVC	10
RED	UTP5ERD0.5-PVC	0.5
	UTP5ERD1-PVC	1
	UTP5ERD2-PVC	2
	UTP5ERD3-PVC	3
	UTP5ERD5-PVC	5
WHITE	UTP5ERD10-PVC	10
	UTP5EWH0.5-PVC	0.5
	UTP5EWH1-PVC	1
	UTP5EWH2-PVC	2
	UTP5EWH3-PVC	3
	UTP5EWH5-PVC	5
	UTP5EWH10-PVC	10

GREY	PART NUMBER	METRE
	UTP5EGY0.5-PVC	0.5
	UTP5EGY1-PVC	1
	UTP5EGY2-PVC	2
	UTP5EGY3-PVC	3
	UTP5EGY5-PVC	5
	UTP5EGY10-PVC	10
BLACK	UTP5EBK0.5-PVC	0.5
	UTP5EBK1-PVC	1
	UTP5EBK2-PVC	2
	UTP5EBK3-PVC	3
	UTP5EBK5-PVC	5
	UTP5EBK10-PVC	10

LSZH

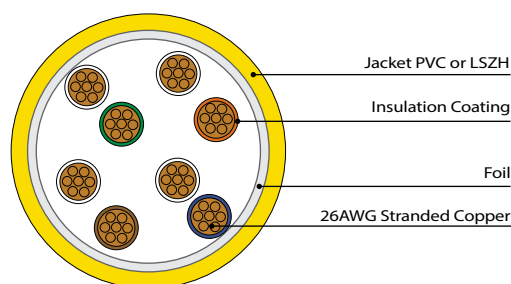
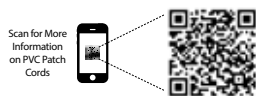
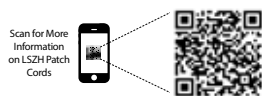
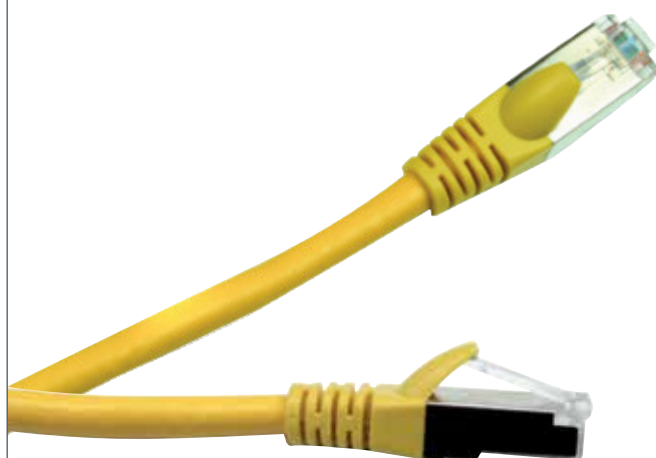
BLUE	PART NUMBER	METRE
	UTP5EBL0.5-LSZH	0.5
	UTP5EBL1-LSZH	1
	UTP5EBL2-LSZH	2
	UTP5EBL3-LSZH	3
	UTP5EBL5-LSZH	5
	UTP5EBL10-LSZH	10
GREEN	UTP5EGN0.5-LSZH	0.5
	UTP5EGN1-LSZH	1
	UTP5EGN2-LSZH	2
	UTP5EGN3-LSZH	3
	UTP5EGN5-LSZH	5
ORANGE	UTP5EGN10-LSZH	10
	UTP5EOR0.5-LSZH	0.5
	UTP5EOR1-LSZH	1
	UTP5EOR2-LSZH	2
	UTP5EOR3-LSZH	3
	UTP5EOR5-LSZH	5
	UTP5EOR10-LSZH	10

YELLOW	PART NUMBER	METRE
	UTP5EYE0.5-LSZH	0.5
	UTP5EYE1-LSZH	1
	UTP5EYE2-LSZH	2
	UTP5EYE3-LSZH	3
	UTP5EYE5-LSZH	5
	UTP5EYE10-LSZH	10
RED	UTP5ERD0.5-LSZH	0.5
	UTP5ERD1-LSZH	1
	UTP5ERD2-LSZH	2
	UTP5ERD3-LSZH	3
	UTP5ERD5-LSZH	5
WHITE	UTP5ERD10-LSZH	10
	UTP5EWH0.5-LSZH	0.5
	UTP5EWH1-LSZH	1
	UTP5EWH2-LSZH	2
	UTP5EWH3-LSZH	3
	UTP5EWH5-LSZH	5
	UTP5EWH10-LSZH	10

GREY	PART NUMBER	METRE
	UTP5EGY0.5-LSZH	0.5
	UTP5EGY1-LSZH	1
	UTP5EGY2-LSZH	2
	UTP5EGY3-LSZH	3
	UTP5EGY5-LSZH	5
	UTP5EGY10-LSZH	10
BLACK	UTP5EBK0.5-LSZH	0.5
	UTP5EBK1-LSZH	1
	UTP5EBK2-LSZH	2
	UTP5EBK3-LSZH	3
	UTP5EBK5-LSZH	5
	UTP5EBK10-LSZH	10



Category 5e F/UTP Patch Cords



Category 5e Foiled Twisted Pair (F/UTP) patch cords conform to class D standards. Our patch cords are made to the highest standards, using only quality stranded cable, giving you the best in flexibility, plus, top grade 50μ gold plated RJ45 connector plugs, for high quality connections. This combination makes for outstanding performance and reduced degradation. Aluminium tape is used to shield all 4 pairs; this gives a screened protection

against external interference such as EMI. All patch cords are produced with a injection moulded boot with easy depression latch cover. Available across 8 colours, 6 standard lengths and in PVC or LSZH jacket varieties. For best performance we recommend these as part of a full Optronics category 5e system.

Features

- > Quality 26 AWG stranded (flexible) cable
- > High grade 50μ gold plated RJ45 connector
- > Injection moulded boot for improved strain relief
- > Soft latch-cover design for easy depression

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI

Conformance

- > Category 5e
- > ISO/IEC 11801 : 2002
- > ANSI/EIA/TIA 568B.2 : 2002
- > This product conforms to the materials requirements of RoHS2
- > REACH
- > UL listed

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size (mm)	0.915 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.97 +/- 0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC or LSZH
Tape	Material	Mylar & Aluminium Mylar
	Coverage (%)	125



OPTRONICS COPPER CABLING SYSTEM | CATEGORY 5E FTP PATCH CORDS

PVC

BLUE	PART NUMBER	METRE
	FTP5EBL0.5-PVC	0.5
	FTP5EBL1-PVC	1
	FTP5EBL2-PVC	2
	FTP5EBL3-PVC	3
GREEN	FTP5EBL5-PVC	5
	FTP5EBL10-PVC	10
	FTP5EGN0.5-PVC	0.5
	FTP5EGN1-PVC	1
	FTP5EGN2-PVC	2
ORANGE	FTP5EGN3-PVC	3
	FTP5EGN5-PVC	5
	FTP5EGN10-PVC	10
	FTP5EOR0.5-PVC	0.5
	FTP5EOR1-PVC	1
	FTP5EOR2-PVC	2
	FTP5EOR3-PVC	3
	FTP5EOR5-PVC	5
	FTP5EOR10-PVC	10

YELLOW	PART NUMBER	METRE
	FTP5EYE0.5-PVC	0.5
	FTP5EYE1-PVC	1
	FTP5EYE2-PVC	2
	FTP5EYE3-PVC	3
RED	FTP5EYE5-PVC	5
	FTP5EYE10-PVC	10
	FTP5ERD0.5-PVC	0.5
	FTP5ERD1-PVC	1
	FTP5ERD2-PVC	2
WHITE	FTP5ERD3-PVC	3
	FTP5ERD5-PVC	5
	FTP5ERD10-PVC	10
	FTP5EWH0.5-PVC	0.5
	FTP5EWH1-PVC	1
	FTP5EWH2-PVC	2
	FTP5EWH3-PVC	3
	FTP5EWH5-PVC	5
	FTP5EWH10-PVC	10

GREY	PART NUMBER	METRE
	FTP5EGY0.5-PVC	0.5
	FTP5EGY1-PVC	1
	FTP5EGY2-PVC	2
	FTP5EGY3-PVC	3
BLACK	FTP5EGY5-PVC	5
	FTP5EGY10-PVC	10
	FTP5EBK0.5-PVC	0.5
	FTP5EBK1-PVC	1
	FTP5EBK2-PVC	2
	FTP5EBK3-PVC	3
	FTP5EBK5-PVC	5
	FTP5EBK10-PVC	10

LSZH

BLUE	PART NUMBER	METRE
	FTP5EBL0.5-LSZH	0.5
	FTP5EBL1-LSZH	1
	FTP5EBL2-LSZH	2
	FTP5EBL3-LSZH	3
GREEN	FTP5EBL5-LSZH	5
	FTP5EBL10-LSZH	10
	FTP5EGN0.5-LSZH	0.5
	FTP5EGN1-LSZH	1
	FTP5EGN2-LSZH	2
ORANGE	FTP5EGN3-LSZH	3
	FTP5EGN5-LSZH	5
	FTP5EGN10-LSZH	10
	FTP5EOR0.5-LSZH	0.5
	FTP5EOR1-LSZH	1
	FTP5EOR2-LSZH	2
	FTP5EOR3-LSZH	3
	FTP5EOR5-LSZH	5
	FTP5EOR10-LSZH	10

YELLOW	PART NUMBER	METRE
	FTP5EYE0.5-LSZH	0.5
	FTP5EYE1-LSZH	1
	FTP5EYE2-LSZH	2
	FTP5EYE3-LSZH	3
RED	FTP5EYE5-LSZH	5
	FTP5EYE10-LSZH	10
	FTP5ERD0.5-LSZH	0.5
	FTP5ERD1-LSZH	1
	FTP5ERD2-LSZH	2
WHITE	FTP5ERD3-LSZH	3
	FTP5ERD5-LSZH	5
	FTP5ERD10-LSZH	10
	FTP5EWH0.5-LSZH	0.5
	FTP5EWH1-LSZH	1
	FTP5EWH2-LSZH	2
	FTP5EWH3-LSZH	3
	FTP5EWH5-LSZH	5
	FTP5EWH10-LSZH	10

GREY	PART NUMBER	METRE
	FTP5EGY0.5-LSZH	0.5
	FTP5EGY1-LSZH	1
	FTP5EGY2-LSZH	2
	FTP5EGY3-LSZH	3
BLACK	FTP5EGY5-LSZH	5
	FTP5EGY10-LSZH	10
	FTP5EBK0.5-LSZH	0.5
	FTP5EBK1-LSZH	1
	FTP5EBK2-LSZH	2
	FTP5EBK3-LSZH	3
	FTP5EBK5-LSZH	5
	FTP5EBK10-LSZH	10



Optronics**PLUS** Copper Cabling System

Category 7

Cable

274



Category 7 S/FTP Low Smoke Zero Halogen Cable



Optronics Category 7 S/FTP LSZH cables are designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network

Features

- > 24 AWG conductor – solid bare copper
- > LSZH external jacket
- > Supplied in 305m box
- > Printed metre marks

Applications

- > Supports category 7 (Class F) networks running up to 600 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > External horizontal and backbone installations
- > 10G Base T
- > Token ring (IEEE 805.5)

Conformance

- > REACH / SvHC Compliant regulation (EC) No. 1907/2006
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green

applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Applicable Standards

The category 7 S/FTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011 (Ed. 2.2)
- > IEC 61156-5:2009 (Ed. 2.0)
- > EN 50173-1:2011
- > EN 50173-2:2007 including amendment A1:2010
- > EN 50288-4-1:2003

Fire Performance

Category 7 S/FTP LSZH cables exceed the requirements of:

- > IEC 60332-1-[1,2]:2004
- > IEC 60754-[1,2]
- > IEC 61034-[1,2]



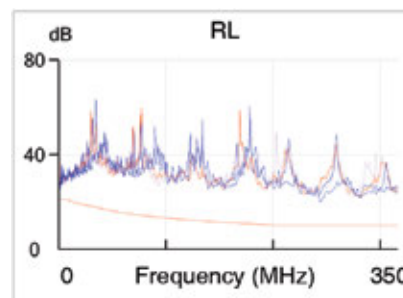
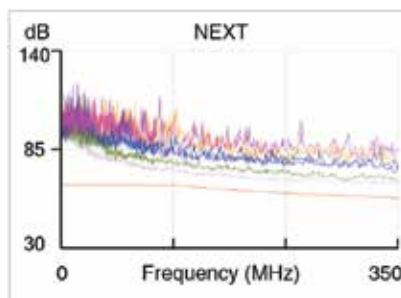
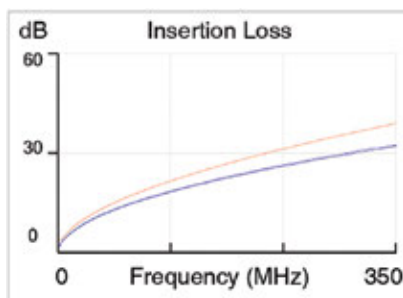
Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.57mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.9mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz) (250 - 600MHz)	100 ± 15Ω 100 ± 18Ω 100 ± 25Ω
DC Loop Resistance		≤ 19.0Ω/100m max
Resistance Unbalance		≤ 2%
Capacitance Unbalance to Earth		≤ 330 pF/km
Delay Skew		≤ 25ns/100m
Nominal Velocity of Propagation		74%
Propagation Delay (Nominal)		440ns/100m at 600MHz
Test Voltage (d.c. for 1 minute) Conductor/Conductor		1000MHz
Insulation Resistance (500V d.c)		≥ 500M.OHM

Transmission line performance at 20°C

(MHZ)	RL ≥DB	ATT ≤DB	NEXT ≥DB	DELAY ≤NS	PSNEXT ≥DB	ELFEXT ≥DB	PSELFEXT ≥DB
1.0	20.0	2.0	78.0	570.0	75.0	78.0	75.0
4.0	23.0	3.7	78.0	552.0	75.0	78.0	75.0
8.0	24.5	5.2	78.0	546.7	75.0	75.9	72.9
10.0	25.0	5.9	78.0	545.4	75.0	74.0	71.0
16.0	25.0	7.4	78.0	543.0	75.0	69.9	66.9
20.0	25.0	8.3	78.0	542.0	75.0	68.0	65.0
25.0	24.3	9.3	78.0	541.2	75.0	66.0	63.0
31.3	23.6	10.4	78.0	540.4	75.0	64.1	61.1
62.5	21.5	14.9	75.5	538.6	72.5	58.1	55.1
100.0	20.1	19.0	72.4	537.6	69.4	54.0	51.0
150.0	18.9	23.6	69.8	536.9	66.8	50.2	47.2
200.0	18.0	27.5	67.9	536.5	64.9	48.0	45.0
250.0	17.3	31.0	66.4	536.3	63.4	46.0	43.0
300.0	17.3	34.2	65.2	536.1	62.2	44.5	41.5
600.0	17.3	50.1	60.7	535.5	57.7	38.4	35.4

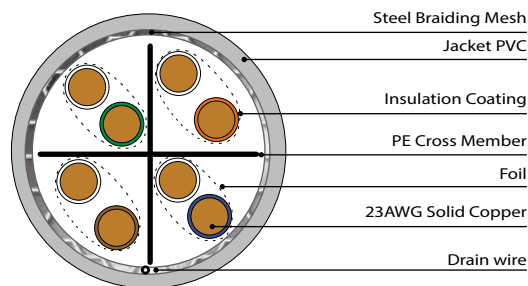


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT7 S/FTP 23AWG Solid Cable LSZH - ETL Approved 305m Box	SFTP7305LSZH
OptronicsPLUS CAT7 S/FTP 23AWG Solid Cable LSZH - ETL Approved 500m Box	SFTP7500LSZH



Category 7 S/FTP PVC Cable



Optronics Category 7 S/FTP PVC cables are designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network

Features

- > 24 AWG conductor – solid bare copper
- > PVC external jacket
- > Supplied in 305m box
- > Printed metre marks

Applications

- > Supports category 7 (Class F) networks running up to 600 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > External horizontal and backbone installations
- > 10G Base T
- > Token ring (IEEE 805.5)

Conformance

- > REACH / SvHC Compliant regulation (EC) No. 1907/2006
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green

applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Applicable Standards

The category 7 S/FTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011 (Ed. 2.2)
- > IEC 61156-5:2009 (Ed. 2.0)
- > EN 50173-1:2011
- > EN 50173-2:2007 including amendment A1:2010
- > EN 50288-4-1:2003

Fire Performance

Category 7 S/FTP PVC cables exceed the requirements of:

- > IEC 60332-1-[1,2]:2004
- > IEC 60754-[1,2]
- > IEC 61034-[1,2]



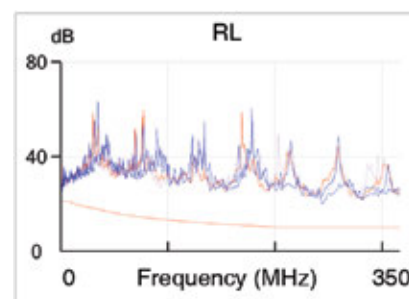
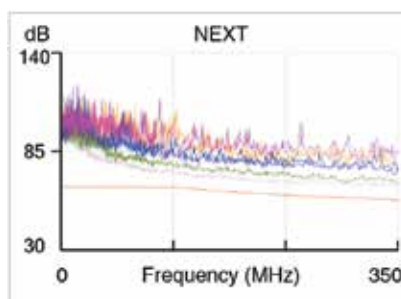
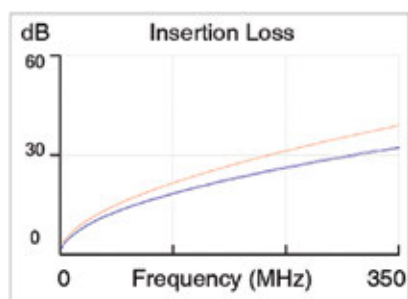
Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.57mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of Grey coloured Polyvinyl Chloride (PVC) compound (RAL 7035)
Diameter	7.9mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 ± 15Ω 100 ± 18Ω
DC Resistance		≤ 9.5Ω/100m max
Resistance Unbalance		≤ 2%
Capacitance Unbalance to Earth		≤ 330 pF/km
Delay Skew		≤ 25ns/100m
Nominal Velocity of Propagation		74%
Propagation Delay (Nominal)		440ns/100m at 600MHz
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000MHz
Insulation Resistance (500V d.c)		≥ 500M.OHM

Transmission line performance at 20°C

(MHZ)	RL ≥DB	ATT ≤DB	NEXT ≥DB	DELAY ≤NS	PSNEXT ≥DB	ELFEXT ≥DB	PSELFEXT ≥DB
1.0	20.0	2.0	78.0	570.0	75.0	78.0	75.0
4.0	23.0	3.7	78.0	552.0	75.0	78.0	75.0
8.0	24.5	5.2	78.0	546.7	75.0	75.9	72.9
10.0	25.0	5.9	78.0	545.4	75.0	74.0	71.0
16.0	25.0	7.4	78.0	543.0	75.0	69.9	66.9
20.0	25.0	8.3	78.0	542.0	75.0	68.0	65.0
25.0	24.3	9.3	78.0	541.2	75.0	66.0	63.0
31.3	23.6	10.4	78.0	540.4	75.0	64.1	61.1
62.5	21.5	14.9	75.5	538.6	72.5	58.1	55.1
100.0	20.1	19.0	72.4	537.6	69.4	54.0	51.0
150.0	18.9	23.6	69.8	536.9	66.8	50.2	47.2
200.0	18.0	27.5	67.9	536.5	64.9	48.0	45.0
250.0	17.3	31.0	66.4	536.3	63.4	46.0	43.0
300.0	17.3	34.2	65.2	536.1	62.2	44.5	41.5
600.0	17.3	50.1	60.7	535.5	57.7	38.4	35.4



Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT7 S/FTP 23AWG Solid Cable CM PVC - UL Approved 305m Box	SFTP7305PVC
OptronicsPLUS CAT7 S/FTP 23AWG Solid Cable CM PVC - UL Approved 500m Box	SFTP7500PVC



OptronicsPLUS Copper Cabling System

Category 6_A

Cable	279
Patch Panels	283
Keystone Jacks	285
Work Area Outlets Keystone Boxes	286
Patch Cords	288

Category 6_A U/FTP Low Smoke Zero Halogen Cable



OptronicsPlus Category 6_A U/FTP LSZH cable is designed to deliver robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 23 AWG conductor (0.57mm) – solid bare copper cable
- > LSZH external jacket
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)
- > ATM 155
- > 10G Base T (IEEE 802.3an)

Fire Performance

- > Category 6_A U/FTP LSZH cables exceed the requirements of:
- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Our Category 6_A U/FTP LSZH cables exceeds the minimum specified performance and support all Category 6_A / Class E_A applications as defined within ISO/IEC 11801:2011 such as 10GBASE-T (10G Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Applicable Standards

- > The Category 6_A U/FTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:
- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA 568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White
 - Pair 2: Blue and White
 - Pair 3: Brown and White
 - Pair 4: Green and White



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.5mm \pm 0.3mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 \pm 15 Ω 100 \pm 18 Ω
DC Loop Resistance		\leq 19.0 Ω /100m
Resistance Unbalance		\leq 2%
Capacitance Unbalance to Earth		\leq 1600 pF/km
Delay Skew		\leq 40ns/100m @ 500MHz
Nominal Velocity of Propagation		78%
Propagation Delay (Nominal)		\leq 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000V
Insulation Resistance (500V d.c)		\geq 500M Ω .km
Transfer Impedance		\geq 55dB

Mechanical Characteristics

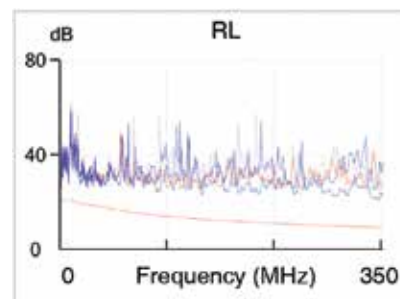
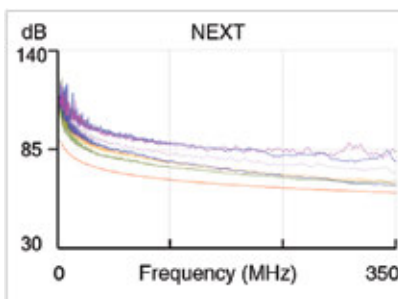
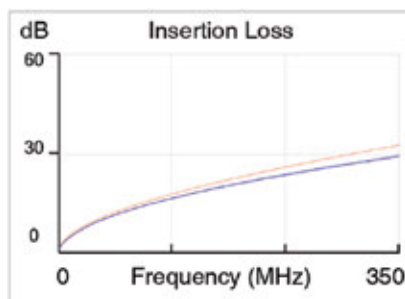
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	NEXT MIN dB	ACR MIN dB	PSNEXT MIN dB	ELFEXT MIN dB	PSELFEXT MIN dB	PSANEXT MIN dB	RETURN LOSS
1	1.8	95.	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	39.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3



Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS Cat 6A U/FTP 23AWG Solid Cable LSZH - ETL Approved 500m Box	FTP6A500LSZH



Category 6_A S/FTP Low Smoke Zero Halogen Cable



OptronicsPlus 6_A S/FTP LSZH cable is designed to deliver robust standards based on performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres. Cable performance is routinely verified by the independent testing

laboratory 3P as part of an ongoing maintenance program.

Our Category 6_A S/FTP LSZH cables exceed the minimum specified performance and support all Category 6_A / Class E_A applications as defined within ISO/IEC 11801:2011 such as 10GBASE-T (10G Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Features

- > 23 AWG conductor (0.57mm) – solid bare copper cable
- > LSZH external jacket
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6_A networks running up to 500 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)
- > ATM 155
- > 10G Base T (IEEE 802.3an)

Fire Performance

Category 6_A S/FTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Applicable Standards

The Category 6_A S/FTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White
 - Pair 2: Blue and White
 - Pair 3: Brown and White
 - Pair 4: Green and White



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.5mm \pm 0.3mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 \pm 15 Ω 100 \pm 18 Ω
DC Loop Resistance		\leq 19.0 Ω /100m
Resistance Unbalance		\leq 2%
Capacitance Unbalance to Earth		\leq 1600 pF/km
Delay Skew		\leq 40ns/100m @ 500MHz
Nominal Velocity of Propagation		78%
Propagation Delay (Nominal)		\leq 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000V
Insulation Resistance (500V d.c)		\geq 500M Ω .km
Transfer Impedance		\geq 55dB

Mechanical Characteristics

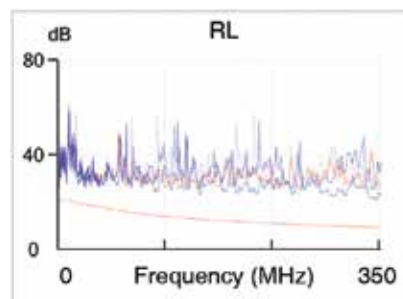
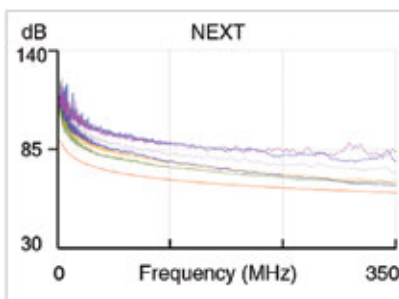
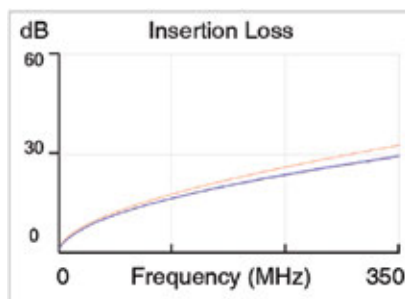
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	NEXT MIN dB	ACR MIN dB	PSNEXT MIN dB	ELFEXT MIN dB	PSELFEXT MIN dB	PSANEXT MIN dB	RETURN LOSS
1	1.8	95.	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	39.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3



Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS Cat 6A S/FTP 23AWG Solid Cable LSZH - ETL Approved 500m Box	STP6A500LSZH



Screened Category 6_A RJ45 Patch Panel

24
Ports



Front view



Rear view

OptronicPlus Category 6_A patch panel exceeds the transmission line performance requirements of IEC and TIA for Class EA/Category 6_A systems. The panels are designed for mechanical and electrical reliability, using quality materials and processes, to deliver a panel solution which delivers a consistent high level of systems performance. Each Category

6_A patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class EA/Category 6_A applications including 10GBASE-T (10 Gigabit Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Features

- > 19" rack mountable
- > 24 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA/110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 500MHz
- > Durability:
 - Socket Contacts: min 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 6 _A patch panel, 24 port Black 1U	800-001



Screened Category 6_A "High Density" RJ45 Patch Panel

48
Ports

CATEGORY
6A

SCREENED



Front view



Rear view

OptronicsPlus Category 6_A "High Density" patch panel exceeds the transmission line performance requirements of IEC and TIA for Class EA/Category 6_A systems. These are 'real' cabinet space saving products designed for mechanical and electrical performance reliability. The "High Density" panel delivers a consistent high level of systems performance whilst halving

the cabinet space required in high density installations. Each Category 6_A "High Density" patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class EA/Category 6_A applications such as 10GBASE-T (10 Gigabit Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Features

- > 19" rack mountable
- > 48 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA/110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 500MHz
- > Durability:
 - Socket Contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 6 _A "HD" patch panel, 48 port Black 1U	800-002



Tool free Screened 6_A RJ45 Keystone Jack



Top view

OptronicsPlus Category 6_A Screened Tool Free Modular RJ45 Jacks exceed the transmission line performance requirements of IEC and TIA for Class EA/Category 6_A systems. Their compact design has been engineered to optimise density in high performance applications such as data centres. Designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that minimises the

time required by the installer to complete each termination. Each Category 6_A Screened RJ45 keystone jack complies with IEC 60603-7-Pt 51 (screened) and support all applications designed for Class EA networks, as defined within ISO/IEC 11801:2011 including 10GBASE-T (10 Gigabit Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Compact design for higher density installation
- > Die-cast manufacturing for a seamless cover and uniform shielding
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Dual tool-free and LSA termination option
- > Supports TIA 568A & B wiring configurations
- > Low insertion force 'clam action' of assists tool-less termination
- > Colour coded and keyed stuffer-cap for reliable installation
- > Integral cable strain relief
- > Electrically compliant beyond 500MHz
- > Durability:
 - Jack contacts: 750 plug insertion cycles minimum
 - Wiring block: 25 termination cycles minimum

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

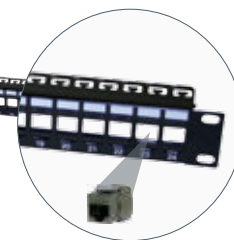
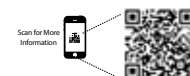
- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

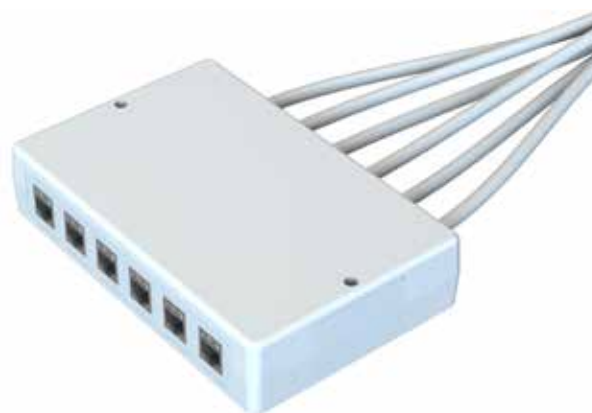
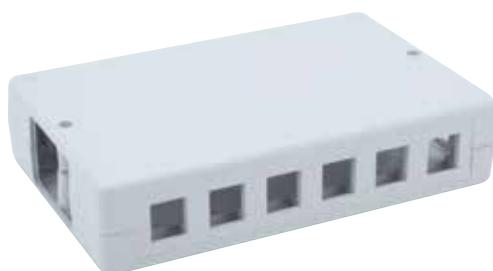
DESCRIPTION	PART NUMBER
Screened Category 6 _A Tool Free keystone jack	800-101
Unloaded Keystone patch panel	400-001

Unloaded Keystone Patch Panel for use with Tool free Screened 6_A RJ45 Keystone Jack

Unloaded Keystone Patch Panel
Part Number: 400-001



Work Area Outlets Keystone Boxes



Optronics offer a range of Mounted Keystone Boxes that can accept: CAT5e, CAT6, or CAT6A keystone jacks. These boxes

are perfect for surface/wall mounted applications within a network.

Features

- > Constructed from durable ABS plastic with a high quality finish
- > Comes in 1, 2 and up to 12 port configurations
- > Easy to assemble and reduces installation times
- > Mounts easily with supplied mounting screws
- > Compatible with the majority of Optronics Cat 5e, Cat 6 and Cat 6A keystones*

*Not all keystone types are compatible. For more information please check with your sales representative.

Applications

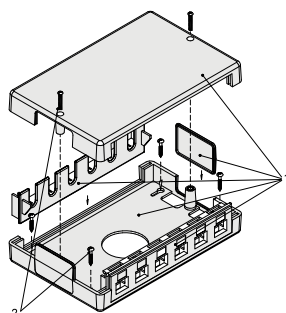
- > Internal application
- > Telecommunication and premise networks

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

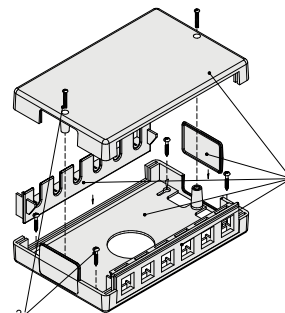
Drawing

Keystone box
(170 × 112 × 38 mm)



1. Box housing
2. Screw

Module insert box
(170 × 112 × 38 mm)



1. Box housing
2. Screw



12 Port Mounted Box for Keystone Jacks/Module Inserts

Product consists of x1 box, x2 front panels and x1 cable guide. Can be used in 6 port or 12 port configurations with multiple cable entry points available.

Technical Specification

DESCRIPTION	KEYSTONE BOX	MODULE INSERT BOX
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	170	170
Width (mm)	112	112
Depth (mm)	38	38
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Mounted box for keystone jacks only - White	101-001
Mounted box for module insert of BNC, F and fibre adaptors - White	101-002

Single and Double Port Mounted Keystone Box with out Shutter

DESCRIPTION	1-PORT BOX W/O SHUTTER	2-PORT BOX W/O SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	30	30
Width (mm)	50	50
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-003
Double port mounted box, without shutter - White	101-004

Single and Double Port Mounted Keystone Box with Shutter

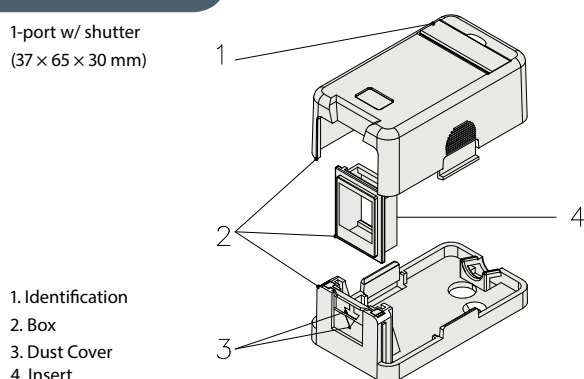
DESCRIPTION	1-PORT BOX WITH SHUTTER	2-PORT BOX WITH SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	37	63
Width (mm)	65	65
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-005
Double port mounted box with shutter - White	101-006

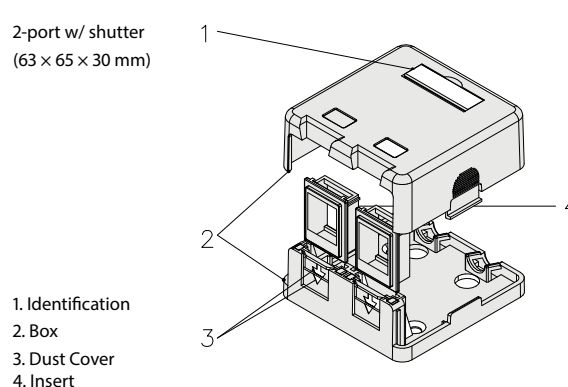
Drawing

1-port w/ shutter
(37 × 65 × 30 mm)



1. Identification
2. Box
3. Dust Cover
4. Insert

2-port w/ shutter
(63 × 65 × 30 mm)



1. Identification
2. Box
3. Dust Cover
4. Insert

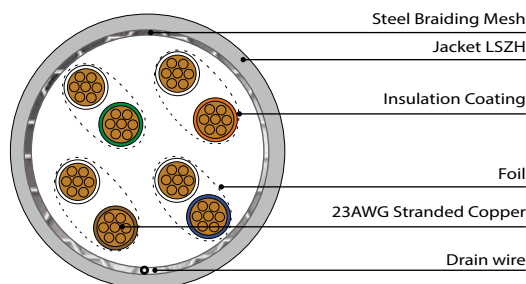


S/FTP Category 6_A Patch Cords

Scan for More
Information
on LSZH Patch
Cords



Scan for More
Information
on PVC Patch
Cords



Category 6_A screened foiled patch cord range exceeds the transmission line performance requirements of IEC and TIA for Class EA/Category 6_A systems. The patch cords are designed for mechanical and electrical reliability, using quality materials and processes, to provide a patch cord solution which delivers a consistent high level of systems performance whilst incorporating design features that allow a “one style fits all” cord application. The low profile moulded boot and snag free latching allows the cords to be deployed within even the most

densely populated network installations deploying the latest blade server technology.

Each Category 6_A patch cords are manufactured and tested in accordance with IEC 61935-2 and comply with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class E/Category 6_A applications such as 10GBASE-T (10G Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet)

Features

- > Low profile moulded strain relief boot to use with blade servers
- > Integral anti-snag latch as standard
- > RJ45 plug with two point “U shape” prongs
- > 50 micro-inch gold plated contact pins
- > Stranded high purity copper wire
- > Integral internal plug wire management (to improve Cross-Talk parameters)
- > PiMF style cable (individual foil screened pairs with overall braiding)
- > Low Smoke Zero Halogen sheathed cable as standard, PVC upon request
- > Multiple length and colour option
- > Individually bagged with traceability information
- > Electrically compliant beyond 500MHz

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-6
- > EN 50288-4-2

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed (PVC assemblies)
- > REACH/SVHC

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size	7 x 01.52mm
	Material	Bare Copper
Insulators	Diameter (mm)	1.03
	Material	HDPE
Jacket	External O.D. (mm)	6.3 +/- 0.2
	Thickness (mm)	0.51
	Material	LSZH or PVC
Shielding	Aluminium/PET	25/25µm
	Copper Clad with Steel	0.1mm x 4 x 16, min. 30% coverage



PVC

GREY	PART NUMBER	METRE
	991-101	1
	991-102	2
	991-103	3
	991-105	5
	991-110	10
	991-115	15
	991-120	20
	991-201	1
	991-202	2
	991-203	3
	991-205	5
RED	991-210	10
	991-215	15
	991-220	20
	991-301	1
BLUE	991-302	2
	991-303	3
	991-305	5
	991-310	10
	991-315	15
	991-320	20

YELLOW	PART NUMBER	METRE
	991-401	1
	991-402	2
	991-403	3
	991-405	5
	991-410	10
	991-415	15
	991-420	20
	991-501	1
	991-502	2
	991-503	3
	991-505	5
GREEN	991-510	10
	991-515	15
	991-520	20
	991-601	1
WHITE*	991-602	2
	991-603	3
	991-605	5
	991-610	10
	991-615	15
	991-620	20

BLACK*	PART NUMBER	METRE
	991-701	1
	991-702	2
	991-703	3
	991-705	5
	991-710	10
	991-715	15
	991-720	20
	991-701	1
	991-702	2
	991-703	3
	991-705	5
ORANGE*	991-710	10
	991-715	15
	991-720	20
	991-720	20

*White, Orange and Black may be subject to minimum order quantities

LSZH

GREY	PART NUMBER	METRE
	992-101	1
	992-102	2
	992-103	3
	992-105	5
	992-110	10
	992-115	15
	992-120	20
	992-201	1
	992-202	2
	992-203	3
	992-205	5
RED	992-210	10
	992-215	15
	992-220	20
	992-301	1
BLUE	992-302	2
	992-303	3
	992-305	5
	992-310	10
	992-315	15
	992-320	20

YELLOW	PART NUMBER	METRE
	992-401	1
	992-402	2
	992-403	3
	992-405	5
	992-410	10
	992-415	15
	992-420	20
	992-501	1
	992-502	2
	992-503	3
	992-505	5
GREEN	992-510	10
	992-515	15
	992-520	20
	992-601	1
WHITE*	992-602	2
	992-603	3
	992-605	5
	992-610	10
	992-615	15
	992-620	20

BLACK*	PART NUMBER	METRE
	992-701	1
	992-702	2
	992-703	3
	992-705	5
	992-710	10
	992-715	15
	992-720	20
	992-701	1
	992-702	2
	992-703	3
	992-705	5
ORANGE*	992-710	10
	992-715	15
	992-720	20
	992-720	20

*White, Orange and Black may be subject to minimum order quantities

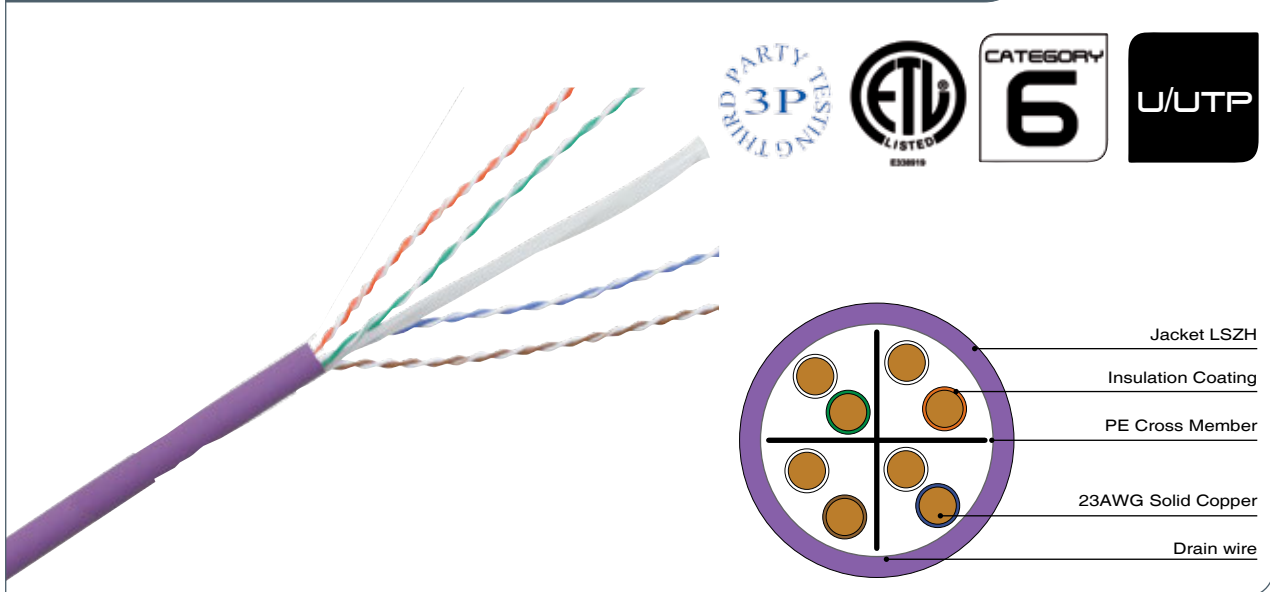


Optronics**PLUS** Copper Cabling System

Category 6

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Category 6 U/UTP Low Smoke Zero Halogen Cable



OptronicsPlus Category 6 U/UTP LSZH cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 23 AWG conductor – solid bare copper cable
- > LSZH external jacket
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Fire Performance

Category 6 U/UTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Our Category 6 U/UTP LSZH cable exceeds the minimum specified performance for Category 6 U/UTP cables and support all Class E applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Applicable Standards

The Category 6 U/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-3-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	6.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 40dB

Mechanical Characteristics

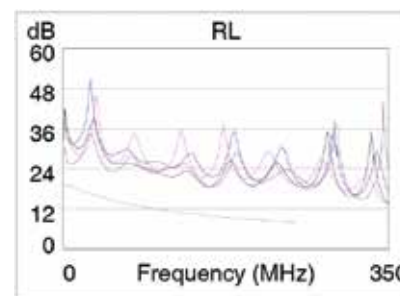
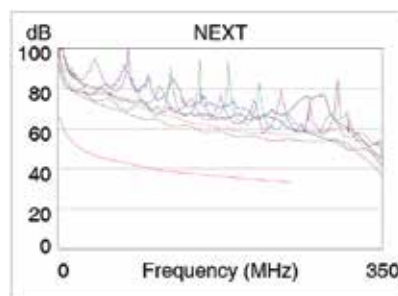
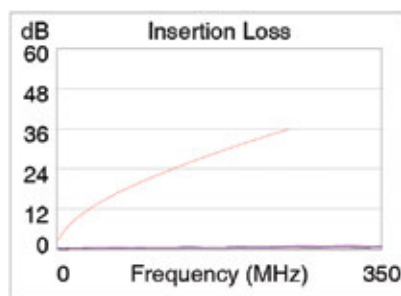
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3

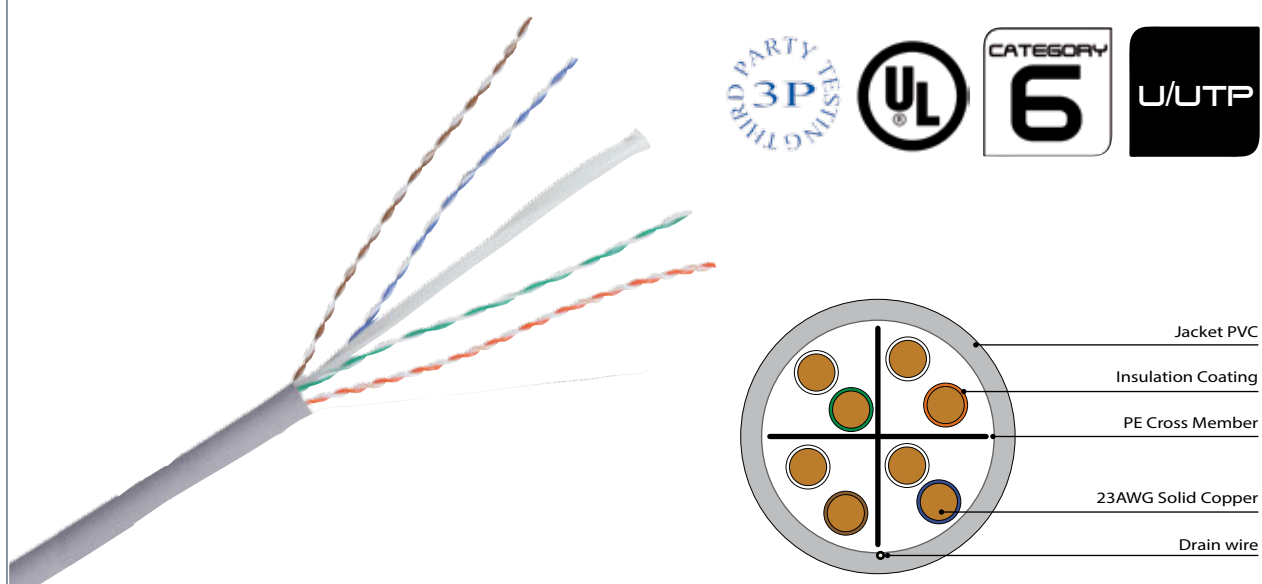


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT6 UTP 4pair LAN Violet LSZH - ETL Approved 305m Box	UTP6305LSZH
OptronicsPLUS CAT6 UTP 4pair LAN Violet LSZH - ETL Approved 500m Box	UTP6500LSZH



Category 6 U/UTP PVC Cable



OptronicsPlus Category 6 U/UTP PVC cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres. Cable performance is routinely verified by the independent

testing laboratory 3P as part of an ongoing maintenance programme. Our Category 6 U/UTP PVC cable exceeds the minimum specified performance for Category 6 U/UTP cables and support all Class E applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Features

- > 23 AWG conductor – solid bare copper cable
- > PVC external jacket
- > Supplied in 305m boxes or 500m reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Fire Performance

Category 6 U/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2

Applicable Standards

The Category 6 U/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-586-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.56mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Sheath	A uniform layer of grey coloured polyvinyl chloride (PVC) compound (RAL 7035)
Diameter	6.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 40dB

Mechanical Characteristics

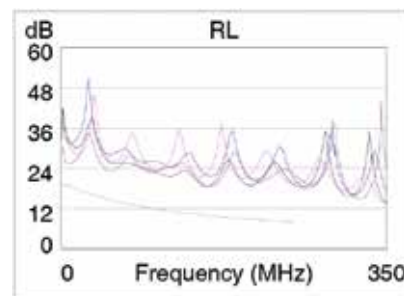
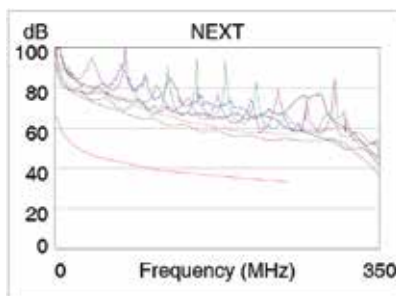
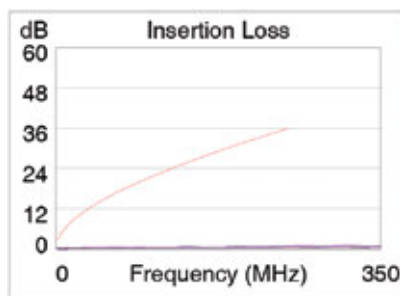
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3

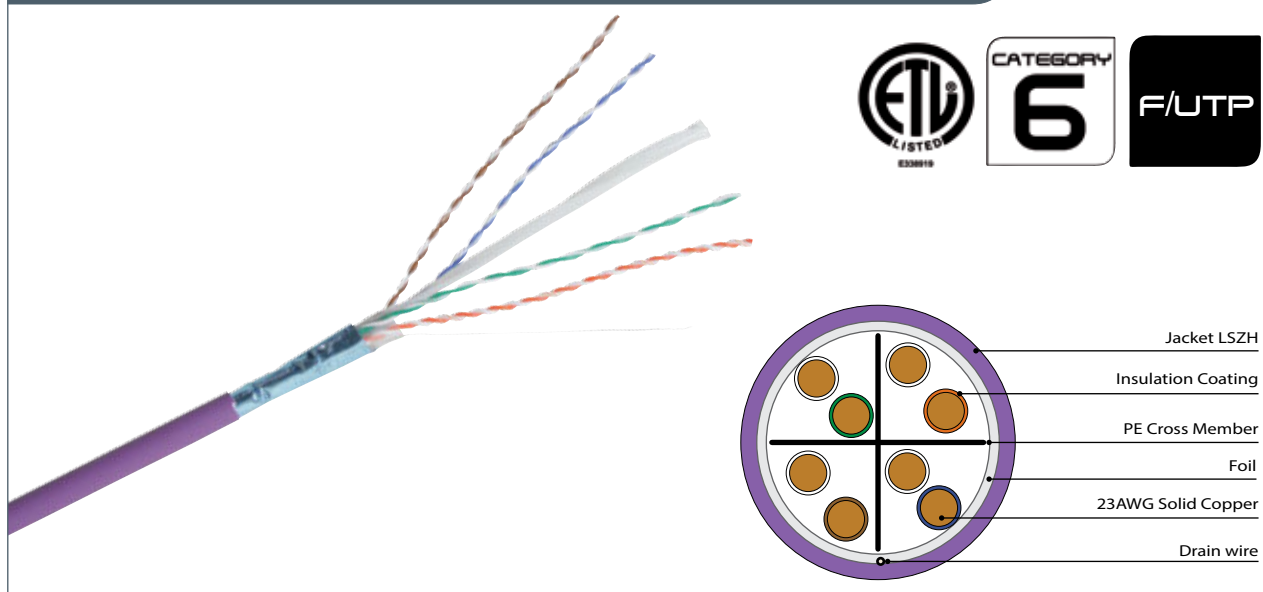


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT6 UTP 4pair LAN Grey CM PVC - UL Approved 305m Box	UTP6305PVC
OptronicsPLUS CAT6 UTP 4pair LAN Grey CM PVC - UL Approved 500m Box	UTP6500PVC



Category 6 F/UTP Low Smoke Zero Halogen Cable



OptronicsPlus Category 6 F/UTP LSZH cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 23 AWG conductor – solid bare copper cable
- > LSZH external jacket
- > Supplied in 305m boxes or 500 reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Fire Performance

Category 6 F/UTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Our Category 6 F/UTP LSZH cable exceeds the minimum specified performance for Category 6 F/UTP cables and support all Class E applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Applicable Standards

The Category 6 F/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.57mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 40dB

Mechanical Characteristics

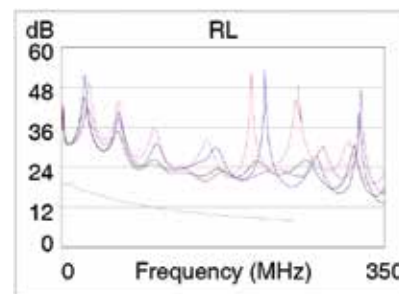
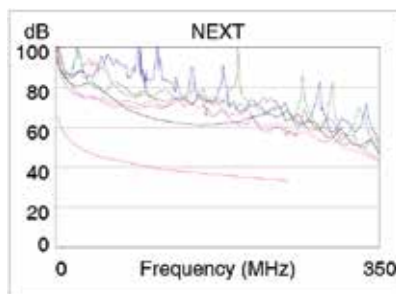
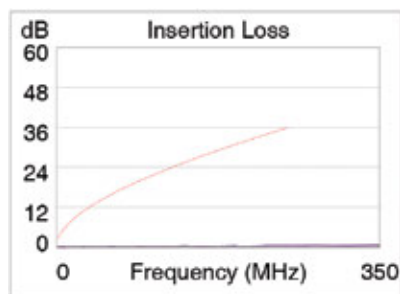
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3

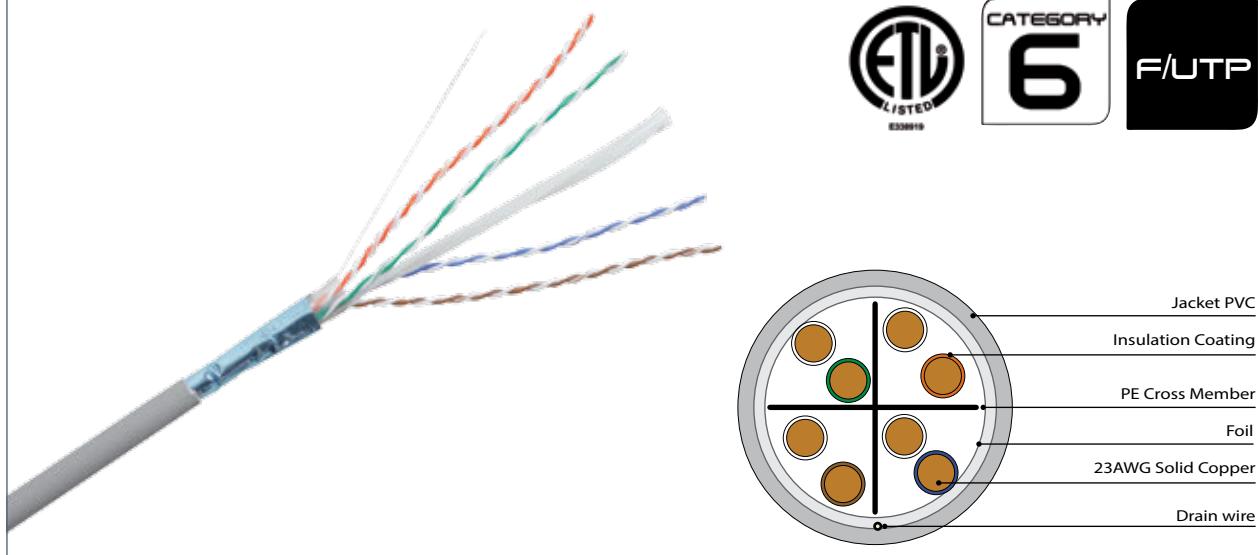


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT6 FTP 4pair LAN Violet LSZH - ETL Approved 305m Box	FTP6305LSZH
OptronicsPLUS CAT6 FTP 4pair LAN Violet LSZH - ETL Approved 500m Box	FTP6500LSZH



Category 6 F/UTP PVC Cable



OptronicsPlus Category 6 F/UTP PVC cables is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 23 AWG conductor – solid bare copper cable
- > PVC external jacket
- > Supplied in 305m boxes or 500 reels
- > Printed metre marks

Applications

- > Supports category 6 (class E) networks running up to 250 MHz applications
- > Backwards compatible with category 5e distribution systems
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > 100 Base T (IEEE 802.3U)
- > 1000 Base T (IEEE 802.3ab)
- > 100 VG any LAN (IEEE 802.12)
- > Token ring (IEEE 805.5)

Fire Performance

Category 6 F/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2

Our Category 6 F/UTP PVC cable exceeds the minimum specified performance for Category 6 F/UTP cables and support all Class E applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbs-1, and 1G FCBASE-T.

Applicable Standards

The Category 6 F/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.57mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together around a polyethylene cross-filler to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of grey coloured polyvinyl chloride (PVC) compound (RAL 7035)

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 55dB

Mechanical Characteristics

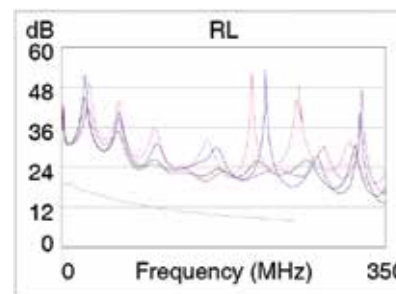
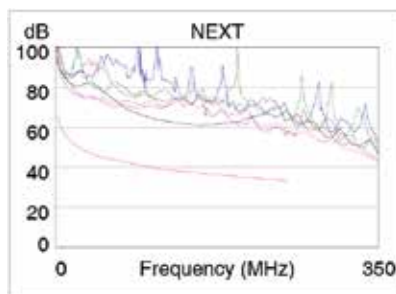
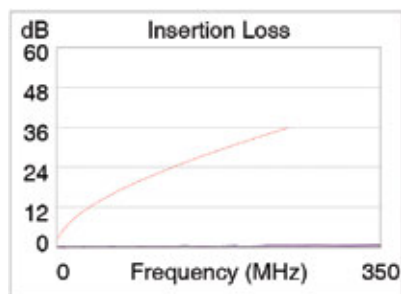
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	74.0	71.9	72.0	68	65	20
4	3.8	65.3	61.5	63.3	56	53	23
10	6.0	59.3	53.3	57.3	48	45	25
16	7.6	56.0	48.4	54.0	44	41	25
20	9.3	45.8	36.5	42.8	42	39	25
62.5	17.0	38.4	21.4	35.4	32	29	21.5
100	22.0	35.3	13.3	32.3	28	25	20.1
125	22.5	43.0	20.5	41.0	26	23	19.5
155.5	25.4	42.0	16.6	40.0	24	21	18.8
250	33.0	38.3	5.3	32.3	20	17	17.3



Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT6 FTP 4pair LAN Grey CM PVC - UL Approved 305m Box	FTP6305PVC
OptronicsPLUS CAT6 FTP 4pair LAN Grey CM PVC - UL Approved 500m Box	FTP6500PVC



Screened Category 6 RJ45 Patch Panel

24
PortsCATEGORY
6

SCREENED



Front view



Rear view

OptronicPlus Screened Category 6 patch panels exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The panels are designed for mechanical and electrical reliability whilst delivering a consistent high level of systems performance.

Features

- > 19" rack mountable
- > 24 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 250MHz
- > Durability:
 - Socket Contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Our Category 6 patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class E/Category 6 applications including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 6 patch panel - 24 port Black 1U	601-001



Screened Category 6 "High Density" RJ45 Patch Panel

48
PortsCATEGORY
6

SCREENED



Front view



Rear view

OptronicPlus Screened Category 6 "High Density" patch panels exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. These panels are genuine cabinet space saving products, which are designed for mechanical and electrical reliability whilst delivering a consistent high level of systems performance and halving

the cabinet space required in high density installations. Each Category 6 "High Density patch panel" complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class E/Category 6 applications including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > 19" rack mountable
- > 48 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 250MHz
- > Durability:
 - Socket Contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 6 "HD" patch panel - 48 port Black 1U	601-002



Unscreened Category 6 RJ45 Patch Panel

24
Ports48
PortsTHIRD PARTY
TESTING
3PCATEGORY
6

UNSCREENED



Front view
24 port patch panel



Rear view
48 port patch panel

OptronicsPlus Unscreened Category 6 patch panels range exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The products are designed for mechanical and electrical reliability, using quality materials and processes, to deliver a panel solution which

delivers a consistent high level of systems performance. Each Category 6 patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class E/Category 6 applications including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > 19" rack mountable
- > 24 ports in 1U space, 48 ports in 2U space
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > 6 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Colour coded wiring blocks for easy cabling lacing
- > Individual port identification
- > Rear cable management bar
- > Cage nuts included as standard
- > Electrically compliant beyond 250MHz
- > Durability:
 - Socket Contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Category 6 RJ45 patch panel, 24 port Black 1U	600-001
Unscreened Category 6 RJ45 patch panel, 48 port Black 2U	600-002



Screened Category 6 RJ45 Tool Free Keystone Jacks



OptronicsPlus Screened Category 6 Tool Free RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The jacks have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that minimises the time required by the installer to complete each termination.

Each Category 6 Modular RJ45 keystone jack complies with IEC 60603-7-Pt 5 (screened) and support all applications designed for Class E networks, as defined within ISO/IEC 11801:2011 including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing for a seamless cover and uniform shielding
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for the best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > Low insertion force 'clam action' of assists tool-less termination
- > Colour coded and keyed stuffer-cap for reliable installation
- > Integral cable strain relief
- > Electrically compliant beyond 250MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 6 tool free keystone jack	601-101
Unloaded keystone patch panel	400-001

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Unloaded Keystone Patch Panel for use with Tool free Screened 6_A RJ45 Keystone Jack

Unloaded Keystone Patch Panel
Part Number: 400-001

Scan for More Information



Tool Free Unscreened Category 6 RJ45 Keystone Jacks



Top view

OptronicsPlus Category 6 Tool Free RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The jacks have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that minimises the time required by the installer to complete each termination. Each Category 6

Tool Free RJ45 keystone jack complies with IEC 60603-7-Pt 4 (unscreened) and support all applications designed for Class E networks, as defined within ISO/IEC 11801:2011 including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing process
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for the best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > Low insertion force 'clam action' of assists tool-less termination
- > Colour coded and keyed stuffer-cap for reliable installation
- > Integral cable strain relief
- > Electrically compliant beyond 250MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Category 6 tool free keystone jack, black	600-101
Unscreened Category 6 tool free keystone jack, white	600-102
Unloaded keystone patch panel	400-001



Unscreened Category 6 RJ45 Keystone Jacks



Top view

OptronicsPlus Category 6 RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The jacks have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that optimises the termination process through the use of a universal wiring block. Each Category 6

RJ45 keystone jack complies with IEC 60603-7-Pt 4 (unscreened) and support all applications designed for Class E networks as defined within ISO/IEC 11801 (2nd Edition): 2010 such as ATM 1200, 1000BASE-T (Gigabit Ethernet), and 1G FCBASE-T.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing process
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > LSA punch down tool termination
- > Colour coded wiring blocks assist termination
- > Electrically compliant beyond 250MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Category 6 keystone jack - Black	600-103
Unscreened Category 6 keystone jack - White	600-104
Unloaded keystone patch panel	400-001

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011



Unscreened Category 6 'Keystone Type' In-Line Coupler



OptronicsPlus Category 6 "Keystone Type" In-Line couplers conform to line performance requirements of IEC and TIA for Class E/Category 6 systems. They follow the industry standard RJ45 footprint and due to small form design they are perfect for higher density applications and short plug to plug data room back-up installations.

Features

- > Small form RJ45 footprint design
- > Fits all keystone style faceplates and floor boxes
- > Suitable for patch panel installation
- > Shielded version available (call for details)

Technical Specification

MECHANICAL	VALUE
Housing Material	ABS+PC UL94V-0
IDC Material	Phosphor Bronze Stamp Pin 0.35mm
Contact Material	Phosphor Bronze + Gold Plating 0.50mm
Shield Material	Bronze, Nickel Plated
RJ45 Jack Life	Min 750 Insertions (ISO/IEC 11801)
Operating Temp.	-10°C to 60°C (ISO/IEC 11801)

Ordering Information

DESCRIPTION	PART NUMBER
Unshielded Category 6 "Keystone Type" In-Line Coupler - Black	600-501
Unshielded Category 6 "Keystone Type" In-Line Coupler - White	600-502
Screened Category 6 "Keystone Type" In-Line Coupler	601-501

Category 6 "Keystone Type" In-Line couplers support all applications designed for Class E networks as defined within ISO/IEC 11801:2011 including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC



Unscreened Category 6 Low Profile Shuttered Modules



P/N: 600-301



P/N: 600-401



Rear view



OptronicsPlus Category 6 low profile shuttered RJ45 modules exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The products have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that is optimised for shallow back boxes.

Each Category 6 low profile shuttered RJ45 module complies with IEC 60603-7-Pt 4 and support all applications designed for Class E networks as defined within ISO/IEC 11801:2011 including ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > Euro-Mod and LJ6C versions
- > 50 micro-inch gold plated contact pins
- > Integral shuttered fascia
- > Supports TIA 568A & B wiring configurations
- > Universal 110 and LSA tool termination
- > Integral cable strain relief
- > Electrically compliant beyond 250MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2001
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened LJ6C Category 6 Low Profile Shuttered Module 38.5mm x 25mm White	600-301
Unscreened Category 6 Low Profile Shuttered Module 50mm x 25mm White	600-401



Work Area Outlets Keystone Boxes



Optronics offer a range of Mounted Keystone Boxes that can accept: CAT5e, CAT6, or CAT6A keystone jacks. These boxes

are perfect for surface/wall mounted applications within a network.

Features

- > Constructed from durable ABS plastic with a high quality finish
- > Comes in 1, 2 and up to 12 port configurations
- > Easy to assemble and reduces installation times
- > Mounts easily with supplied mounting screws
- > Compatible with the majority of Optronics Cat 5e, Cat 6 and Cat 6A keystones*

*Not all keystone types are compatible. For more information please check with your sales representative.

Applications

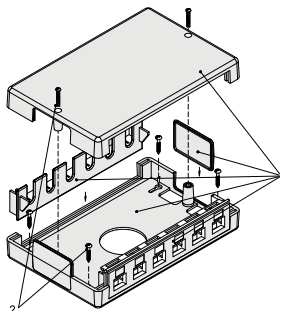
- > Internal application
- > Telecommunication and premise networks

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

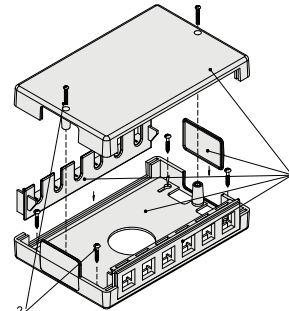
Drawing

Keystone box
(170 × 112 × 38 mm)



1. Box housing
2. Screw

Module insert box
(170 × 112 × 38 mm)



1. Box housing
2. Screw



12 port mounted box for keystone jacks/module inserts

Product consists of x1 box, x2 front panels and x1 cable guide. Can be used in 6 port or 12 port configurations with multiple cable entry points available.

Technical Specification

DESCRIPTION	KEYSTONE BOX	MODULE INSERT BOX
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	170	170
Width (mm)	112	112
Depth (mm)	38	38
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Mounted box for keystone jacks only - White	101-001
Mounted box for module insert of BNC, F and fibre adaptors - White	101-002

Single and double port mounted keystone box with out shutter

Technical Specification

DESCRIPTION	1-PORT BOX W/O SHUTTER	2-PORT BOX W/O SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	30	30
Width (mm)	50	50
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-003
Double port mounted box, without shutter - White	101-004

Single and double port mounted keystone box with shutter

Technical Specification

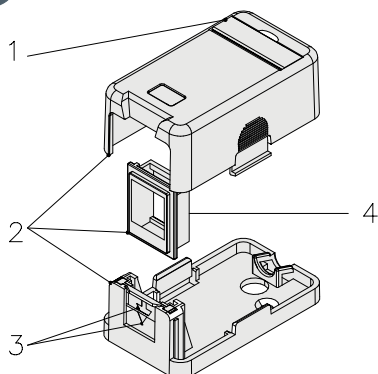
DESCRIPTION	1-PORT BOX WITH SHUTTER	2-PORT BOX WITH SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	37	63
Width (mm)	65	65
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-005
Double port mounted box with shutter - White	101-006

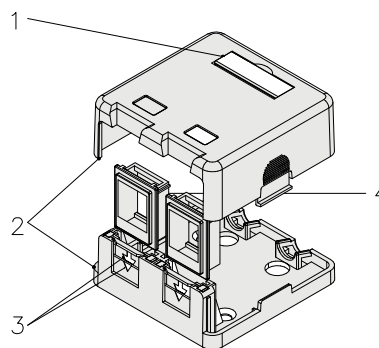
Drawing

1-port w/ shutter
(37 × 65 × 30 mm)



- 1. Identification
- 2. Box
- 3. Dust Cover
- 4. Insert

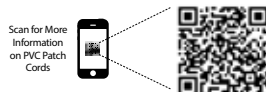
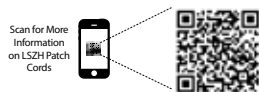
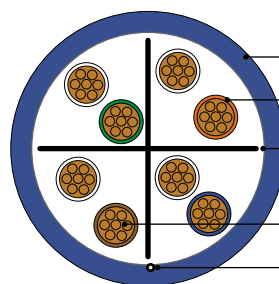
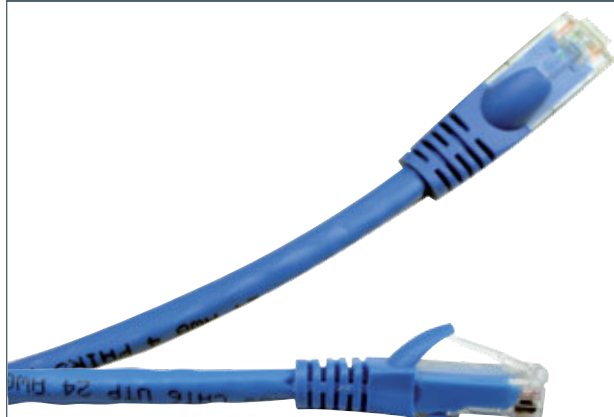
2-port w/ shutter
(63 × 65 × 30 mm)



- 1. Identification
- 2. Box
- 3. Dust Cover
- 4. Insert



Unscreened Category 6 Patch Cords



Category 6 unscreened patch cord range exceeds the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The patch cords are designed for mechanical and electrical reliability, using quality materials and processes, to provide a patch cord solution which delivers a consistent high level of systems performance whilst incorporating design features that allow a “one style fits all” cord application. The low profile moulded boot and snag free

latching allows the cords to be deployed within even the most densely populated network installations deploying the latest blade server technology.

Each Category 6 patch cords are manufactured and tested in accordance with IEC 61935-2 and comply with the requirements of ISO/IEC 11801 and supports all applications designed or Class E/Category 6 applications such as ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > Low profile moulded strain relief boot to use with blade servers
- > Integral anti-snag latch as standard
- > RJ45 plug with two point “U shape” prongs
- > 50 micro-inch gold plated contact pins
- > Stranded high purity copper wire
- > Integral internal plug wire management and wire cross member (to improve Cross-Talk parameters)
- > Aluminised polyester tape screen and drain wire
- > Low Smoke Zero Halogen sheathed cable as standard, PVC upon request
- > Multiple length and colour option
- > Individually bagged with traceability information
- > Electrically compliant beyond 250MHz

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-6
- > EN 50288-5-2

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed (PVC assemblies)
- > REACH/SVHC

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	24
	Size (mm)	7 x 0.192mm
	Material	Bare Copper
Insulators	Diameter (mm)	0.98
	Material	HDPE
Jacket	External O.D. (mm)	6.0 +/- 0.20
	Thickness (mm)	0.51
	Material	LSZH or PVC



PVC

GREY	PART NUMBER	METRE
	610-101	1
	610-102	2
	610-103	3
	610-105	5
	610-110	10
	610-115	15
	610-120	20
	610-201	1
	610-202	2
	610-203	3
	610-205	5
	610-210	10
	610-215	15
	610-220	20
	610-301	1
RED	610-302	2
	610-303	3
	610-305	5
	610-310	10
BLUE	610-315	15
	610-320	20

YELLOW	PART NUMBER	METRE
	610-401	1
	610-402	2
	610-403	3
	610-405	5
	610-410	10
	610-415	15
	610-520	20
	610-501	1
	610-502	2
	610-503	3
	610-505	5
	610-610	10
	610-515	15
	610-520	20
	610-601	1
GREEN	610-602	2
	610-603	3
	610-605	5
	610-610	10
WHITE*	610-615	15
	610-620	20

BLACK ^Δ	PART NUMBER	METRE
	610-701	1
	610-702	2
	610-703	3
	610-705	5
	610-710	10
	610-715	15
	610-720	20
	610-701	1
	610-702	2
	610-703	3
	610-705	5
	610-710	10
	610-715	15
	610-720	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

LSZH

GREY	PART NUMBER	METRE
	620-101	1
	620-102	2
	620-103	3
	620-105	5
	620-110	10
	620-115	15
	620-120	20
	620-201	1
	620-202	2
	620-203	3
	620-205	5
	620-210	10
	620-215	15
	620-220	20
	620-301	1
RED	620-302	2
	620-303	3
	620-305	5
	620-310	10
BLUE	620-315	15
	620-320	20

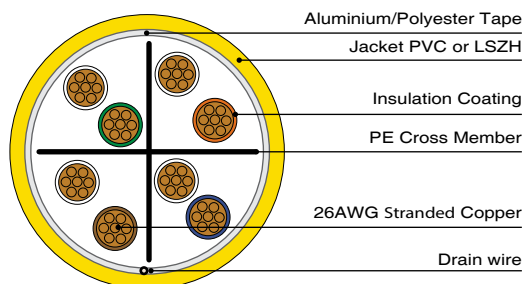
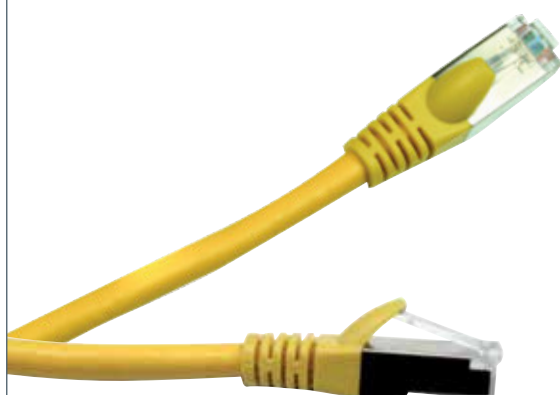
YELLOW	PART NUMBER	METRE
	620-401	1
	620-402	2
	620-403	3
	620-405	5
	620-410	10
	620-415	15
	620-420	20
	620-501	1
	620-502	2
	620-503	3
	620-505	5
	620-510	10
	620-515	15
	620-620	20
	620-601	1
GREEN	620-602	2
	620-603	3
	620-605	5
	620-610	10
WHITE*	620-615	15
	620-620	20

BLACK ^Δ	PART NUMBER	METRE
	620-701	1
	620-702	2
	620-703	3
	620-705	5
	620-710	10
	620-715	15
	620-720	20
	620-801	1
	620-802	2
	620-803	3
	620-805	5
	620-810	10
	620-815	15
	620-820	20

^ΔWhite, Orange and Black may be subject to minimum order quantities



Screened Category 6 Patch Cords



Category 6 screened patch cord range exceed the transmission line performance requirements of IEC and TIA for Class E/Category 6 systems. The products are designed for mechanical and electrical reliability using quality materials and processes to deliver a patch cord solution which delivers a consistent high level of systems performance whilst incorporating design features that allow a "one style fits all" cord application. The low profile moulded boot and snag free latching allows the cords to

be deployed within even the most densely populated network installations deploying the latest blade server technology.

Each Category 6 patch cords are manufactured and tested in accordance with IEC 61935-2 and comply with the requirements of ISO/IEC 11801:2011 and TIA 568C and support all applications designed for Class E/Category 6 applications such as ATM 1200, 1000BASE-T (Gigabit Ethernet) and 1G FCBASE-T.

Features

- > Low profile moulded strain relief boot to use with blade servers
- > Integral internal anti-snag latch as standard
- > RJ45 plug with two point "U shape" prongs
- > 50 micro-inch gold plated contact pins
- > Stranded high purity copper wire
- > Integral internal plug wire management (to improve Cross-Talk parameters)
- > Aluminised polyester tape screen and drain wire
- > Low Smoke Zero Halogen sheathed cable as standard, PVC upon request
- > Multiple length and colour option
- > Individually bagged with traceability information
- > Electrically compliant beyond 250MHz

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-6
- > EN 50288-6-2

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed (PVC assemblies)
- > REACH/SVHC

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size (mm)	0.915 +/- 0.008
	Material	Bare Copper
Insulators	Diameter (mm)	0.97 +/- 0.05
	Material	Polyolefin
Jacket	External O.D.	6.0 +/- 0.20
	Thickness (mm)	0.5
	Material	PVC/LSZH
Tape	Material	Aluminium/Polyester
	Coverage (%)	125



PVC

GREY	PART NUMBER	METRE
	630-101	1
	630-102	2
	630-103	3
	630-105	5
	630-110	10
	630-115	15
	630-120	20
	630-201	1
	630-202	2
RED	630-203	3
	630-205	5
	630-210	10
	630-215	15
	630-220	20
BLUE	630-301	1
	630-302	2
	630-303	3
	630-305	5
	630-310	10
	630-315	15
	630-320	20

YELLOW	PART NUMBER	METRE
	630-401	1
	630-402	2
	630-403	3
	630-405	5
	630-410	10
	630-415	15
	630-520	20
	630-501	1
	630-502	2
GREEN	630-503	3
	630-505	5
	630-630	10
	630-515	15
	630-520	20
WHITE ^Δ	630-601	1
	630-602	2
	630-603	3
	630-605	5
	630-630	10
	630-615	15
	630-620	20

BLACK ^Δ	PART NUMBER	METRE
	630-701	1
	630-702	2
	630-703	3
	630-705	5
	630-710	10
	630-715	15
	630-720	20
	630-701	1
	630-702	2
ORANGE ^Δ	630-703	3
	630-705	5
	630-710	10
	630-715	15
	630-720	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

LSZH

GREY	PART NUMBER	METRE
	640-101	1
	640-102	2
	640-103	3
	640-105	5
	640-110	10
	640-115	15
	640-120	20
	640-201	1
	640-202	2
RED	640-203	3
	640-205	5
	640-210	10
	640-215	15
	640-220	20
BLUE	640-301	1
	640-302	2
	640-303	3
	640-305	5
	640-310	10
	640-315	15
	640-320	20

YELLOW	PART NUMBER	METRE
	640-401	1
	640-402	2
	640-403	3
	640-405	5
	640-410	10
	640-415	15
	640-420	20
	640-501	1
	640-502	2
GREEN	640-503	3
	640-505	5
	640-510	10
	640-515	15
	640-640	20
WHITE ^Δ	640-601	1
	640-602	2
	640-603	3
	640-605	5
	640-610	10
	640-615	15
	640-640	20

BLACK ^Δ	PART NUMBER	METRE
	640-701	1
	640-702	2
	640-703	3
	640-705	5
	640-710	10
	640-715	15
	640-720	20
	640-801	1
	640-802	2
ORANGE ^Δ	640-803	3
	640-805	5
	640-810	10
	640-815	15
	640-820	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

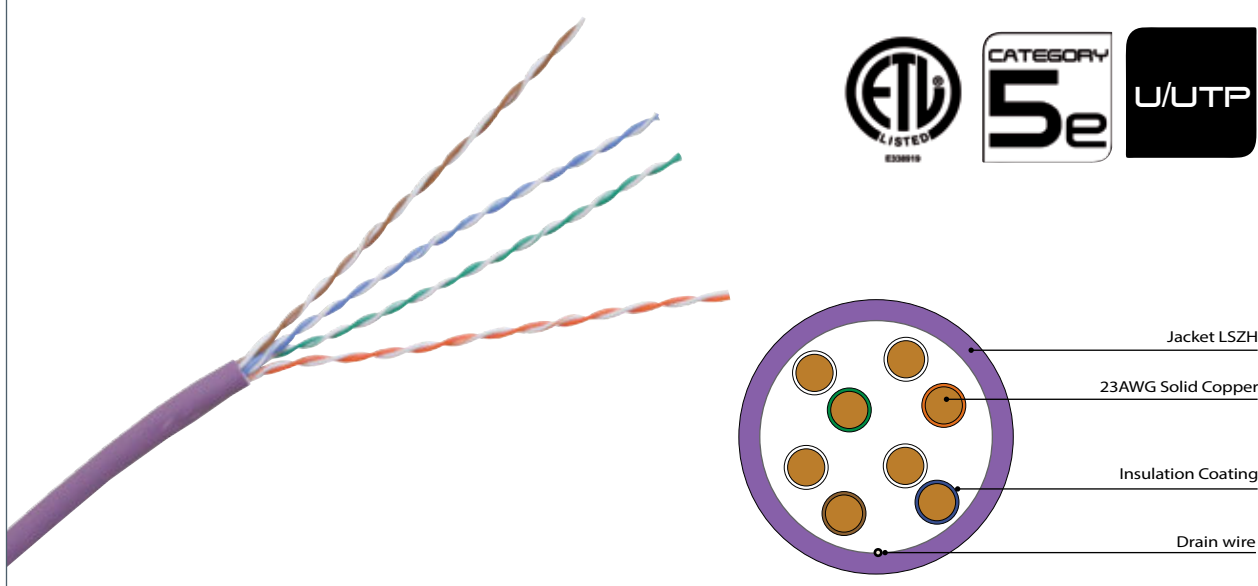


Optronics**PLUS** Copper Cabling System

Category 5e

Cable	314
Patch Panels	322
Keystone Jacks	325
Shuttered Modules	328
Work Area Outlets Keystone Boxes	329
Patch Cords	331

Category 5e U/UTP Low Smoke Zero Halogen Cable



OptronicsPlus Category 5e U/UTP LSZH cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres. Our

Category 5e U/UTP LSZH cable exceeds the minimum specified performance for Category 5e U/UTP cables and supports all Class D applications as defined within ISO/IEC 11801:2011 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbs-1, and 1G FCBASE-T.

Features

- > 24 AWG conductor – solid bare copper cable
- > LSZH external jacket
- > Supplied in 305m box
- > Printed metre marks

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Fire Performance

Category 5e U/UTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Applicable Standards

The Category 5e U/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-3-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km

Mechanical Characteristics

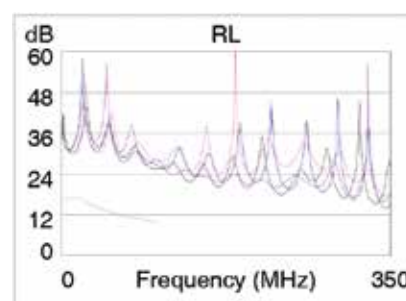
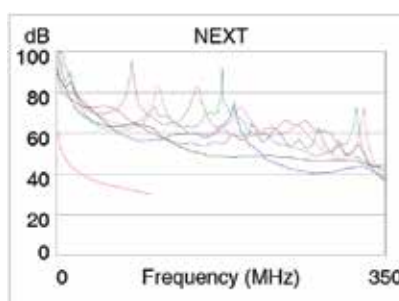
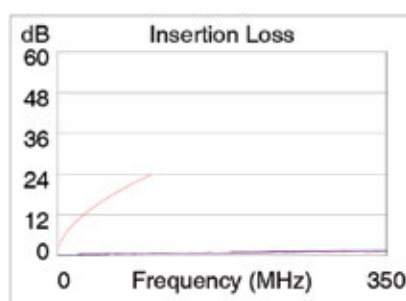
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

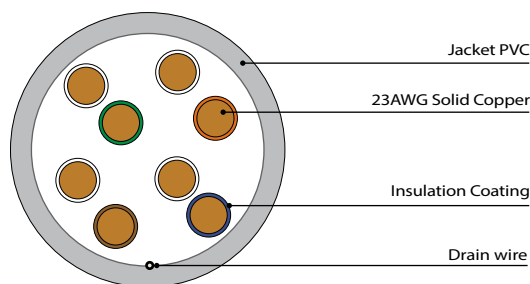
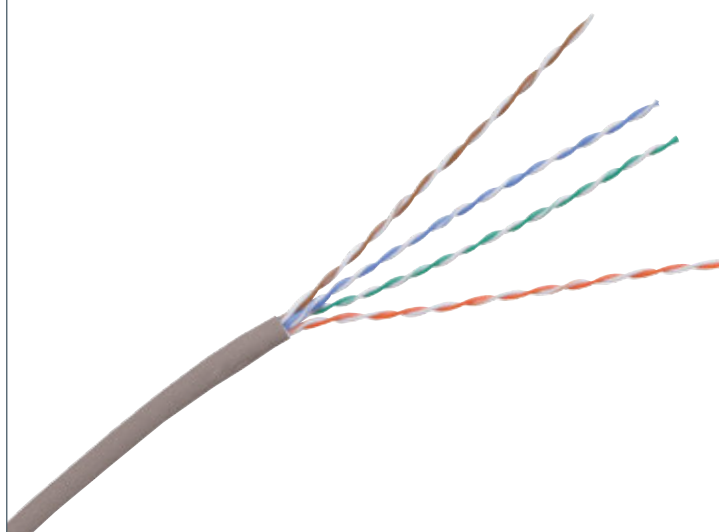


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT5e UTP 4pair LAN Violet LSZH - ETL Approved 305m Box	UTP5E305LSZH
OptronicsPLUS CAT5e UTP 4pair LAN Violet LSZH - ETL Approved 500m Box	UTP5E500LSZH



Category 5e U/UTP PVC Cable



OptronicsPlus Category 5e U/UTP PVC cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 24 AWG conductor – solid bare copper cable
- > PVC external jacket
- > Supplied in 305m box
- > Printed metre marks

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Fire Performance

- Category 5e U/UTP PVC cables exceed the requirements of:
- > IEC 60332-1-2

Our Category 5e U/UTP PVC cable exceeds the minimum specified performance for Category 5e U/UTP cables and support all Class D applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Applicable Standards

The Category 5e U/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Sheath	A uniform layer of grey coloured PVC compound (RAL 7035)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km
Transfer Impedance	≥ 40dB

Mechanical Characteristics

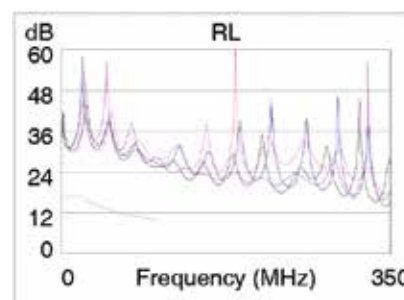
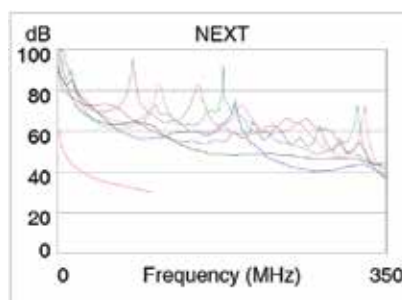
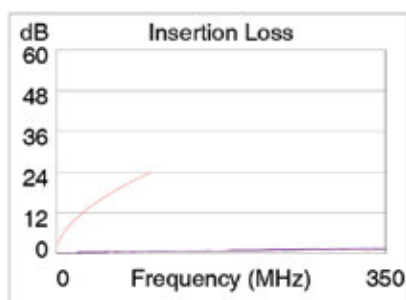
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB 38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

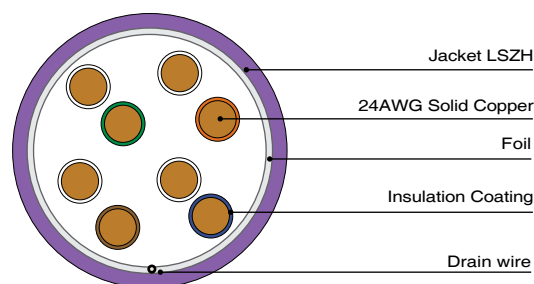
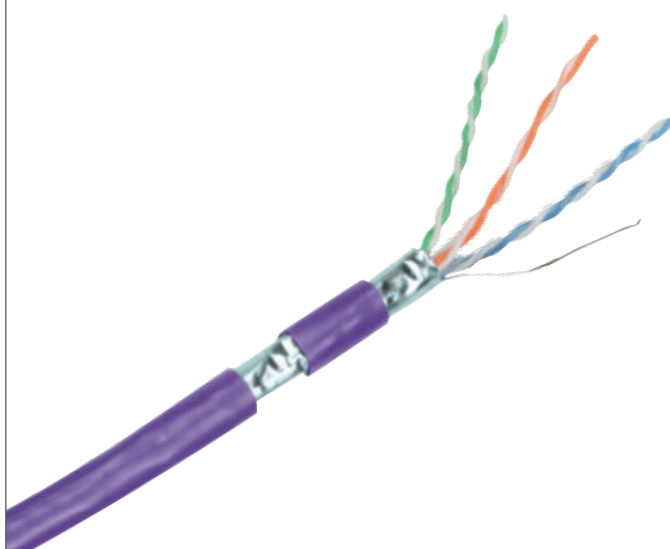


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT5e UTP Cable 305m Box CM PVC - UL Approved	UTP5E305PVC
OptronicsPLUS CAT5e UTP Cable 500m Box CM PVC - UL Approved	UTP5E500PVC



Category 5e F/UTP Low Smoke Zero Halogen Cable



OptronicPlus Category 5e F/UTP LSZH cables is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Our Category 5e F/UTP LSZH cable exceeds the minimum specified performance for Category 5e F/UTP cables and support all Class D applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Features

- > 24 AWG conductor – solid bare copper
- > LSZH external jacket
- > Supplied in 305m box
- > Printed metre marks
- > PVC, LSZH and PE options

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > External horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Fire Performance

Category 5e F/UTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

Applicable Standards

The Category 5e F/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 24AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km

Mechanical Characteristics

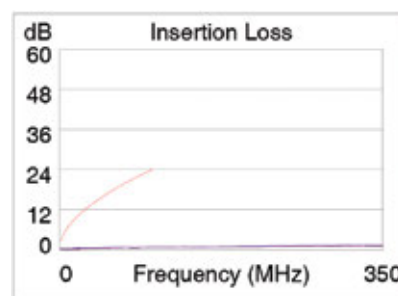
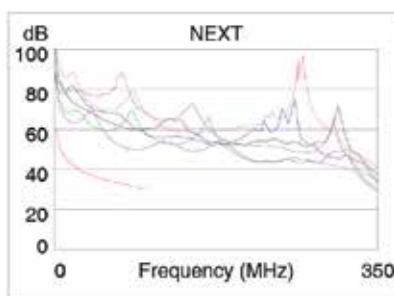
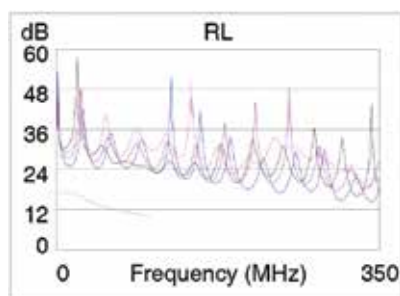
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

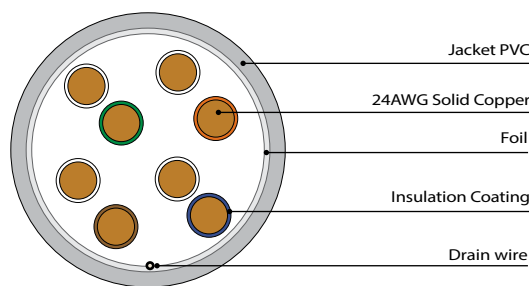
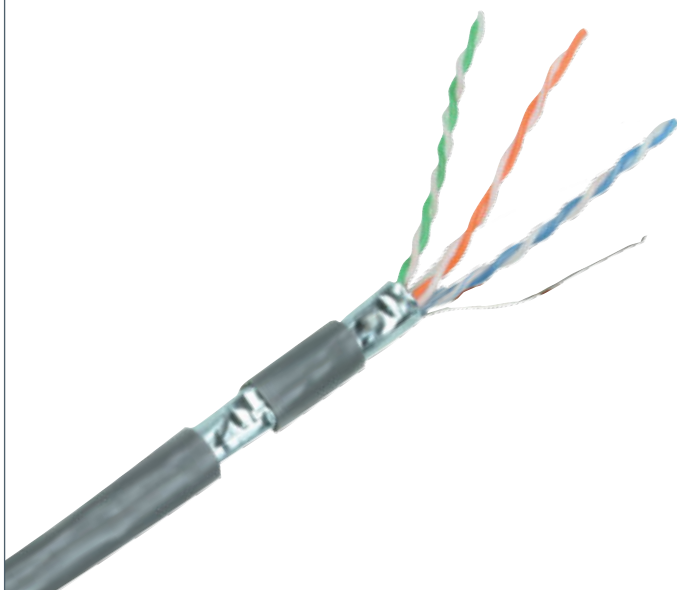


Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT5e FTP 4pair LAN Violet LSZH - ETL Approved 305m Box	FTP5E305LSZH
OptronicsPLUS CAT5e FTP 4pair LAN Violet LSZH - ETL Approved 500m Box	FTP5E500LSZH



Category 5e F/UTP PVC Cable



OptronicsPlus Category 5e F/UTP PVC cables is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Features

- > 24 AWG conductor – solid bare copper
- > PVC external jacket
- > Supplied in 305m box
- > Printed metre marks
- > PVC, LSZH and PE options

Applications

- > Supports category 5e (class D) networks running up to 100 MHz applications
- > Ideal for environments where heavy external interference can disrupt signal such as EMI
- > External horizontal and backbone installations
- > 10 Base T (IEEE 802.3)
- > Token ring (IEEE 805.5)
- > 100 Base T (IEEE 802.3U)
- > ATM 155
- > 100 VG any LAN (IEEE 802.12)

Fire Performance

Category 5e F/UTP PVC cables exceed the requirements of:

- > IEC 60332-1-2

Our Category 5e F/UTP PVC cable exceeds the minimum specified performance for Category 5e F/UTP cables and support all Class D applications as defined within ISO/IEC 11801:2011 such as 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbs-1, and 1G FCBASE-T.

Applicable Standards

The Category 5e F/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-5
- > EN 50288-2-1

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed
- > REACH/SVHC
- > Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green



Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 24AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of grey coloured PVC compound (RAL 7035)
Diameter	5.0mm

ELECTRICAL PROPERTIES AT 20°C	
Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC Loop Resistance	≤ 19.0Ω/100m
Resistance Unbalance	≤ 2%
Capacitance Unbalance to Earth	≤ 1600 pF/km
Nominal Velocity of Propagation	67%
Propagation Delay (Nominal)	≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor	1000V
Insulation Resistance (500V d.c)	≥ 500MΩ.km

Mechanical Characteristics

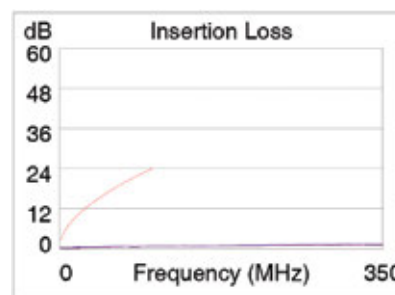
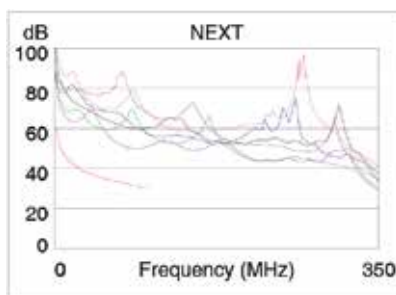
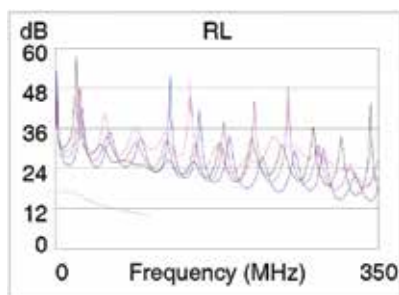
TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	42.0NEXT dB38.3	ACR dB/100M	PSNEXT dB	ELFEXT dB/100M	PSELFEXT dB/100M	RETURN LOSS
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1



Ordering Information

DESCRIPTION	PART NUMBER
OptronicsPLUS CAT5e FTP 4pair LAN Grey CM PVC - UL Approved 305m Box	FTP5E305PVC
OptronicsPLUS CAT5e FTP 4pair LAN Grey CM PVC - UL Approved 500m Box	FTP5E500PVC



Screened Category 5e RJ45 Patch Panel

24
Ports

Front view

CATEGORY
5e

SCREENED



Rear view

OptronicPlus Screened Category 5e patch panels exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The panels are designed for mechanical and electrical reliability using quality materials and processes to deliver a panel solution which delivers a consistent high level of systems performance. Our Category 5e patch

panels comply with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class D/Category 5e applications including 1000BASE-T (Gigabit Ethernet), ATM 155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Features

- > 19" rack mountable
- > 24 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 100MHz
- > Durability:
 - Socket Contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 5e patch panel, 24 port Black 1U	501-001



Screened Category 5e "High Density" RJ45 Patch Panel

48
Ports



Front view

CATEGORY
5e

SCREENED



Rear view

OptronicsPlus Screened Category 5e "High Density" patch panels exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. These are 'real' cabinet space saving products designed for mechanical and electrical reliability. The "High Density" panel delivers a consistent high level of systems performance whilst halving

the cabinet space required in high density installations. Each Category 5e "High Density" patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class D/Category 5e applications such as 1000BASE-T (Gigabit Ethernet), ATM 155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Features

- > 19" rack mountable
- > 48 ports in 1U space
- > 50 micro-inch gold plated contact pins
- > 8 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Right-angled wiring block orientation for easier installation
- > Colour coded wiring blocks for easy cabling lacing
- > Integral rear cable management
- > Earthing kit and cage nuts included as standard
- > Electrically compliant beyond 100MHz
- > Durability:
 - Socket contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

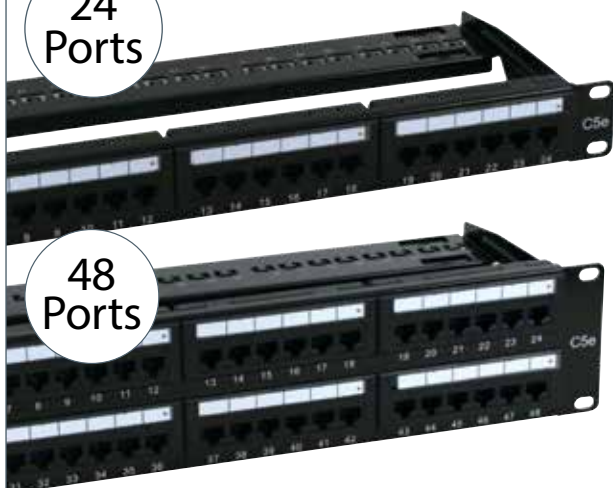
- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Category 5e "HD" patch panel, 48 port, Black, 1U	501-002



Unscreened Category 5e RJ45 Patch Panel

24
Ports48
Ports

Front view



Rear view

OptronicsPlus Category 5e patch panels exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The panels are designed for mechanical and electrical reliability using quality materials and processes to deliver a panel solution which delivers a consistent high level of systems performance. Each Category

5e patch panel complies with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class D/Category 5e applications including 1000BASE-T (Gigabit Ethernet), ATM 155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Features

- > 19" rack mountable
- > 24 ports in 1U space / 48 ports in 2U space
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of contact pins)
- > 6 port RJ45 wiring block
- > Terminates 22AWG to 26AWG cables
- > Supports TIA 568A & B wiring configurations
- > Universal LSA / 110 termination option
- > Colour coded wiring blocks for easy cabling lacing
- > Individual port identification
- > Rear cable management bar
- > Cage nuts included as standard
- > Electrically compliant beyond 100MHz
- > Durability:
 - Socket contacts: 750 plug insertion cycles minimum
 - Wiring block: 25 termination cycles minimum

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Category 5e patch panel, 24 port, Black, 1U	500-001
Unscreened Category 5e patch panel, 48 port, Black, 2U	500-002



Tool Free Screened Category 5e RJ45 Keystone Jacks



Top view

OptronicPlus Category 5e tool free RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The products have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that minimises the time required by the installer to complete each termination.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing for a seamless cover and uniform shielding
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > Low insertion force 'clam action' of assists tool-less termination
- > Colour coded and keyed stuffer-cap for reliable installation
- > Integral cable strain relief
- > Electrically compliant beyond 100MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Each Category 5e modular RJ45 keystone jacks complies with IEC 60603-7-Pt 3 (screened) and support all applications designed for Class D networks as defined within ISO/IEC 11801:2011 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbs-1, and 1G FCBASE-T.

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Screened Cat5e Tool Free keystone jack, White	501-101
Unloaded Keystone patch panel	400-001



Tool Free Unscreened Category 5e RJ45 Keystone Jacks



Top view

OptronicsPlus Category 5e Tool Free RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The products have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that minimises the time required by the installer to complete each termination.

Each Category 5e Tool Free RJ45 keystone jack complies with IEC 60603-7-Pt 2 (unscreened) and support all applications designed for Class D networks as defined within ISO/IEC 11801:2001 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing process
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > Low insertion force 'clam action' of assits tool-less termination
- > Colour coded and keyed stuffer-cap for reliable installation
- > Integral cable strain relief
- > Electrically compliant beyond 100MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Cat5e Tool Free keystone jack - Black	500-101
Unscreened Cat5e Tool Free keystone jack - White	500-102
Unloaded Keystone patch panel	400-001



Unscreened Category 5e RJ45 Keystone Jacks



Top view

OptronicPlus Category 5e RJ45 keystone jacks exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The jacks have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that optimises the termination process through the use of a universal wiring block. Each

Category 5e RJ45 keystone jack complies with IEC 60603-7-Pt 2 (unscreened) and support all applications designed for Class D networks as defined within ISO/IEC 11801:2011 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1, and 1G FCBASE-T.

Features

- > Fits all keystone style faceplates and floor boxes
- > Suitable for modular patch panel installation
- > Die-cast manufacturing process
- > 50 micro-inch gold plated contact pins
- > Contact pins supporter for best performance and reliability (to maintain the shape, specific bend and to secure position of the contact pins)
- > Supports TIA 568A & B wiring configurations
- > LSA punch down tool termination
- > Colour coded wiring blocks assist termination
- > Electrically compliant beyond 100MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened Category 5e keystone jack - Black	500-103
Unscreened Category 5e keystone jack - White	500-104
Unloaded Keystone patch panel	400-001



Unscreened Category 5e Low Profile Shuttered Modules



P/N: 500-301



P/N: 500-401



Rear view

OptronicsPlus Category 5e low profile shuttered RJ45 modules exceed the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. These modules have been designed for mechanical and electrical reliability, using quality materials, to deliver a jack solution that is optimised

for shallow back boxes. Each Category 5e low profile shuttered RJ45 module complies with IEC 60603-7-Pt 2 and support all applications designed for Class D networks as defined within ISO/IEC 11801:2011 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Features

- > Euro-Mod and LJ6C versions
- > 50 micro-inch gold plated contact pins
- > Integral shuttered facia
- > Supports TIA 568A & B wiring configurations
- > Universal 110 and LSA tool termination
- > Colour coded wiring blocks assist termination
- > Integral cable strain relief
- > Electrically compliant beyond 100MHz
- > Durability:
 - Jack contacts: min. 750 plug insertion cycles
 - Wiring block: min. 25 termination cycles

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011

Conformance

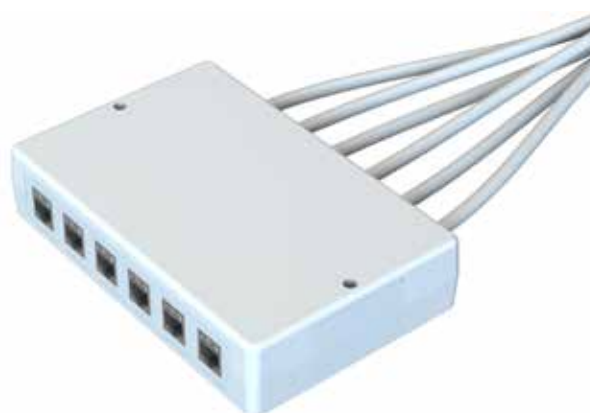
- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Ordering Information

DESCRIPTION	PART NUMBER
Unscreened LJ6C Category 5e Low Profile Shuttered Module 38.5mm x 25mm White	500-301
Unscreened Category 5e Low Profile Shuttered Module 50mm x 25mm White	500-401



Work Area Outlets Keystone Boxes



Optronics offer a range of Mounted Keystone Boxes that can accept: CAT5e, CAT6, or CAT6A keystone jacks. These boxes

are perfect for surface/wall mounted applications within a network.

Features

- > Constructed from durable ABS plastic with a high quality finish
- > Comes in 1, 2 and up to 12 port configurations
- > Easy to assemble and reduces installation times
- > Mounts easily with supplied mounting screws
- > Compatible with the majority of Optronics Cat 5e, Cat 6 and Cat 6A keystones*

*Not all keystone types are compatible. For more information please check with your sales representative.

Applications

- > Internal application
- > Telecommunication and premise networks

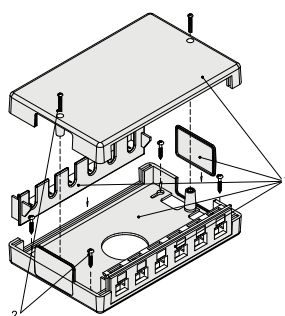
Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL 94V-0 (High-Impact Fire-Retardant plastic parts)
- > REACH/SVHC

Drawing

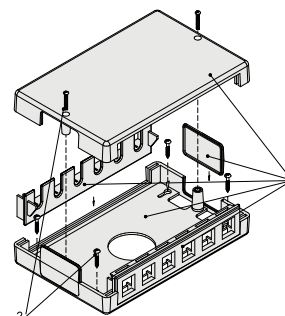
Keystone box
(170 × 112 × 38 mm)

1. Box housing
2. Screw



Module insert box
(170 × 112 × 38 mm)

1. Box housing
2. Screw



12 port mounted box for keystone jacks/module inserts

Product consists of x1 box, x2 front panels and x1 cable guide. Can be used in 6 port or 12 port configurations with multiple cable entry points available.

Technical Specification

DESCRIPTION	KEYSTONE BOX	MODULE INSERT BOX
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	170	170
Width (mm)	112	112
Depth (mm)	38	38
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Mounted box for keystone jacks only - White	101-001
Mounted box for module insert of BNC, F and fibre adaptors - White	101-002

Single and double port mounted keystone box with out shutter

Technical Specification

DESCRIPTION	1-PORT BOX W/O SHUTTER	2-PORT BOX W/O SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	30	30
Width (mm)	50	50
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-003
Double port mounted box, without shutter - White	101-004

Single and double port mounted keystone box with shutter

Technical Specification

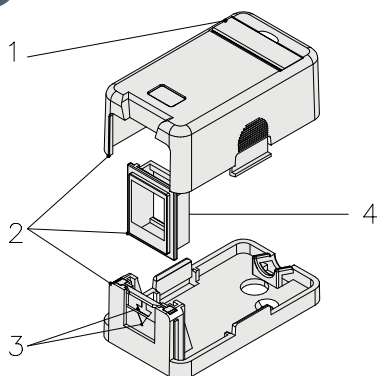
DESCRIPTION	1-PORT BOX WITH SHUTTER	2-PORT BOX WITH SHUTTER
Material	ABS, UL94V-0	ABS, UL94V-0
Length (mm)	37	63
Width (mm)	65	65
Depth (mm)	30	30
Colour	White	White

Ordering Information

DESCRIPTION	PART NUMBER
Single port mounted box, without shutter - White	101-005
Double port mounted box with shutter - White	101-006

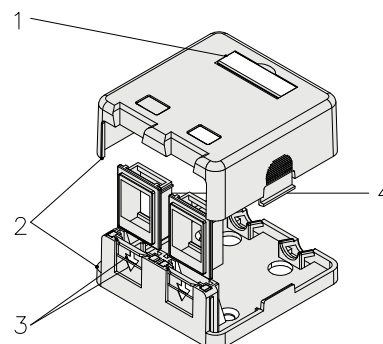
Drawing

1-port w/ shutter
(37 × 65 × 30 mm)



1. Identification
2. Box
3. Dust Cover
4. Insert

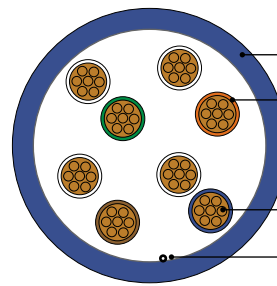
2-port w/ shutter
(63 × 65 × 30 mm)



1. Identification
2. Box
3. Dust Cover
4. Insert



Unscreened Category 5e Patch Cords

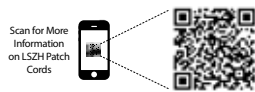
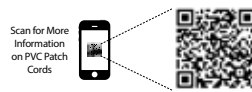


Jacket PVC or LSZH

Insulation Coating

24AWG Stranded Copper

Drain wire

Scan for More
Information
on LSZH Patch
CordsScan for More
Information
on PVC Patch
Cords

Category 5e unscreened patch cord range exceeds the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The patch cords are designed for mechanical and electrical reliability, using quality materials and processes, to deliver a solution which delivers a consistent high level of systems performance whilst incorporating design features that allow a “one style fits all” patch cord application. The low profile moulded boot and snag free latching allows the patch cords to be deployed within even the most densely

populated network installations, deploying the latest blade server technology.

Each Category 5e patch cords are manufactured and tested in accordance with IEC 61935-2 and comply with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class D/Category 5e including 1000BASE-T (Gigabit Ethernet), ATM 155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Features

- > Low profile moulded strain relief boot to use with blade servers
- > Integral anti-snag latch as standard
- > RJ45 plug with two point “U shape” prongs
- > 50 micro-inch gold plated contact pins
- > Stranded high purity copper wire
- > Low Smoke Zero Halogen sheathed cable as standard, PVC upon request
- > Multiple length and colour option
- > Individually bagged with traceability information
- > Electrically compliant beyond 100MHz

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-6
- > EN 50288-3-2

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed (PVC assemblies)
- > REACH/SVHC

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	24
	Size (mm)	7 x 0.192mm
	Material	Bare Copper
Insulators	Diameter (mm)	0.95
	Material	HDPE
Jacket	External O.D.	5.4+/- 0.2
	Thickness (mm)	0.51
	Material	LSZH or PVC



PVC

GREY	PART NUMBER	METRE
	510-101	1
	510-102	2
	510-103	3
	510-105	5
	510-110	10
	510-115	15
	510-120	20
	510-201	1
	510-202	2
RED	510-203	3
	510-205	5
	510-210	10
	510-215	15
	510-220	20
	510-301	1
BLUE	510-302	2
	510-303	3
	510-305	5
	510-310	10
	510-315	15
	510-320	20

YELLOW	PART NUMBER	METRE
	510-401	1
	510-402	2
	510-403	3
	510-405	5
	510-410	10
	510-415	15
	510-520	20
	510-501	1
	510-502	2
GREEN	510-503	3
	510-505	5
	510-510	10
	510-515	15
	510-520	20
	510-601	1
WHITE*	510-602	2
	510-603	3
	510-605	5
	510-610	10
	510-615	15
	510-620	20

BLACK ^Δ	PART NUMBER	METRE
	510-701	1
	510-702	2
	510-703	3
	510-705	5
	510-710	10
	510-715	15
	510-720	20
	510-701	1
	510-702	2
ORANGE ^Δ	510-703	3
	510-705	5
	510-710	10
	510-715	15
	510-720	20
	510-720	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

LSZH

GREY	PART NUMBER	METRE
	520-101	1
	520-102	2
	520-103	3
	520-105	5
	520-110	10
	520-115	15
	520-120	20
	520-201	1
	520-202	2
RED	520-203	3
	520-205	5
	520-210	10
	520-215	15
	520-220	20
	520-301	1
BLUE	520-302	2
	520-303	3
	520-305	5
	520-310	10
	520-315	15
	520-320	20

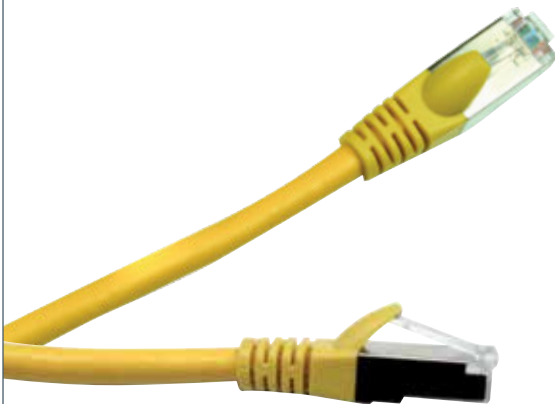
YELLOW	PART NUMBER	METRE
	520-401	1
	520-402	2
	520-403	3
	520-405	5
	520-410	10
	520-415	15
	520-420	20
	520-501	1
	520-502	2
GREEN	520-503	3
	520-505	5
	520-510	10
	520-515	15
	520-520	20
	520-601	1
WHITE ^Δ	520-602	2
	520-603	3
	520-605	5
	520-610	10
	520-615	15
	520-620	20

BLACK ^Δ	PART NUMBER	METRE
	520-701	1
	520-702	2
	520-703	3
	520-705	5
	520-710	10
	520-715	15
	520-720	20
	520-801	1
	520-802	2
ORANGE ^Δ	520-803	3
	520-805	5
	520-810	10
	520-815	15
	520-820	20
	520-820	20

^ΔWhite, Orange and Black may be subject to minimum order quantities



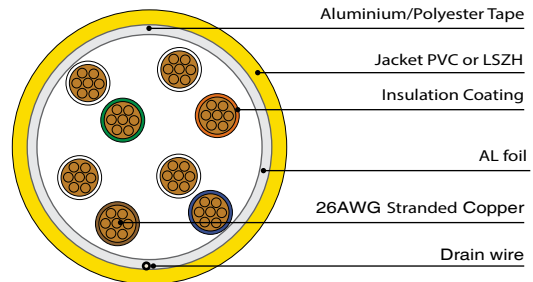
Screened Category 5e Patch Cords



Scan for More
Information
on LSZH Patch
Cords



Scan for More
Information
on PVC Patch
Cords



Category 5e screened patch cord range exceeds the transmission line performance requirements of IEC and TIA for Class D/Category 5e systems. The patch cords are designed for mechanical and electrical reliability, using quality materials and processes, to provide a solution which delivers a consistent high level of systems performance whilst incorporating design features that allow a “one style fits all” patch cord application. The low profile moulded boot and snag free latching allows the patch cords to be deployed within even the most densely

Features

- > Low profile moulded strain relief boot to use with blade servers
- > Integral anti-snag latch as standard
- > RJ45 plug with two point “U shape” prongs
- > 50 micro-inch gold plated contact pins
- > Stranded high purity copper wire
- > Aluminised polyester tape screen and drain wire
- > Low Smoke Zero Halogen sheathed cable as standard, PVC upon request
- > Multiple length and colour option
- > Individually bagged with traceability information
- > Electrically compliant beyond 100MHz

Applicable Standards

- > ISO/IEC 11801:2011
- > ANSI/TIA/EIA-568-C.2
- > CENELEC EN 50173-1:2011
- > IEC 61156-6
- > EN 50288-2-2

populated network installations, deploying the latest blade server technology.

Each Category 5e patch cords are manufactured and tested in accordance with IEC 61935-2 and comply with the requirements of ISO/IEC 11801:2011 and support all applications designed for Class D/Category 5e including 1000BASE-T (Gigabit Ethernet), ATM 155, 100BASE-Tx, Token Ring 100Mbps-1 and 1G FCBASE-T.

Conformance

- > CE approved
 - EU LVD (Low Voltage Directive 73/23/EEC as amended by Directive 93/68/EEC)
 - EU RoHS (Directive 2002/95/EC)
- > UL listed (PVC assemblies)
- > REACH/SVHC

Technical Specifications

CONSTRUCTION		VALUE
Conductors	AWG	26
	Size (mm)	7 x 0.152mm
	Material	Bare Copper
Insulators	Diameter (mm)	0.86
	Material	HDPE
Jacket	External O.D.	5.3 +/- 0.2
	Thickness (mm)	0.51
	Material	LSZH or PVC
Shielding	Material	Aluminium/PET
	Thickness	25/25µm



PVC

GREY	PART NUMBER	METRE
	530-101	1
	530-102	2
	530-103	3
	530-105	5
	530-110	10
	530-115	15
	530-120	20
RED	530-201	1
	530-202	2
	530-203	3
	530-205	5
	530-210	10
BLUE	530-215	15
	530-220	20
	530-301	1
	530-302	2
	530-303	3
	530-305	5
	530-310	10
	530-315	15
	530-320	20

YELLOW	PART NUMBER	METRE
	530-401	1
	530-402	2
	530-403	3
	530-405	5
	530-410	10
	530-415	15
	530-520	20
GREEN	530-501	1
	530-502	2
	530-503	3
	530-505	5
	530-510	10
WHITE ^Δ	530-515	15
	530-520	20
	530-601	1
	530-602	2
	530-603	3
	530-605	5
	530-610	10
	530-615	15
	530-620	20

BLACK ^Δ	PART NUMBER	METRE
	530-701	1
	530-702	2
	530-703	3
	530-705	5
	530-710	10
	530-715	15
	530-720	20
ORANGE ^Δ	530-801	1
	530-802	2
	530-803	3
	530-805	5
	530-810	10
	530-815	15
	530-820	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

LSZH

GREY	PART NUMBER	METRE
	540-101	1
	540-102	2
	540-103	3
	540-105	5
	540-110	10
	540-115	15
	540-120	20
RED	540-201	1
	540-202	2
	540-203	3
	540-205	5
	540-210	10
BLUE	540-215	15
	540-220	20
	540-301	1
	540-302	2
	540-303	3
	540-305	5
	540-310	10
	540-315	15
	540-320	20

YELLOW	PART NUMBER	METRE
	540-401	1
	540-402	2
	540-403	3
	540-405	5
	540-410	10
	540-415	15
	540-420	20
GREEN	540-501	1
	540-502	2
	540-503	3
	540-505	5
	540-510	10
WHITE ^Δ	540-515	15
	540-520	20
	540-601	1
	540-602	2
	540-603	3
	540-605	5
	540-610	10
	540-615	15
	540-620	20

BLACK ^Δ	PART NUMBER	METRE
	540-701	1
	540-702	2
	540-703	3
	540-705	5
	540-710	10
	540-715	15
	540-720	20
ORANGE ^Δ	540-801	1
	540-802	2
	540-803	3
	540-805	5
	540-810	10
	540-815	15
	540-820	20

^ΔWhite, Orange and Black may be subject to minimum order quantities

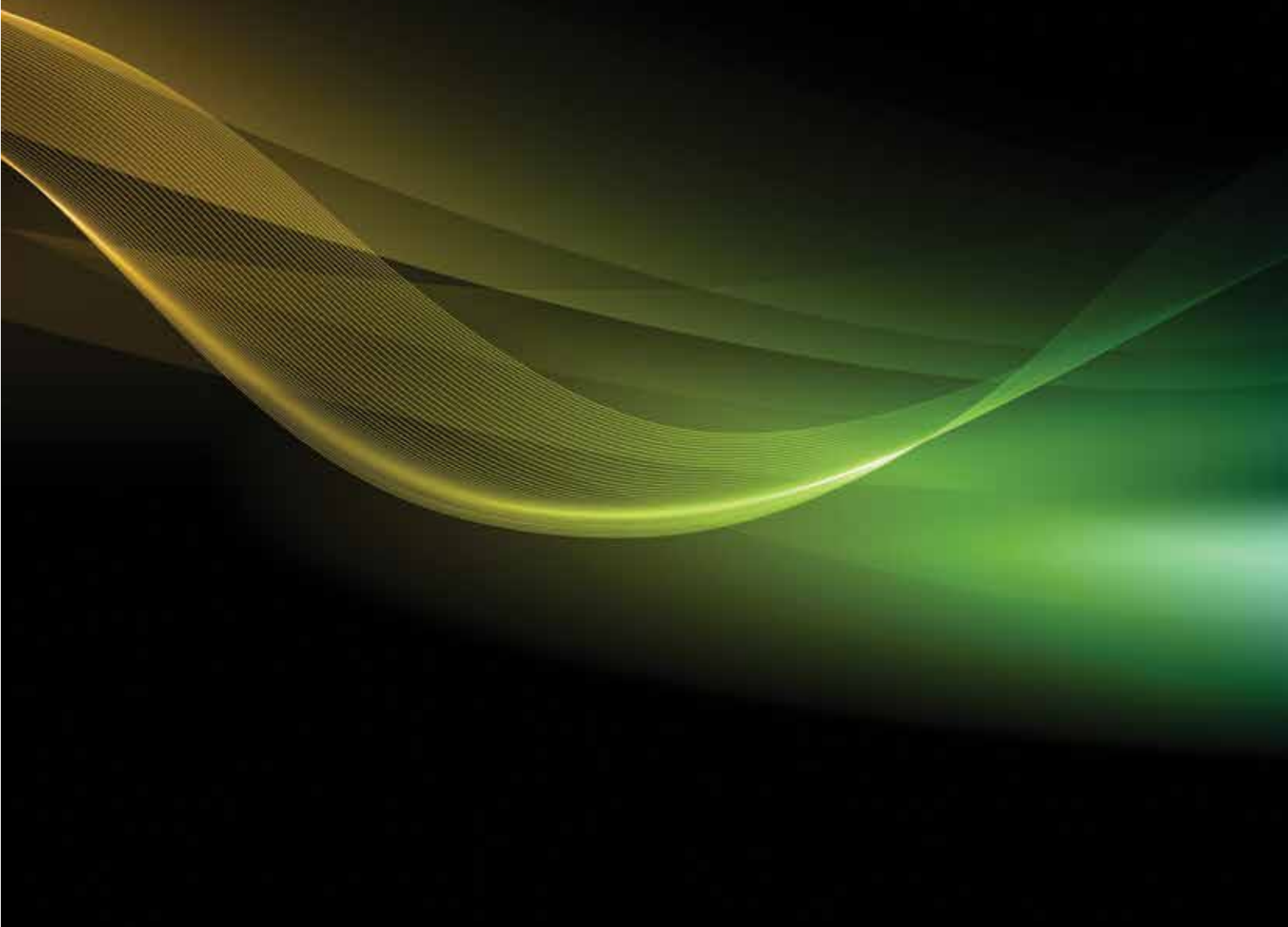


Optronics Copper Cabling System

Faceplates & Accessories

Faceplates & Modules

336



UK/EU Flat Faceplate



UK/EU Flat Faceplate to fit 50x50 style keystone jack modules

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
86x86/50x50mm	Single Gang 2 aperture flat faceplate 86x86 accepts 2x 50mm x 25mm modules	100-001
86x146/50x100mm	Double Gang 4 aperture flat faceplate 146x86 accepts 4x 50mm x 25mm modules	100-002

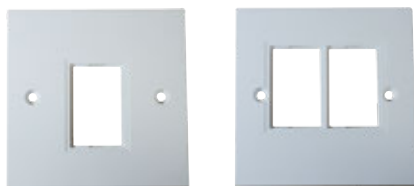
UK/EU Bevelled Faceplate



UK/EU Bevelled Faceplate to fit 50x50 style keystone jack modules

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
86x86/50x50mm	Single Gang 2 aperture bevelled faceplate 86x86 accepts 2x 50mm x 25mm modules	100-007
86x146/50x100mm	Double Gang 4 aperture bevelled faceplate 146x86 accepts 4x 50mm x 25mm modules	100-008

LJ6C Faceplate



LJ6C Flat Faceplate to fit 38.5x25 style keystone jack modules

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
86x86/38.5x25mm	LJ6C Flat Single Gang 1 aperture faceplate 86x86 for 1 x LJ6C 38.5 x 25mm	100-003
86x86/38.5x25mm	LJ6C Flat Single Gang 2 aperture faceplate 86x86 for 2x LJ6C 38.5mm x 25mm	100-004

Back Box



Back Box for UK/EU Single and Double Gang Faceplates

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
86x86x37mm	UK/EU OptronicsPlus Single Gang Back Box - RAL9003 - 86x 86x 37mm	100-100
86x146x32mm	UK/EU OptronicsPlus Double Gang Back Box - RAL9003 - 86x 146x 32mm	100-101



EU Bevelled Faceplate



EU Bevelled Faceplate - to fit 50x50 style keystone jack modules

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
80x80/50x50mm	Single Gang 2 aperture bevelled faceplate 80x80 accepts 2x 50mm x 25mm modules	100-011

French Faceplate



French Faceplate to fit 45x45 style keystone jack modules*

*supplied including 1 or 2 port flat shuttered keystone jack module

DIMENSION (OUTER/INNER)	DESCRIPTION	PART NUMBER
80x80/45x45mm	French Single Gang 1 aperture faceplate to accept 1x keystone jack	200-001
80x80/45x45mm	French Single Gang 1 aperture faceplate to accept 2x keystone jack	200-002

EU Back Box



EU style Back Box

DIMENSION (H/W/D)	DESCRIPTION	PART NUMBER
80x80x42mm	EU OptronicsPlus Single Gang Back Box - RAL9003 - 80x 80x 42mm	100-102

French Style Back Box



French Style Back Box

DIMENSION (H/W/D)	DESCRIPTION	PART NUMBER
80x80x42mm	EU OptronicsPlus Single Gang Back Box - RAL9016 - 80x 80x 42mm	200-100



50x50 Euro Module



50x50 style keystone jack module – Euro module

DIMENSION	DESCRIPTION	PART NUMBER
50x25mm	Keystone Angled Shuttered module insert to fit 50 x 25mm aperture	100-006
50x25mm	Full blank insert to fit 50mm x 25mm aperture	100-009
50x12.5mm	Half blank insert to fit 50mm x 25mm aperture	100-010

38.5x25 LJ6C Module



38.5x25 style keystone jack module - LJ6C module

DIMENSION	DESCRIPTION	PART NUMBER
38.5x25mm	LJ6C Angle Shuttered module insert 38.5mm x 25mm to accept 1 x keystone jack	100-005

45x45 French Module



45x45 style keystone jack module – French module

DIMENSION	DESCRIPTION	PART NUMBER
45x45mm	Angled Shuttered Insert 45x45mm, Single Port - 1 Port	200-006
45x45mm	Angled Shuttered Insert 45x45mm, Single Port - 2 Port	200-002

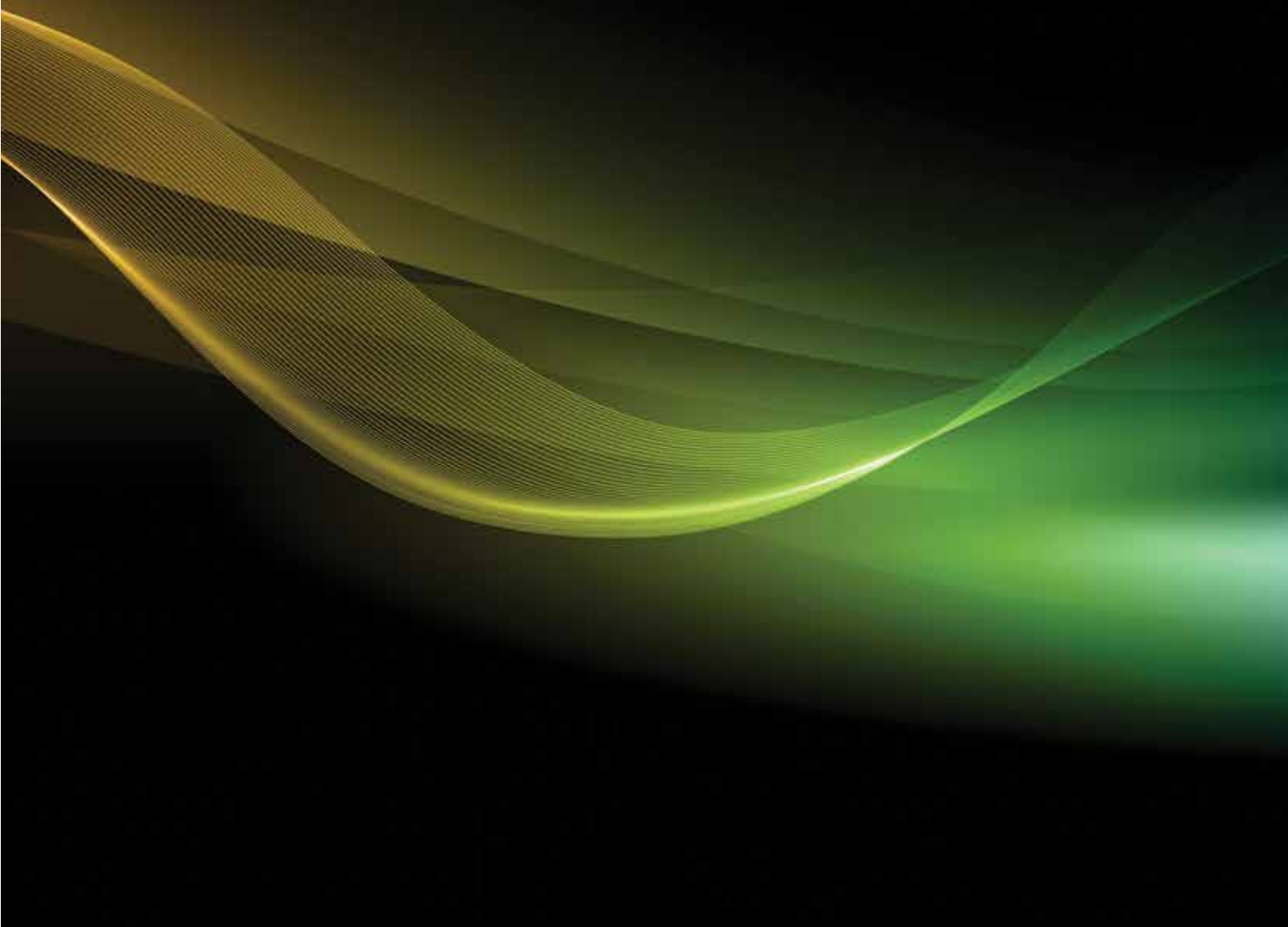


Optronics Copper Cabling System

Installation Tools

Copper Installation Tools

340

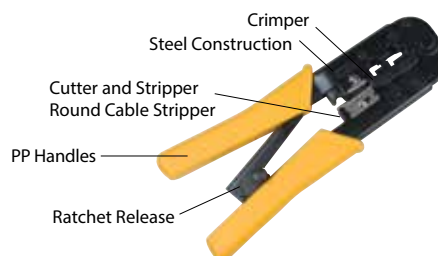


Cable Cutters



DESCRIPTION	PART NUMBER
Cable Cutters	OPT+CC

RJ45 Crimp Tool



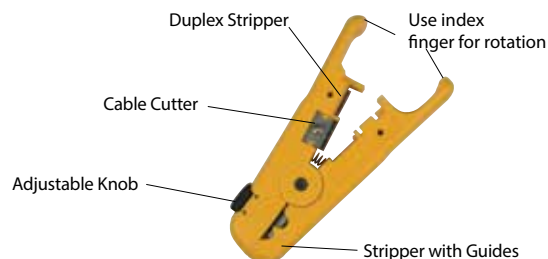
DESCRIPTION	PART NUMBER
RJ45 / RJ11 Crimp Tool	OPT+RJCT

Impact Tool



DESCRIPTION	PART NUMBER
Termination Tool with Krone Scissors Bade	OPT+IPDT-S
Replacements Scissors Blade - Krone	OPT+IPDT-SB
Blade for Krone Type Block w/o Scissors	OPT+KRSB1

Universal Stripper



DESCRIPTION	PART NUMBER
Universal Data Stripper	OPT+UTPS

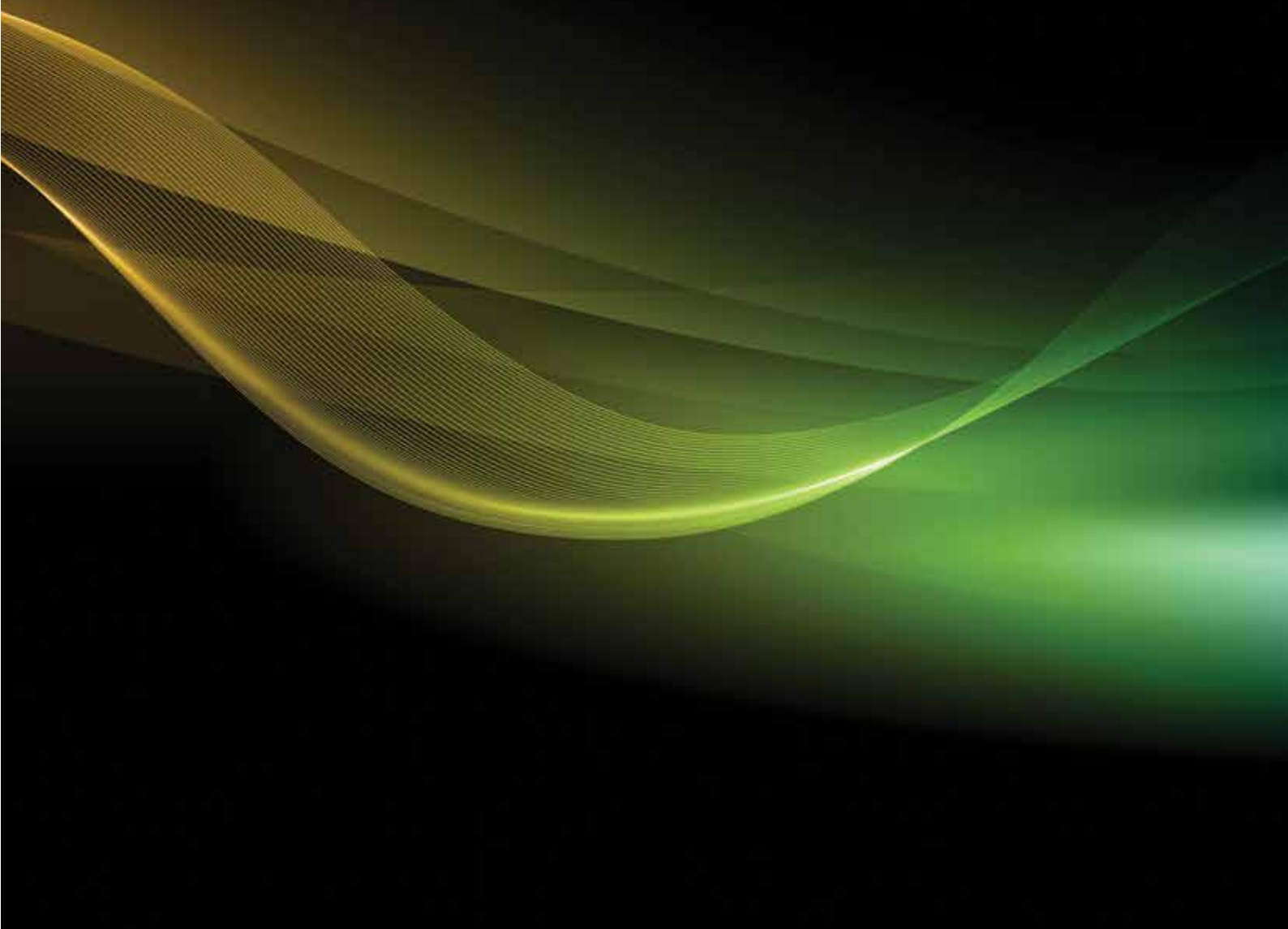
Insertion Tool



DESCRIPTION	PART NUMBER
Impact Tool for Krone Type Terminal Block	OPT+IDC

Optronics Copper Cabling System

Copper Warranty Programme



The Optronics Cabling System Warranty Explained:



At Optronics we offer one of the most complete warranty programmes available to the structured cabling industry. Our copper and fibre solutions are designed for performance and reliability and manufactured to comply with the latest national and international standards at the time of installation.

Optronics products exceed the performance requirements defined within ISO/IEC 11801, ANSI/EIA/TIA 568 and EN 50173 as applicable, and are warranted against failure for a period of 25 years from the date of installation. Furthermore, Optronics warranty that if the components are installed and tested by an Optronics approved partner, then the installed link will support,

- > The Optronics Cabling System Warranty is only available through Authorised Partners and Authorised Installers.
- > The Optronics Cabling System 25 year product and lifetime applications warranty commences upon completion of the installation the submission of the test results and the issue of the warranty certificate to the installation owner by Optronics.
- > Product Warranty: - All Optronics products are warranted for a period of 25 years as being free from manufacturing defects that could jeopardise the mechanical, electrical or transmission line performance and reliability of the product when used appropriately.

for the lifetime of the installation, all applications that have been designed to run on the specific Class/Category of cabling system.

The Optronics copper and fibre structured cabling range represents the relentless pursuit by Optronics to bring quality and reliability to the market. Through world Class engineering , we have confidence to stand behind our products for 25 years, in the full knowledge that they will continue to faultlessly delivering the applications for the which they were designed, for a life-time.

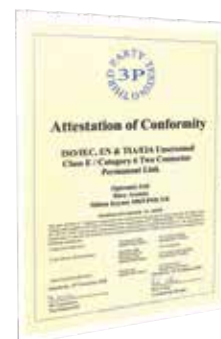
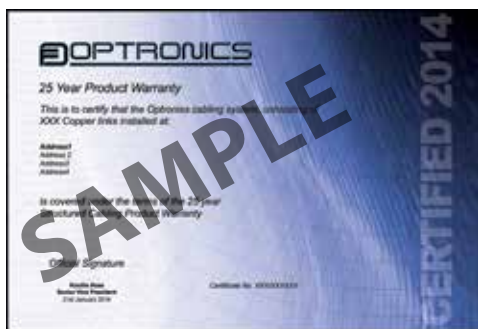
- > The Optronics Cabling System Warranty covers all passive optical and copper products supplied by Optronics under the Optronics brand.
- > Applications Warranty - All Optronics products are warranted to support all and any application designed to operate over installed Class of cabling system. In case of doubt a specific application reference should be made to ISO 11801, latest edition.
- > The Optronics Cabling System warranty can be transferred for the remaining life of the warranted products providing that Optronics is notified by the new building owner in writing within 30 days of taking ownership of the building.

Limitations of the Warranty

This Warranty only covers the Installation as defined in the submitted dossier and specification. Any extensions or modifications to the Installation must be submitted to Optronics following the procedure listed in our warranty documentation. On review and acceptance, a new Certificate and Schedule will be issued.

Becoming an Authorised Installer

- > Certification as an Authorised Installer must happen prior to project award. Any proposal that cannot be supported with the necessary training records will be rejected.
- > A potential Authorised Installer must be proposed by the Authorised Partner. The proposal should be supported by the completion of Appendix II of our detail warranty statement.
- > Upon satisfactory review of the potential installers details acceptance will be acknowledged by Optronics through the issue of a numbered authorised Installer certificate.



Partner Resource

Your online web portal for accessing marketing materials

www.optronicsnet.com/partner



Image Gallery

High quality images of Optronics Products in a variety of sizes for print or online use

Product Information

Bespoke Optronics Catalogues and Datasheets.

Packaging

Bespoke Packaging, to your specification

Logos

For print and web

Multimedia

Video, Animations, Presentations

Eflyers

Latest Optronics Eflyers

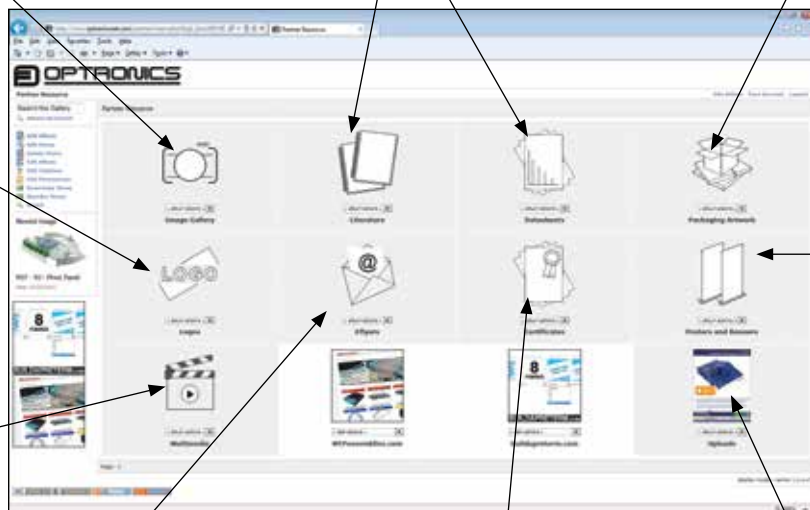
Certificates

Authorised installer and Warranty Certificates

Uploads

Need to send us a big file?
Upload your file to your own area on the partner resource

Posters and Banners



The Optronics Partner Resource can be tailored to your particular requirements and will be secured with a unique username and password, making it the ideal way to interact with Optronics's marketing department.

Call your account manager now to sign up to this invaluable resource

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