

OM3/OM4 RBS LC Short Boot Patch Cords

FibreFab LC patch cords supplied with a short boot are ideal for high density applications with tight space requirements. The connector length from tip to boot assembly is only 40 mm, compared to 66 mm for standard LC patch cords with heatshrink providing 40% more space.

These patch cords have the added benefit of being supplied with reduced bend sensitivity OM3 or OM4 optical fibre which exhibits much lower optical power loss under bend conditions while remaining compatible with conventional cabling.

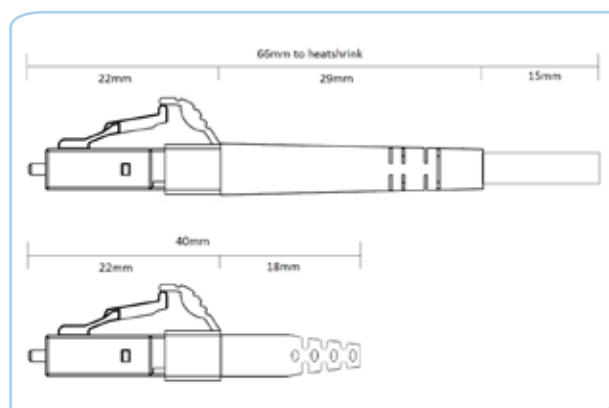
LC Short Boot Patch cords are designed to meet IEC, EN and Telcordia GR 326 requirements.

Features / Benefits

- > Short length – allows up to 40mm space between rack and closed cabinet door – 25mm extra!
- > Enhanced flexibility of the boot maintains minimum bend radius
- > No heatshrink system – improved cable flexibility
- > Cable dimensions of 2.0mm, 1.8mm, 1.6mm for optimising air flow space

Applications

- > Data centres
- > FTTx Multi dwelling unit (MDU)
- > LAN and WAN



Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.30 dB	IEC 61300-3-4
Ave/Master	0.15 dB	IEC 61300-3-4
Ave/Random	0.20 dB	IEC 61300-3-34
Return Loss	20 dB	IEC 61300-3-6

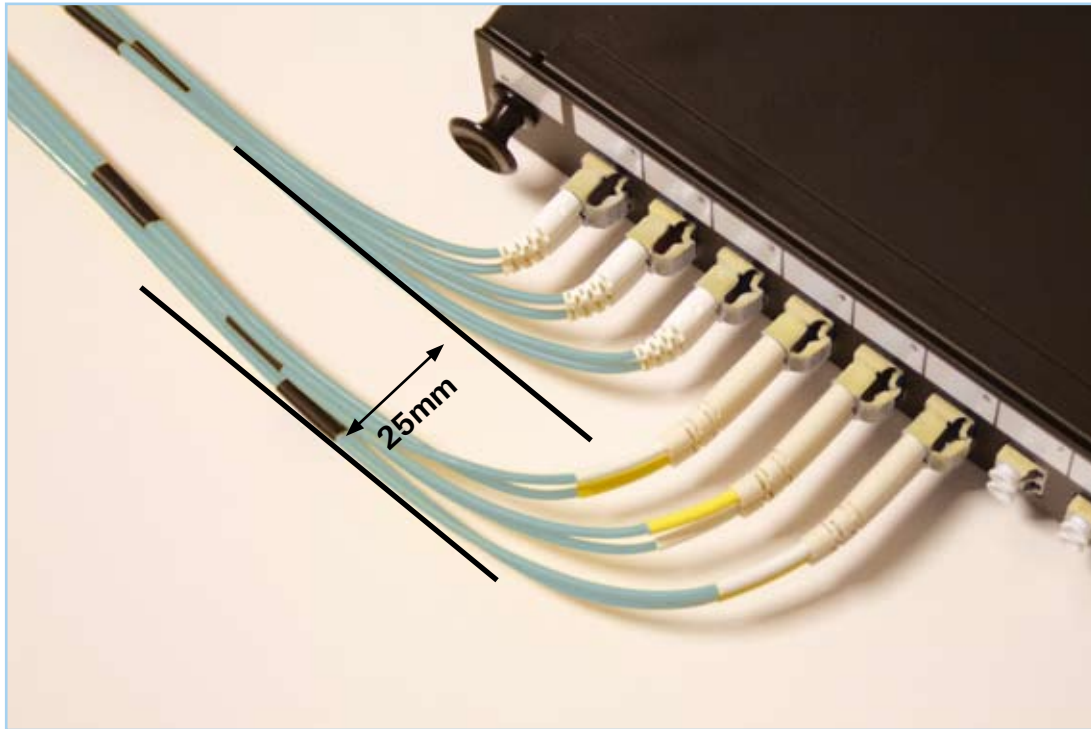
Cable Specification

CHARACTERISTICS	SIMPLEX / DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to 60
Fire Specification	IEC 60332-1

* PVC (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1300nm
OM3 Bandwidth (MHz x km)	1500 @ 850nm / 500 @ 1300nm / 2000 @ 850nm
OM4 Bandwidth (MHz x km)	3500 @ 850nm / 500 @ 1300nm / 4700 @ 850nm



Part Number Configurator

Connector End A		Connector End B		Fibre Type		Cable Configuration		Cable Colour		Cable Diameter		Cable Length (M) ¹		/Z
LC Short Boot	LCS	LC Short Boot	LCS	OM3 RBS	RM3	Duplex	D	Aqua	AQ	1.6 mm	1.6 mm	1 Mtr	1	
		LC	LC	OM4 RBS	RM4	Simplex	S	Erika Violet	EV	1.8mm	1.8mm	2 Mtrs	2	
		FC	FC			Flat Duplex	FD			2.0mm	2.0mm	3 Mtrs	3	
		SC	SC			Riser Duplex	DR					5 Mtrs	5	
		ST	ST			Riser Simplex	SR					10 Mtrs	10	
												X Mtrs	xx	

¹Other lengths available upon request.

eg. LCSLCRM3DAQ2.0MM5/Z A 5m LC LSZH duplex Patch cord made with 2mm zip cable OM3 RBS with short boot at one end
Please call sales for more details.

OS1/OS2 G657 LC Short Boot Patch Cords

FibreFab LC patch cords supplied with a short boot are ideal for high density applications with tight space requirements. The connector length from tip to boot assembly is only 40 mm, compared to 66 mm for standard LC – 40% shorter!

These patch cords have the added benefit of being supplied with reduced bend sensitivity ITU-T G657 singlemode optical fibre which exhibit much lower optical power loss under bend conditions while remaining compatible with conventional cabling.

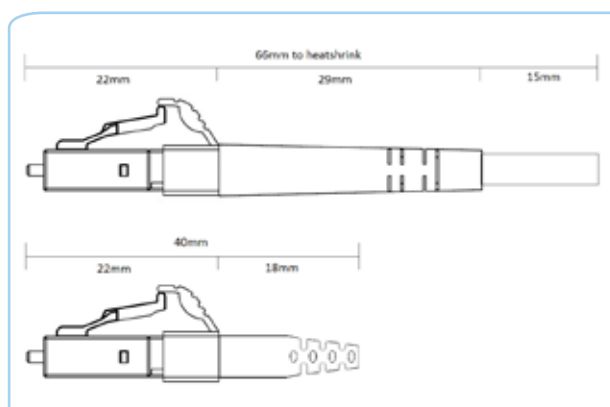
LC Short boot patch cords are designed to meet IEC, EN and Telcordia GR 326 requirements.

Features / Benefits

- > Short length – allows up to 40 mm space between rack and closed cabinet door – 25mm extra!
- > Enhanced flexibility of the boot maintains minimum bend radius
- > No heatshrink system – improved cable flexibility
- > Cable dimensions of 2.0mm, 1.8mm, 1.6mm for optimising air flow space

Applications

- > Central Office
- > Passive Optical Networks (PON)
- > FTTx
- > CATV / VIDEO
- > WDM / DWDM
- > Data centres
- > LAN and WAN



Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25 dB	IEC 61300-3-4
Ave/Master	0.18 dB	IEC 61300-3-4
Ave/Random	0.18 dB	IEC 61300-3-34
Return Loss UPC/APC	55/65 dB	IEC 61300-3-6

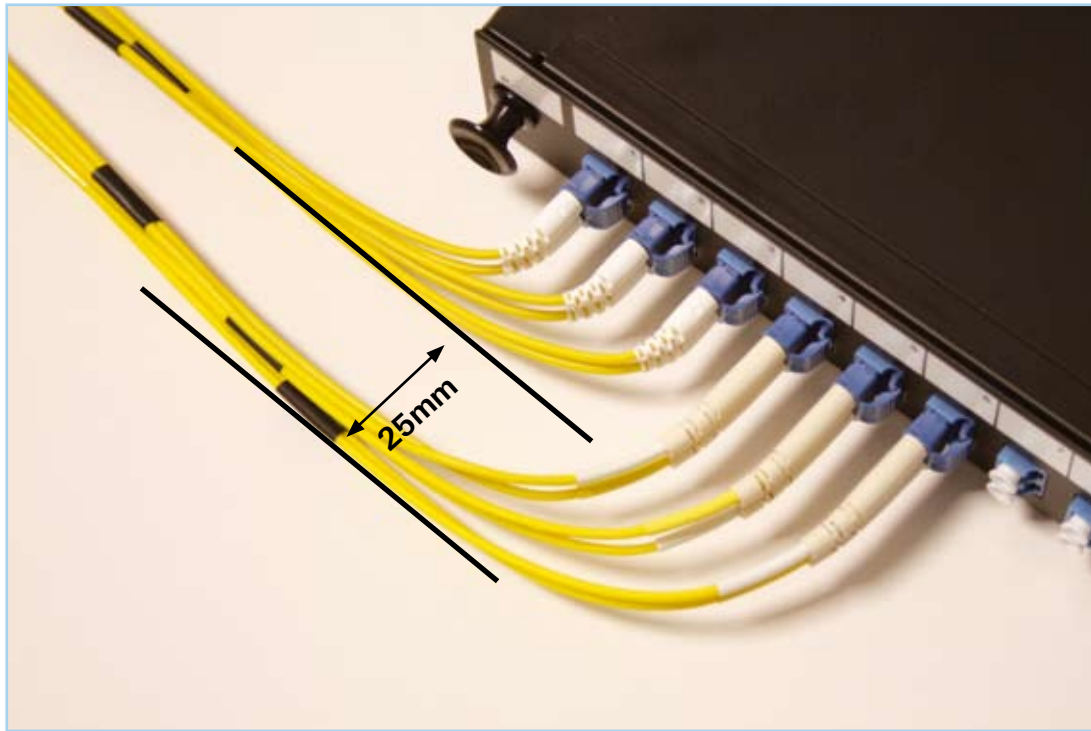
Cable Specification

CHARACTERISTICS	SIMPLEX / DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to 60
Fire Specification	IEC 60332-1

* PVC (RISER) also available

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	0.38 @ 1310nm / 0.25 @ 1550nm
Chromatic Dispersion (ps/nm x km)	3.0 @ 1310nm / 18.0 @ 1550nm



Part Number Configurator

														/Z
Connector End A		Connector End B		Fibre Type		Cable Configuration		Cable Colour		Cable Diameter		Cable Length (M) ¹		
LC Short Boot	LCS	LC Short Boot	LCS	G.657.A1	7A1	Duplex	D	Yellow	YE	1.6 mm	1.6MM	1 Mtr	1	
LC/APC Short Boot	LCAS	LC/APC Short Boot	LCAS	G.657.A2	7A2	Simplex	S			1.8mm	1.8MM	2 Mtrs	2	
		LC	LC	G.657.B3	7B3	Flat Duplex	FD			2.0mm	2.0MM	3 Mtrs	3	
		LC/APC	LCA			Riser Duplex	DR					5 Mtrs	5	
		FC	FC			Riser Duplex	DR					10 Mtrs	10	
		FC/APC	FCA			Riser Simplex	SR					X Mtrs	xx	
		SC	SC											
		SC/APC	SCA											
		ST	ST											

¹Other lengths available upon request.

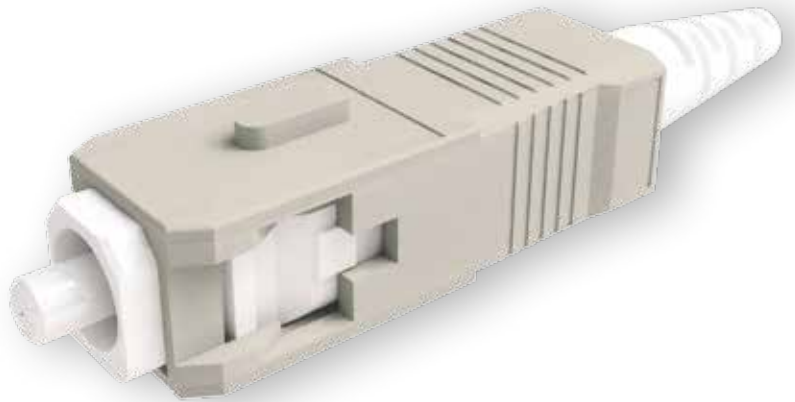
eg. LCSLC7A1DYE2.0MM5/Z – A 5m LC LSZH duplex patchcord with 2mm zip cable G.657A1 with a short boot at one end
Please call sales for more details.

OM3/OM4 RBS SC Short Boot Patch Cords

Our SC patch cords supplied with a short boot are ideal for high density applications with tight space requirements. The connector length from tip to boot assembly is only 42 mm, compared to 57 mm for standard SC patch cords providing 35% more space.

These patch cords have the added benefit of being supplied with reduced bend sensitivity OM3 or OM4 optical fibre which exhibits much lower optical power loss under bend conditions while remaining compatible with conventional cabling.

SC Short Boot Patch cords are designed to meet IEC and BS EN requirements.



Features / Benefits

- > Short length – allows up to 40mm space between rack and closed cabinet door
- > Enhanced flexibility of the boot maintains minimum bend radius
- > Cable dimensions of 2.0mm, 1.8mm, 1.6mm for optimising air flow space

Applications

- > Data centres
- > FTTx Multi dwelling unit (MDU)
- > LAN and WAN

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25 dB	IEC 61300-3-4
Ave/Master	0.15 dB	IEC 61300-3-4
Ave/Random	0.20 dB	IEC 61300-3-34
Return Loss	28 dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX / DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to 60
Fire Specification	IEC 60332-1

* PVC (RISER) also available



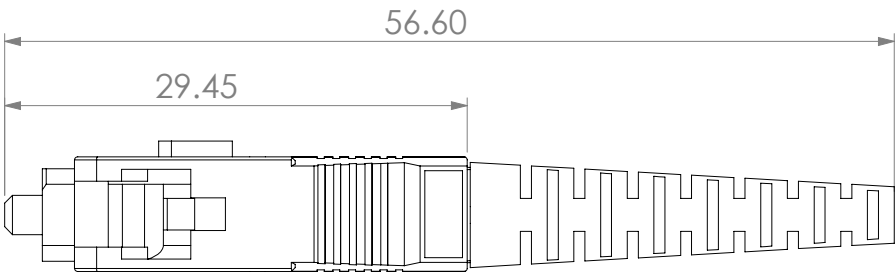
Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1300nm
OM3 Bandwidth (MHz x km)	1500 @ 850nm / 500 @ 1300nm / 2000 @ 850nm
OM4 Bandwidth (MHz x km)	3500 @ 850nm / 500 @ 1300nm / 4700 @ 850nm

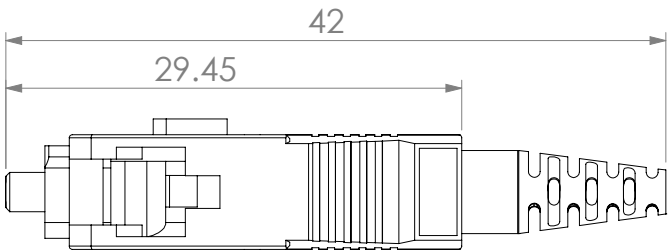
OM3/OM4 RBS SC Short Boot Patch Cords

Technical Drawing

SC Simplex with Standard Boot



SC Simplex with RBS Bellcore Style Boot



Part Number Configurator

Connector End A		Connector End B		Fibre Type		Cable Configuration		Cable Colour		Cable Diameter		Cable Length ¹	
SC Short Boot	SCS	LC Short Boot	LCS	OM3 RBS	RM3	Duplex	D	Aqua	AQ	1.6mm	1.6MM	1m	1
		SC Short Boot	SCS	OM4 RBS	RM4	Simplex	S	Erika Violet	EV	1.8mm	1.8MM	2m	2
		LC	LC			Duplex LSZH-3	DL			2.0mm	2.0MM	3m	3
		FC	FC			Simplex LSZH-3	SL					5m	5
		SC	SC			Riser Simplex	SR					10m	10
		ST	ST			Riser Duplex	DR					Xm	XX

¹Other lengths available upon request.

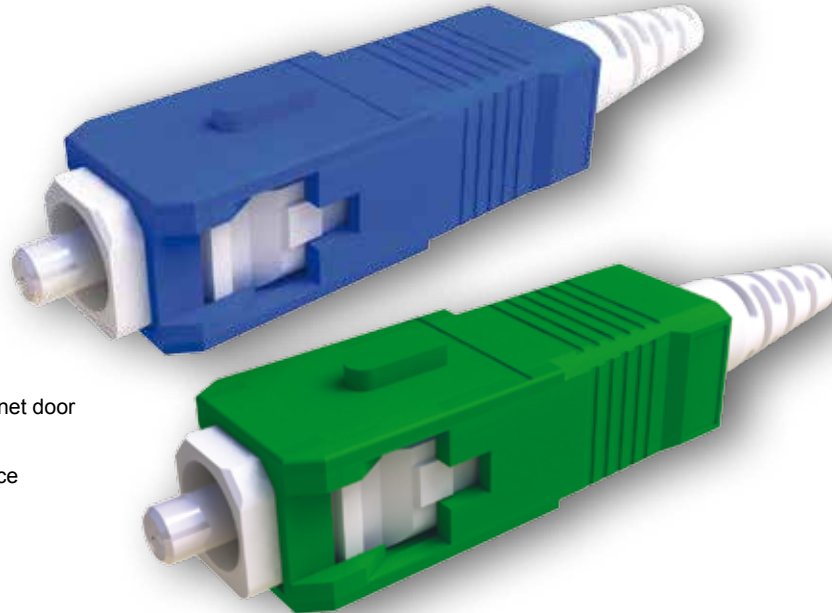
eg. **SCSSCRM3DAQ2.0MM5** A 5m SC LSZH duplex Patch cord made with 2mm zip cable OM3 RBS with a short boot at one end
Please call sales for more details.

OS1/OS2 G657 SC Short Boot Patch Cords

Our SC patch cords supplied with a short boot are ideal for high density applications with tight space requirements. The connector length from tip to boot assembly is only 42 mm, compared to 57 mm for standard SC – 35% shorter!

These patch cords have the added benefit of being supplied with reduced bend sensitivity ITU-T G657 singlemode optical fibre which exhibit much lower optical power loss under bend conditions while remaining compatible with conventional cabling.

SC Short boot patch cords are designed to meet IEC, and BS EN requirements.



Features / Benefits

- > Short length – allows up to 40mm space between rack and closed cabinet door
- > Enhanced flexibility of the boot maintains minimum bend radius
- > Cable dimensions of 2.0mm, 1.8mm, 1.6mm for optimising air flow space

Applications

- > Central Office
- > Passive Optical Networks (PON)
- > FTTx
- > CATV / VIDEO
- > WDM / DWDM
- > Data centres
- > LAN and WAN

Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25 dB	IEC 61300-3-4
Ave/Master	0.15 dB	IEC 61300-3-4
Ave/Random	0.20 dB	IEC 61300-3-34
Return Loss	28 dB	IEC 61300-3-6

Cable Specification

CHARACTERISTICS	SIMPLEX / DUPLEX
Cable Material*	LSZH
Strength Member	Aramid
Crush (N)	1000
Operating Temperature (°C)	-20 to 60
Fire Specification	IEC 60332-1

* PVC (RISER) also available



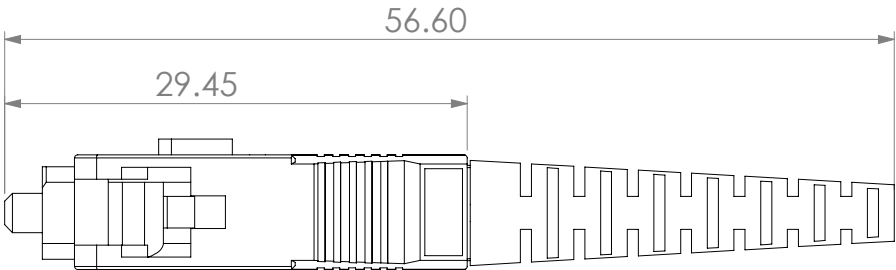
Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1300nm
OM3 Bandwidth (MHz x km)	1500 @ 850nm / 500 @ 1300nm / 2000 @ 850nm
OM4 Bandwidth (MHz x km)	3500 @ 850nm / 500 @ 1300nm / 4700 @ 850nm

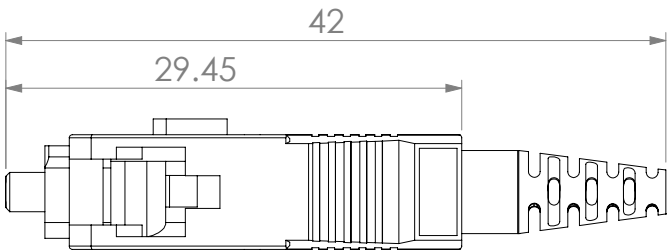
OS1/OS2 G657 SC Short Boot Patch Cords

Technical Drawing

SC Simplex with Standard Boot



SC Simplex with RBS Bellcore Style Boot



Part Number Configurator

Connector End A		Connector End B		Fibre Type		Cable Configuration		Cable Colour		Cable Diameter		Cable Length ¹	
SC Short Boot	SCS	LC Short Boot	LCS	G.657.A1	7A1	Duplex	D	Yellow	YE	1.6mm	1.6MM	1m	1
SC/APC Short Boot	SCAS	LC/APC Short Boot	LCAS	G.657.A2	7A2	Simplex	S			1.8mm	1.8MM	2m	2
		SC Short Boot	SCS	G.657.B3	7B3	Duplex LSZH-3	DL			2.0mm	2.0MM	3m	3
		SC/APC Short Boot	SCAS			Simplex LSZH-3	SL					5m	5
		LC	LC			Riser Simplex	SR					10m	10
		LC/APC	LCA			Riser Duplex	DR					Xm	XX
		SC	SC			Flat Duplex	FD						
		SC/APC	SCA										
		FC	FC										
		FC/APC	FCA										
		ST	ST										

¹Other lengths available upon request.

e.g. **SCSLC7A1DYE2.0MM5** – A 5m SC LSZH duplex patch cord with 2mm zip cable G.657A1 with a short boot SC and a standard LC connector

Please call sales for more details.

Classix Patchcord

Optronics Classix's range of patchcords is suitable for value telecom and general datacom applications. The patchcords and pigtails provide flexible interconnection to active equipment, passive optical devices and cross-connects. Classix refers to the assembly and not the connector.

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

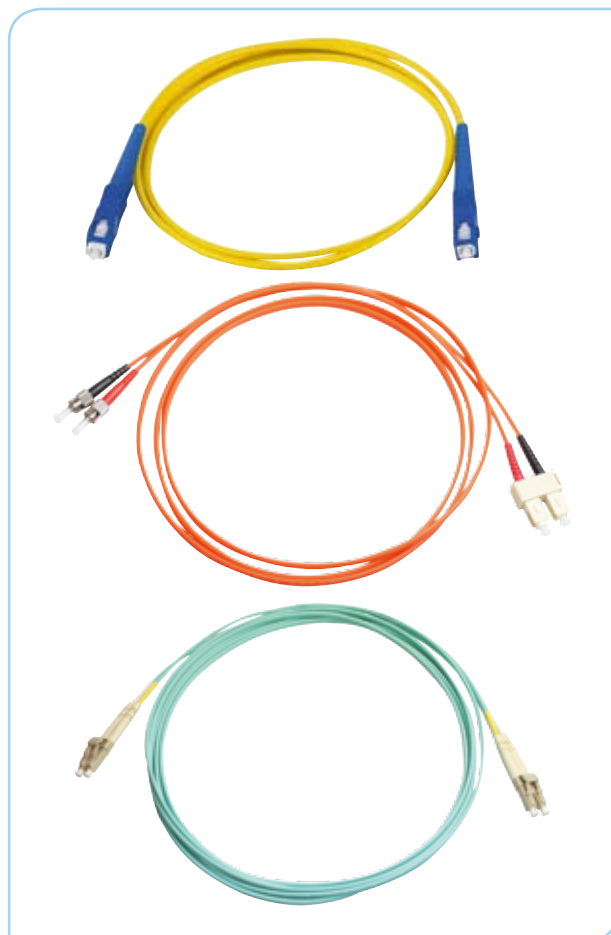
Features / Benefits

- > Conform to IEC, EIA-TIA, and Telecordia performance requirements
- > Available in fibre types OS1, OS2, OM1, OM2 and OM3
- > Available with connector types SC, LC, ST and FC
- > Available in standard and custom lengths
- > RoHS, REACH & SvHC compliant
- > Supplied in packs of ten

Applications

- > Telecommunication Networks
- > CATV
- > LAN and WAN
- > FTTx
- > Broadband network

Connector Specification



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 90 N	IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg 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

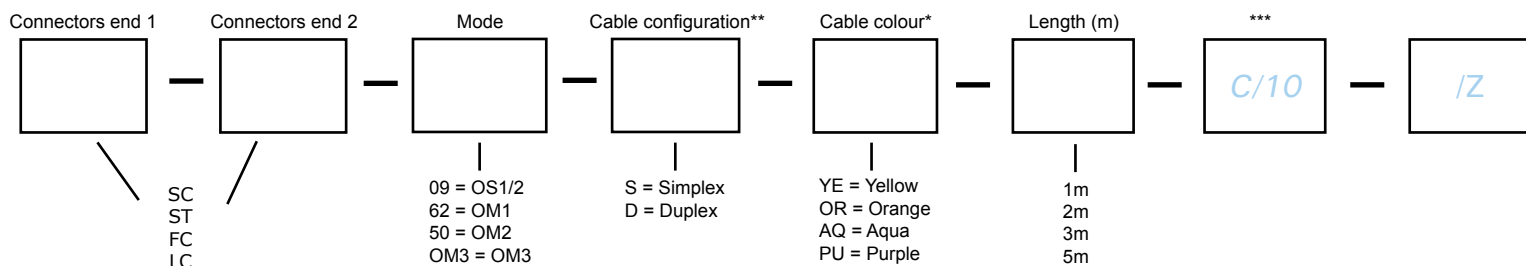
Optical Performance	Singlemode	Multimode	Conformance
IL Max/Master (Acceptance)	0.30 dB	0.30 dB	IEC 61300-3-4
Max IL/Random	0.75 dB	0.75 dB	IEC 61300-3-34
Ave/Master*	0.22 dB	0.25 dB	IEC 61300-3-4
Ave/Random*	0.30 dB	0.25 dB	IEC 61300-3-34
Return Loss	50dB	-	IEC 61300-3-6

Connector Type	Conformance	SM	SM Duplex	MM Duplex
SC connector	IEC 61754-4	SM PC- Blue	SM PC- Blue with clips	MM PC- Beige with clips Boot -Red & Black
LC connector	IEC 61754-20	SM PC- Blue	SM PC- Blue with clips	SM PC- Blue
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	SM PC- Blue boot	MM PC- Black boot

Cable Specification

Characteristics	Units	Simplex	Duplex
Cable Material		LSZH or PVC	LSZH or PVC
Strength Member		Aramid	Aramid
Crush	N	1000	1000
Operating Temperature	°C	-20 to 60	-20 to 60
Secondary Buffer Diameter (3mm)	µm	900+/-50	900+/-50
Secondary Buffer Diameter (1.8mm)	µm	600+/-50	600+/-50
Minimum Bending Radius	mm	10D (installed) 20D (loaded)	10D (installed) 20D (loaded)

Part Number Generator



*: Ye = OS1/2, OR = OM1/OM2, AQ/PU = OM3/OM4

** : Simplex option is for SM only, Duplex option is available for both SM and MM.

***: Please note C/10 indicates the packaging quantity of 10 units.

LC Uniboot Patchcord

Optronics LC Uniboot patchcords are designed for high density applications in Data Centre environment. Reduced size saves valuable space and contributes to improved airflow management. 3mm round duplex cable enclosing two fibres for data transmission, thus reducing the space usage which is critical for data centres. The LC Uniboot patchcords for data centres are available in OM3 and OM4 fibre types.

Features / Benefits

- > Conform to IEC, EIA-TIA, and Telecordia performance requirements
- > Uses standard 3mm round duplex LSZH cable
- > Available in OM3 and OM4 MM fibres
- > RoHS, REACH & SvHC compliant

Applications

- > SAN
- > Data centres
- > Premise networks
- > 10 Gigabit Ethernet
- > Interconnect and cross connect
- > High density radius system

Connector Specification

OPTICAL PERFORMANCE MULTIMODE	MM	CONFORMANCE
Insertion loss (MAX/MASTER)	0.30 dB	IEC 61300-3-4
Insertion loss (97%)	0.40 dB	IEC 61300-3-34
Ave/Master	0.15 dB	IEC 61300-3-4
Ave/Random	0.20 dB	IEC 61300-3-34

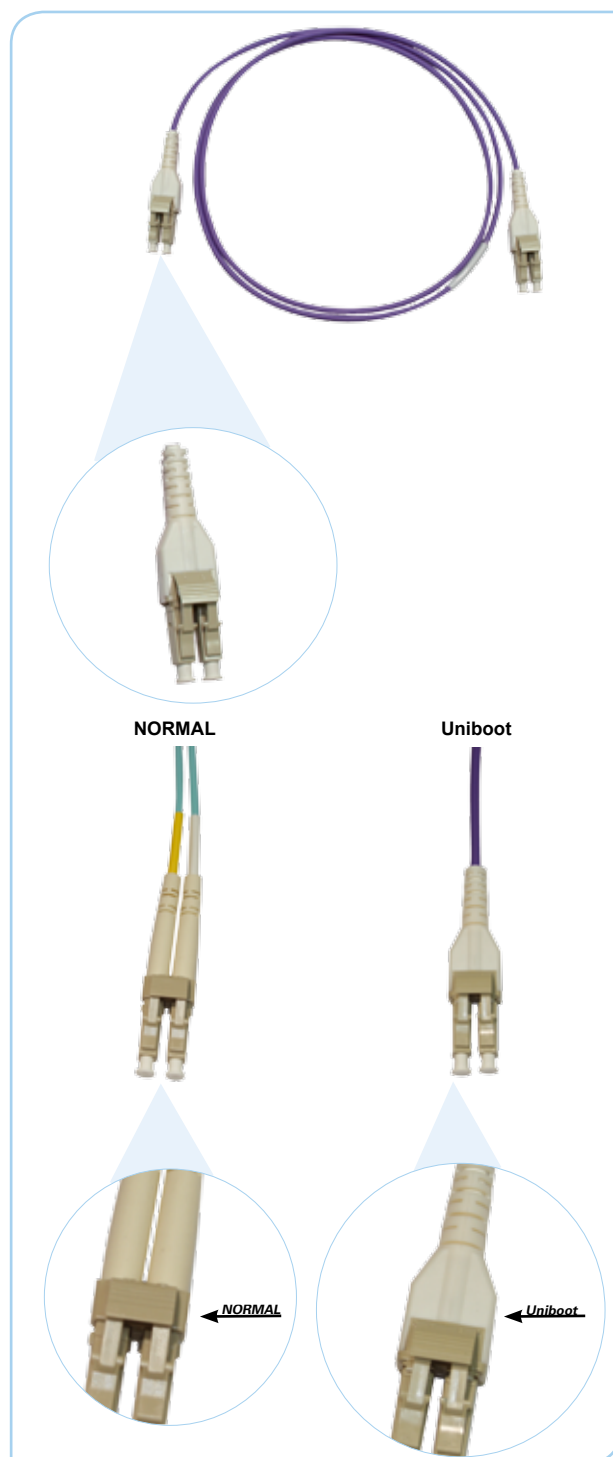
** Recommended for high performance and low loss connection for efficient data transmission

Cable Specification

CHARACTERISTICS	UNITS	ROUND DUPLEX
Cable Material		LSZH
Strength Member		Aramid
Crush	N100mm	1000
Operating Temperature	°C	-20 to 60
Secondary Buffer Diameter	µm	900+50
Minimum Bending Radius	mm	10D (installed) 20D (loaded)

Part Number Generator

Connector End 1		Connector End 2		Cable Type		Cable Configuration		Cable Colour		Length (m)	UNI
LC	LC	LC	LC	OM3	OM3	Duplex	D	Aqua	AQ	1	
SC	SC	SC	SC	OM4	OM4			Purple ¹	PU	2	
								Erika Violet ²	EV	3	
										5	
										XX	



Premium Patchcords

Optronics Premium range patchcords are suitable for low loss telecom, datacom, data centre and some critical applications. The patchcords provide flexible interconnection to active equipment, passive optical devices and cross-connects. The patchcords are terminated with Premium range physical contact (singlemode & multimode) and angled physical contact (singlemode) zirconia ferrule connectors which are manufactured with precision factory mounting and polishing techniques which helps assure high transmission quality.

Features / Benefits

- > Conform to IEC, EIA-TIA, and Telecordia performance requirements
- > Available in different fibre types
- > Available with different connector types
- > Available in standard and custom lengths
- > RoHS, REACH & SvHC compliant

Applications

- > Data centre
- > Telecommunication networks
- > CATV
- > LAN and WAN
- > FTTX
- > Broadband network

Connector Specification



OPTICAL PERFORMANCE	SINGLE-MODE	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15 dB	0.15 dB	IEC 61300-3-4
MAX IL/Random	0.30 dB	0.25 dB	IEC 61300-3-34
Ave/Master*	0.12 dB	0.08 dB	IEC 61300-3-4
Ave/Random*	0.12 dB	0.10 dB	IEC 61300-3-34
Return Loss	55/65 dB	-	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 90 N		IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg 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

CONNECTOR TYPE	CONFORMANCE	SM	MM	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

IMP: Please note that the LC 2mm connectors will have heat shrinks to serve the purpose of cable retention. C clips will be provided for channel identification of duplex FC and ST patchcords.

Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX	DUPLEX
Cable Material		LSZH or PVC	LSZH or PVC
Strength Member		Aramid	Aramid
Crush	N	1000	1000
Operating Temperature	°C	-20 to +60	-20 to +60
Secondary Buffer Diameter (2.0mm, 2.4mm and 3.0mm)	µm	900±50	900±50
Secondary Buffer Diameter (1.6mm and 1.8mm)	µm	600±50	600±50
Minimum Bending Radius	mm	10D (installed) 20D (loaded)	10D (installed) 20D (loaded)

IMP: The patchcords are available in standard length of 1m, 2m, 3m, 5m, and 10m. For other lengths please contact us for the actual lead times.

Part Number Generator

Connector End A ¹		Connector End B ¹		Fibre Type		Cable Configuration ²		Cable Colour ³		Cable Length (M) ⁴		P/Z
FC	FC	FC	FC	OS1/OS2	09	Duplex LSZH	DL	Yellow	YE	1 Mtr	1	
FC/APC	FCA	FC/APC	FCA	G.657A1	A1	Duplex PVC/	DR	Orange	OR	2 Mtrs	2	
SC	SC	SC	SC	G657A2	A2	Simplex LSZH	S	Purple	PU	3 Mtrs	3	
SC/APC	SCA	SC/APC	SCA	OM1	62	Simplex PVC/	SR	Aqua	AQ	5 Mtrs	5	
ST	ST	ST	ST	OM2	50			Erica Violet	EV	10 Mtrs	10	
LC	LC	LC	LC	OM3	OM3					X Mtrs	xx	
LC/APC	LCA	LC/APC	LCA	OM4	OM4							
E2000	E2	E2000	E2									
E2000/APC	E2A	E2000/APC	E2A									

*IMP: Ye = OS1/OS2, OR = OM1/OM2, AQ/PU = OM3/OM4

Armoured Patchcord

Optronics armoured patchcord are used in outdoor applications in customer premises, central offices and in harsh environments. The patchcords provide flexible interconnection to active equipment, passive optical devices and cross-connects. Armoured patchcords are constructed with a stainless steel tube over a standard patchcord surrounded by a stainless steel mesh with an outer jacket. Optronics patchcords are terminated with our standard range of connectors, all quality tested to meet Optronics and international standards.

Features

- > Conform to IEC, EIA-TIA, and Telecordia performance requirements
- > Easy installation
- > Available in different fibre types
- > Available in standard and custom lengths
- > RoHS, REACH & SvHC compliant

Applications

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

Technical Specification

ITEM	SIMPLEX	DUPLEX	DESCRIPTION
Fibre count	1	2	
Tight buffer	OD 0.6mm ± 0.05mm	OD 0.6mm ± 0.05mm	Blue / Yellow
Kevlar	2*1110 dtex *2	2*1110 dtex *2	Yellow
Outer Jacket	OD 3.0 +0/-0.2mm	OD 3.3+ 0.1mm	Blue-singlemode / Gray-multimode PVC & LSZH

FIBRE TYPE	MULTIMODE	SINGLEMODE
Operating wavelength (nm)	850 / 1300	1310 / 1550
Mode field diameter (µm)	62.5 ± 2.5	9.0 ± 0.2
Max Attenuation (dB/km)	3.0 / 1.0	0.4 / 0.3

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS		
Operating Temp (°C)	-40 to +75 LSZH / -40 to +70 PVC	
Max Tensile load (N)	Short term	300
	Long term	200
Max Crush resistance (N/100mm)	Short term	3000
	Long term	200
Cable weight (kg/km)	17.3	

*FC-UPC / SC-UPC 9/125
Simplex patchcord Armoured*



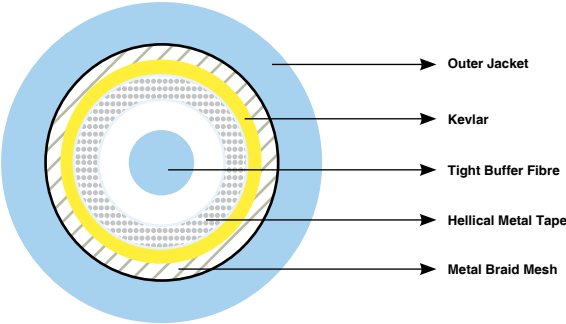
*SC-PC / LC-PC 50/125
Duplex Patchcord Armoured*



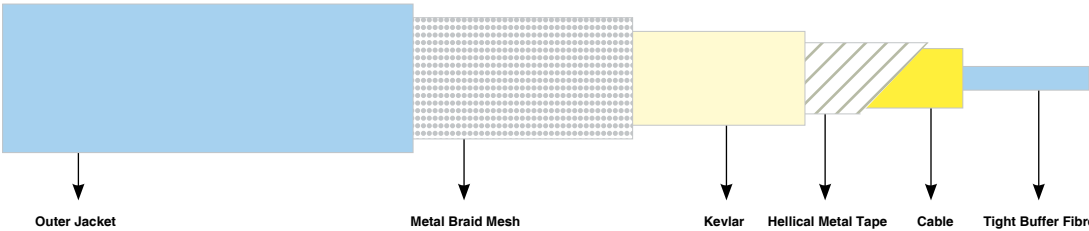
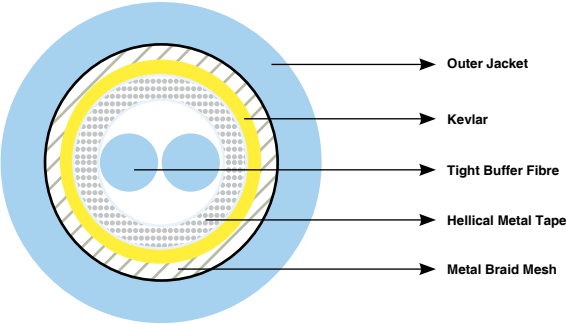
Connector Performance

	MULTIMODE	SINGLEMODE
Insertion loss (Typ)	0.30 dB	0.30 dB
Ave/Master	0.18 dB	0.15 dB
Ave/Random	0.18 dB	0.20 dB
Return loss	NA	55dB / 65dB

Simplex Patchcord Armoured



Duplex Patchcord Armoured



Part Number Generator

Connector END A		Connector END B		Fibre type		Cable Configuration		Cable Material		Cable Colour		Cable length (m)	SA/Z
FC	FC	FC	FC	OS1/OS2	09	Duplex 3.3mm	D1	LSZH	L	Blue	BL		
FC/APC	FCA	FC/APC	FCA	OM1	62	Simplex 3mm	S1			Grey	GR		
SC	SC	SC	SC	OM2	50								
SC/APC	SCA	SC/APC	SCA	OM3	OM3								
ST	ST	ST	ST										
LC	LC	LC	LC										

Note: For multimode cable the cable colour will be grey (GR) and for singlemode it will be blue (BL).

Attenuated Patchcord

Optronics high performance attenuated patchcords are used to attenuate the optical signal in a link. Attenuated patch cords can be installed in place of conventional patchcords to provide a constant level of attenuation with a return loss of >50 dB.

The attenuated patchcord can be used to replace the conventional cable assembly and attenuator combination. It is a compact, multi purpose passive device designed to operate at the 1310 and 1550nm wavelengths.

Attenuated patchcords can be provided with various connector styles SC, ST and FC to meet customer's requirements.

Optronics attenuated patchcords comes to you from a world class manufacturing facility backed by over 15 years of experience in manufacturing fibre optic passive and active devices. Products coming out of this facility have found worldwide applications in computer networking, telecommunications and cable TV.

The Optronics optical fibre patch cords are manufactured using the best quality components. The connectors are the market leading Optronics range of connectors, and the cable exceeds all areas of the standards.

The Optronics range of patch cords has grown through the years, from industry standard 62.5/125 multimode to 9/125 singlemode, Optronics can supply them all.

Non-standard cables can be made to your own exacting standards in our ISO 9001 UK production facility. This encompasses all of the essential tools to ensure the products not only meet but also exceed the requirements laid down in IEC international standards for fibre optic terminations



Features / Benefits

- > Provides the functions of attenuator and cable assembly simultaneously
- > Low Back Reflection
- > 100% Insertion Loss Testing
- > Connector varieties available
- > Conforms to the requirements of EIA/TIA standards
- > Inexpensive and compact

Applications

- > Telecommunication Networks
- > CATV
- > LAN and WAN
- > Attenuation values available: 01= 1dB, 02= 2dB, 03= 3dB, 04= 4dB, 05= 5dB 06= 6dB, 07= 7dB, 08= 8dB, 09= 9dB, 10= 10dB 15= 15dB, 20= 20dB

Technical Specification

DESCRIPTION	
Available Attenuation	1.0 to 20 dB with 1dB increments
Attenuation Tolerance	For = 5dB : ± 0.5 dB; For >5dB : $\pm 10\%$ of nominal value
Back Reflection	>55 dB(UPC) >60dB (APC)
Operating Wavelength	1310nm, 1550nm, 1310 and 1550nm
Connectorization	SC, FC & ST
Length	0.5M UPTO 10M (tol +0.1/-0.05) 10M TO 20M (tol +0.2/-0.1) Other lengths available on request
Fiber type Corning	SMF-28

Mode Conditioning Patchcord

It is known that multimode optical fibre links that use laser based transmitters may be limited in bandwidth to values less than half those of the over-filled launch bandwidth. The bandwidth is very low in the case of centre-launch condition. Optronics mode conditioning patchcords are specifically designed for launching your gigabit signal into the conventional 62.5/125 or 50/125 fibre with very high bandwidth. The Optronics mode conditioning patchcords can improve the transmission bandwidth by 3 to 4 times and also greatly reduces modal noise.

Today's Gigabit Ethernet Switches use VCSEL's, as the old technology LED emitters can not produce the signals required in these high bandwidth applications. The new mode conditioning assemblies are designed for use in 62.5/125 or 50/125 multimode fibre optic cabling systems, where these assemblies allow long wavelength 1300nm signals to be transmitted over good quality fibre at distances of up to 550m. The VCSEL devices used in Gigabit Ethernet applications are based on a singlemode launch condition and operate over both singlemode and multimode fibre.



Features / Benefits

- > Increased transmission bandwidth by as much as 4 times
- > Reduced modal noise
- > Low insertion loss (< 1dB)
- > Easy installation
- > Various connector options

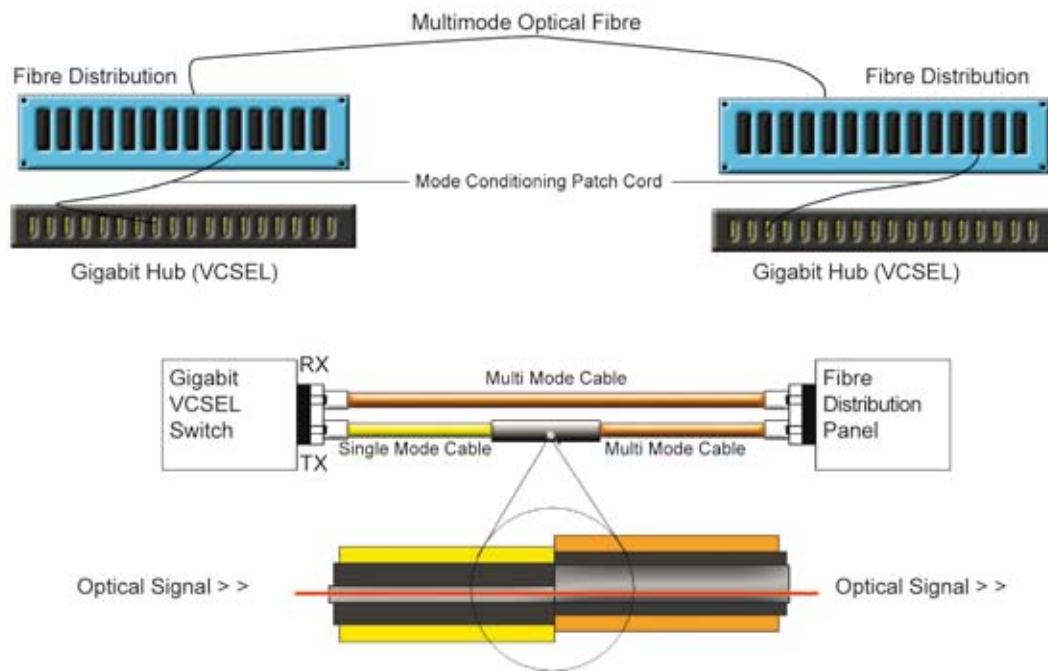
Technical Specification

DESCRIPTION	62.5µm MMF	50µm MMF
Operating wavelength	1300nm	
Maximum insertion loss	0.5dB	
Coupled power ratio (CPR)	28 to 40dB	12 to 20dB
Back reflection S/M channel	30dB	
Back reflection M/M channel	20dB	
Connector finish	PC or APC	
Ferrule radius of curvature	10 to 25mm	
Fibre height	-50 to 50nm	
Maximum angular offset	1°	
Sheath colour	Orange (yellow for SM leg)	

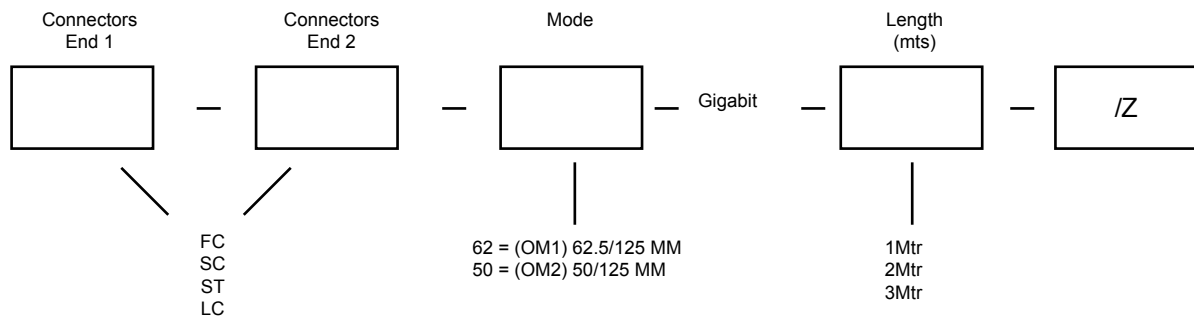
DESCRIPTION	
Temperature Cycling	(IEC 61300-2-22) -40 to +75°C, 40 cycles =0.2dB Change
Damp Heat	(IEC 61300-2-19) 60°C at 95% RH, 96 hours =0.2dB Change
Vibration (Mated Pair)	(IEC 61300-2-1) 10-55 Hz, 1.5mm P to P =0.3dB Change
Mating Durability	(IEC 61300-2-2) 1000 mating cycles Clean every 25 < 0.2 dB Change
Operating Temperature	(IEC 61300-2-22) 40°C to +85°C

PATCHCORDS SPECIFICATIONS

Connectors available	Types: FC, ST, SC, LC
Product Packaging	Each patchcord is packaged individually and individually identified for traceability, test certification is supplied for each assembly.
Length	2000mm \pm 10mm Other lengths available to order



Part Number Generator



Reduced Bend Sensitivity Patchcords

Optronics patchcords and pigtails are available in both singlemode and multimode classes based on reduced bend sensitivity (RBS) fibre cable.

RBS patchcords exhibit much lower optical power loss under bend conditions while remaining compatible with conventional cabling.

RBS patchcords are made with solid trench assisted optical fibre that is designed to reduce optical loss when the cable is bent.

RBS patchcords provide the same high quality, mechanical features and optical performance as our standard patchcords with the added capability of maintaining optical performance when bent or flexed.

RBS patchcords are available for multimode (OM3 and OM4) and singlemode (OS2/ G.657A1 and G.657A2) networks.

Application

RBS patchcords and pigtails are used in applications for which low loss in tight radius routing is important:

- > **When routing cable around corners and in tight spaces is required, for example in FTTH installations in existing buildings.**
- > **FTTH cabling in POPs, MDU distribution points and subscriber connections.**
- > **Data Centres where network uptime is critical. For example, OM4 RBS patchcords will continue to provide data service when pinched by a cabinet door, whereas service would be lost with conventional OM4 patchcords.**
- > **Generally, when small radius installation is needed or the cabling may be subjected to occasional small radius events.**



Straight fibre as reference



G.652.D → -15.10dB

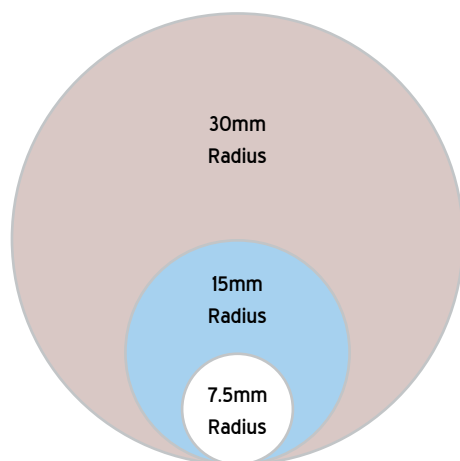


RBS → -0.21dB

Termination Specification

General mechanical and optical specifications of RBS patchcords are as per corresponding standard products including IEC and TIA/EIA standards conformance.

FIBRE CLASS	FIBRE STANDARD	GUIDELINE RADIUS	BEND PERFORMANCE			
Standard Multimode and Singlemode		30mm	-			
REDUCED BEND SENSITIVITY MULTIMODE		10mm	RADIUS	TURNS	LOSS AT 850 nm	LOSS AT 1300 nm
OM3 RBS	OM3		15mm	2	≤ 0.1 dB	≤ 0.3 dB
OM4 RBS	OM4		7.5mm	2	≤ 0.2 dB	≤ 0.4 dB
REDUCED BEND SENSITIVITY SINGLE MODE		15mm	15MM RADIUS 10 TURNS	10MM RADIUS 1 TURN	7.5MM RADIUS 1 TURN	
657A1	ITU-T G.657A1 / OS1 / OS2		≤ 0.25 dB	≤ 0.75 dB	-	
657A2	ITU-T G.657A2 / OS1 / OS2		≤ 0.03 dB	≤ 0.1 dB	≤ 0.5 dB	



Actual Size

Part Number Generator

Connector End A		Connector End B		Fibre Type		Cable Configuration		Cable Diameter		Cable Colour		Cable Length (M) ¹		/Z
FC	FC	FC	FC	G657A1	A1	Duplex	D	1.6 mm ²	1.6 mm	Yellow	YE	1 Mtr	1	
FC/APC	FCA	FC/APC	FCA	G657A2	A2	Simplex	S	2.0mm	2.0mm	Purple	PU	2 Mtrs	2	
SC	SC	SC	SC	OM3RBS	OM3R	Flat Duplex	FD	2.8mm	2.8mm	Aqua	AQ	3 Mtrs	3	
SC/APC	SCA	SC/APC	SCA	OM4RBS	OM4R							5 Mtrs	5	
ST	ST	ST	ST							Erika Violet	EV	10 Mtrs	10	
LC	LC	LC	LC									X Mtrs	xx	
LC/APC	LCA	LC/APC	LCA											
E2000	E2	E2000	E2											
E2000/APC	E2A	E2000/APC	E2A											

¹Other lengths available upon request.

²1.6mm only available as singlemode.

Please call sales for more details.

Master Test Lead

The Optronics range of Master Test Leads is ideal for high precision and high performance optical test applications. The test leads are terminated with the highest quality physical contact (singlemode) A Grade zirconia ferrule connectors. The connectors are manufactured with precision mounting and polishing techniques which ensure excellent mating characteristics and optimised optical performance.

Features

- > Optimised geometry of fibre, cable and connector providing reduced installation time and cost through improved accuracy and reliability of measurement
- > Conforms to IEC, EIA-TIA, and Telecordia performance requirements
- > Supplied with ultra tight geometry ITU-T G.652D (LWP) singlemode and multimode optical fibres
- > Available with FC, SC, LC, & ST high performance connector types to suit majority of applications
- > Available in standard lengths
- > RoHS, REACH & SvHC compliant
- > Optional foam lined storage case for added protection
- > Tethered dust caps for protection of the connector end face
- > End face geometry, concentricity and IL / RL test report provided

Application

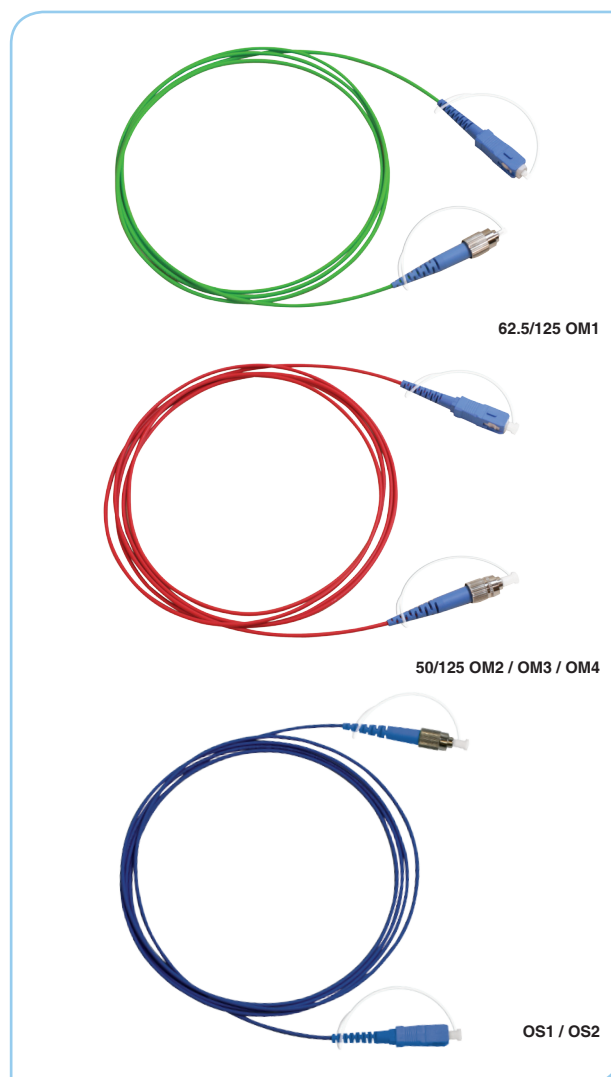
- > Optical network testing
- > Testing Labs
- > Critical telecomms and data centre applications
- > Instrumentation
- > Termination houses

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE**	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.10 dB	IEC 61300-3-4
MAX IL/Random	0.20 dB	0.25 dB	IEC 61300-3-34
Ave/Master*	0.08 dB	0.08 dB	IEC 61300-3-4
Ave/Random*	0.08 dB	0.10 dB	IEC 61300-3-34
Return Loss	55/65 dB	-	IEC 61300-3-6
Concentricity / Eccentricity Max fibre to ferrule OD finished product	0.8µm Max / 0.4 µm Max	1.5 µm Max / 0.75 µm Max	
Apex Offset	50 µm Max	50 µm Max	
Radius of curvature (ST, SC, FC)	10mm Min / 20mm Max		
Radius of curvature (LC)	5mm Min / 12mm Max		
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	2mm = 70N		IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg		IEC 61300-2-5

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

**APC available on request



Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Cable Material		LSZH
Strength Member		Aramid
Crush	N	1000
Operating Temperature	°C	-20 to 60
Secondary Buffer Diameter	µm	900±50
Colour	µm	OS1/2 ITU-T G.652D SM – Blue OM1 62.5/125 – Green OM2, OM3, OM4 50/125 – Red

Fibre Specification

SINGLEMODE 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



Hard Carry Case

MULTIMODE CHARACTERISTICS	UNITS	MULTIMODE OM1	MULTIMODE OM2, OM3, OM4
Cladding Diameter	µm	125±1	125±1
Core Diameter	µm	62.5±1	50±1
Core/Cladding Concentricity Error	µm	< 1.0	< 1.0
Cladding Non Circularity	%	< 1.0	< 1.0
Numerical Aperture		0.275±0.015	0.2±0.015

Part Number Generator

Master Side	Equipment side	Fibre Type	Fibre Construction	Cable Diameter	Jacket Type	Colour	Length (m)	Test Lead
FC	FC	OM1	Simplex	2mm	LSZH	Green OM1	1m	1
SC	SC	OM2/OM3/OM4	S	2	L	Red OM2/OM3/OM4	1.5m	1.5
LC	LC	OS1/OS2				Blue OS1/2	2m	2
ST	ST							

High Performance Patchcords

Optronics High Performance Patchcords are a range of “best in class” patchcords employing highest grade components, manufacturing processes and test methods that offer excellent performance for demanding telecommunications and data centre applications. High Performance Patchcords are used where low loss budgets are essential and may be considered for splice replacement.

Features / Benefits

- > Conform to IEC, EIA-TIA, and Telecordia performance requirements
- > Grade A singlemode connector class applied
- > Special high accuracy G.652D photonics fibre
- > End face geometry result data included
- > RoHS, REACH & SvHC compliant

Applications

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



Termination Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	IEC 61300-3-4
MAX IL/Random	0.20 dB	IEC 61300-3-34
Ave/Master*	0.08 dB	IEC 61300-3-4
Ave/Random*	0.08 dB	IEC 61300-3-34
Return Loss	55/70 dB	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 90 N	IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg 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
Secondary Buffer Diameter (2.0mm, 2.4mm and 3.0mm)	µm	900±50
Secondary Buffer Diameter (1.6mm and 1.8mm)	µm	600±50
Colour		SM – Yellow MM – Orange(OM1,OM2) MM – Aqua (OM3, OM4)

Fibre Specification

CHARACTERISTICS	UNITS	SINGLEMODE
Cladding Diameter	µm	125±0.3
Core/Cladding Concentricity Error	µm	≤0.3
Cladding Non Circularity	%	≤0.7
Polarization Mode Dispersion (PMD)	Ps/(km) ^{1/2}	≤0.06
Mode Field Diameter (mfd) @ 1310nm	µm	9.2±0.4
Mode Field Diameter (mfd) @ 1550nm	µm	10.4±0.5

Part Number Generator

Connector End A ¹		Connector End B ¹		Fibre Type		Cable Configuration ²		Cable Colour ³		Cable Length (M) ⁴		HP/Z
FC	FC	FC	FC	OS1/ OS2	09	Duplex	D	Yellow	YE	1 Mtr	1	
FC/APC	FCA	FC/APC	FCA	G.657A1	A1	Simplex	S			2 Mtrs	2	
SC	SC	SC	SC							3 Mtrs	3	
SC/APC	SCA	SC/APC	SCA							5 Mtrs	5	
ST	ST	ST	ST							10 Mtrs	10	
LC	LC	LC	LC							X Mtrs	xx	
LC/APC	LCA	LC/APC	LCA									
E2000	E2	E2000	E2									
E2000/ APC	E2A	E2000/ APC	E2A									

9/125 (OS1/OS2) Optical Fibre Patchcords

Optronics singlemode patchcords are used for telecom networks and also used for high speed metropolitan and access network. The singlemode patchcords are manufactured using LSZH cables which conform to IEC, EIA TIA and Telecordia standards. The OS1/OS2 patchcords are terminated with standard Optronics connector which gives optimum optical performance.

Features / Benefits

- > SC, LC, ST, FC MU and E2000 connectors
- > Low smoke zero halogen (LSZH) jacket in yellow colour
- > 900µm tight buffer
- > OS1/OS2 fibre conforms to ITU-652.D, TIA/EIA 492 CAAA
- > Simplex and duplex assemblies
- > Duplex assemblies available with clips (SC and LC)
- > Different connector performance range for specific application
- > Armoured option also available

Applications

- > CATV / VIDEO
- > Passive Optical Network PON
- > WDM / DWDM
- > FTTH
- > Data centres Supports high speed multi channel video, data and voice services in metropolitan and access networks
- > ATM, SONET and WDM



Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.25 dB	IEC 61300-3-4
Ave/Master*	0.18 dB	IEC 61300-3-4
Ave/Random*	0.18 dB	IEC 61300-3-34
Return Loss UPC/APC	55/65 dB	IEC 61300-3-6

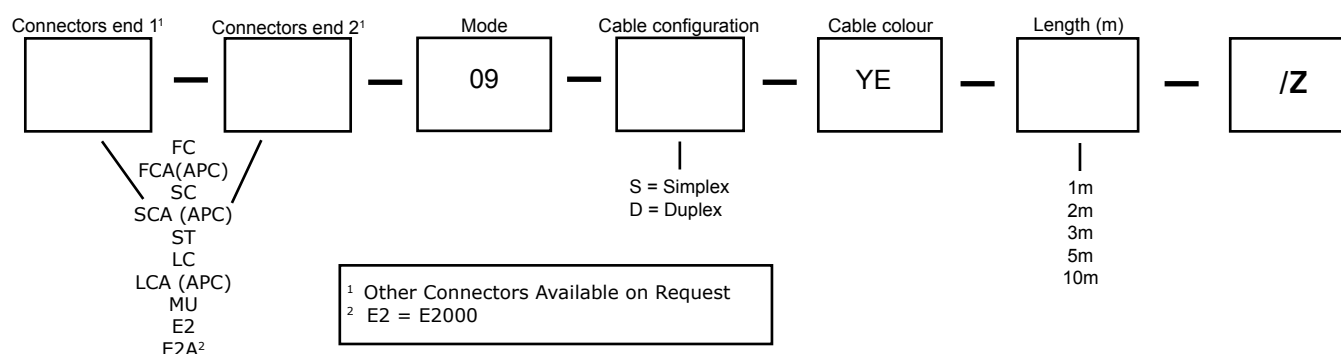
Cable Specification

CHARACTERISTICS	SIMPLEX	DUPLEX
Cable Material	LSZH or PVC	LSZH or PVC
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1	

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	0.38 @ 1310nm / 0.25 @ 1550nm
Chromatic Dispersion (ps/nm x km)	3.0 @ 1310nm / 18.0 @ 1550nm
Max Ethernet Transmittable Distance	Please refer to Fibre Comparison Chart

Part Number Generator



62.5/125 (OM1) Optical Fibre Patchcords

Optronics multimode patchcords are used to connect high speed and legacy networks like Gigabit Ethernet, Fast Ethernet and Ethernet. The multimode patchcords are manufactured using LSZH cables which conform to IEC, EIA TIA and Telecordia standards. The OM1 patchcords are terminated with standard Optronics connector which gives optimum optical performance.

Features / Benefits

- > SC, LC, ST, FC and MTRJ connectors
- > Low smoke zero halogen (LSZH) cable in orange colour
- > 900µm / 600 µm tight buffer
- > OM1 fibre conforms to ITU-651, TIA/EIA 492AAAA
- > Simplex and duplex assemblies
- > Duplex assemblies available with clips (SC and LC)
- > Different connector performance range for specific application
- > Armoured option also available

Applications

- > Gigabit Ethernet in high speed LAN networks over an indicative 275 m link length at 850 nm (SX) wavelength
- > Legacy networks including Ethernet, Fast Ethernet and FDDI
- > Data centers
- > Premises cabling in data networks including backbone, riser and horizontal
- > Supports video, data and voice services



Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.30 dB	IEC 61300-3-4
Ave/Master*	0.15 dB	IEC 61300-3-4
Ave/Random*	0.20 dB	IEC 61300-3-34

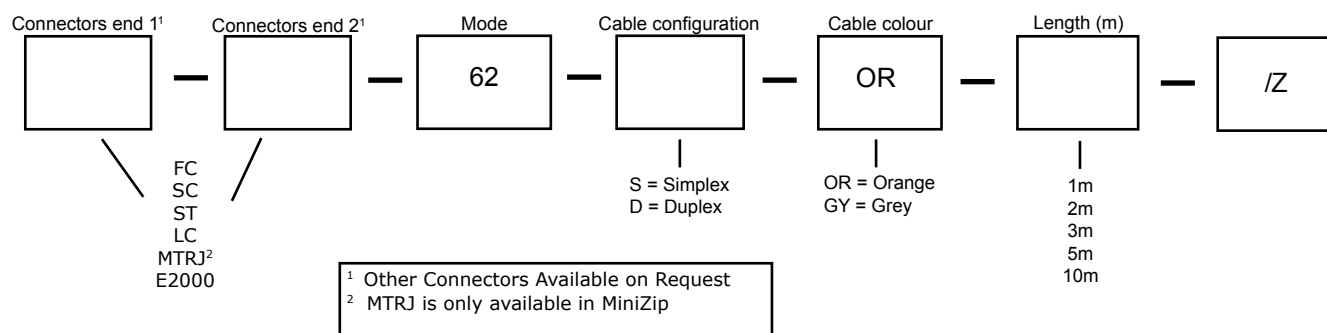
Cable Specification

Characteristics	Simplex	Duplex
Cable Material	LSZH or PVC	LSZH or PVC
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1 / IEC 60332-3	

Fibre Specification

CHARACTERISTICS	
Attenuation (dB)	2.8 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	220 @ 850nm / 600 @ 1300nm
Max Ethernet Transmittable Distance	Please refer to Fibre Comparison Chart

Part Number Generator



50/125 (OM2) Optical Fibre Patchcords

Optronics multimode patchcords are used to connect high speed and legacy networks like Gigabit Ethernet, Fast Ethernet and Ethernet. Multimode patchcords conform to IEC, EIA TIA and Telecordia standards. OM2 patchcords are terminated with standard Optronics connectors which giving optimum optical performance.

Features / Benefits

- > SC, LC, ST, FC and MTRJ connectors
- > LSZH cable or PVC
- > 900µm tight buffer
- > OM2 fibre conforms to ITU-651, TIA/EIA 492AAAB
- > Simplex and duplex assemblies
- > Duplex assemblies available with clips (SC and LC)
- > Armoured option also available

Applications

- > For use in 1 Gb/s high speed LAN networks over a 550 m indicative link length at 850 nm wavelength using a laser launch
- > High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet
- > Data centers
- > Premises cabling in data networks including backbone, riser and horizontal
- > Supports video, data and voice services



Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.30 dB	IEC 61300-3-4
Ave/Master*	0.15 dB	IEC 61300-3-4

*MTRJ - 0.4 dB

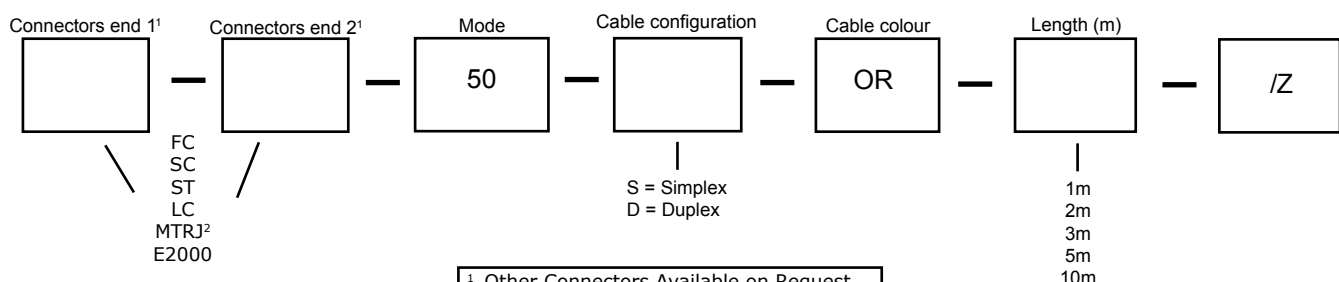
Cable Specification

Characteristics	Simplex	Duplex
Cable Material	LSZH or PVC	LSZH or PVC
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1 / LSZH PVC OFNR (UL)	

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1300nm
Bandwidth OFL (MHz x km)	500 @ 850nm / 500 @ 1300nm
Max Ethernet Transmittable Distance	Please refer to Fibre Comparison Chart

Part Number Generator



¹ Other Connectors Available on Request

² MTRJ is only available in duplex

50/125 (OM3) Optical Fibre Patchcords

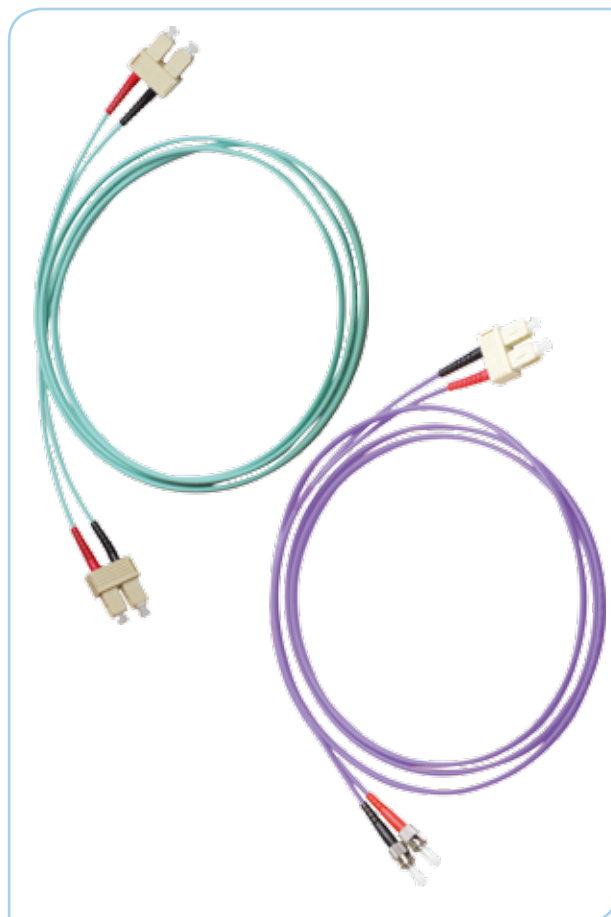
Optronics multimode patchcords are used to connect high speed and legacy networks like Gigabit Ethernet, Fast Ethernet and Ethernet. The multimode patchcords are manufactured using LSZH cables which conform to IEC, EIA TIA and Telecordia standards. The OM3 patchcords are terminated with standard Optronics connector which gives optimum optical performance.

Features / Benefits

- > SC, LC, ST, FC and MTRJ connectors
- > Low smoke zero halogen (LSZH) cable in aqua or purple colour
- > 900µm tight buffer
- > OM2 fibre conforms to ITU-651, TIA/EIA 492AAAC
- > Simplex and duplex assemblies
- > Duplex assemblies available with clips (SC and LC)
- > Different connector performance range for specific application
- > Armoured option also available

Applications

- > For use in 10 Gb/s high speed LAN networks over a 300 m indicative link length at 850 nm (SX) wavelength using a laser launch
- > For use in 1 Gb/s high speed LAN networks over a 1000 m indicative link length at 850 nm (SX) wavelength using a laser launch
- > High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet
- > Data centers
- > Premises cabling in data networks including backbone, riser and horizontal
- > Supports video, data and voice services



Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.30 dB	IEC 61300-3-4
Ave/Master*	0.15 dB	IEC 61300-3-4
Ave/Random*	0.20 dB	IEC 61300-3-34

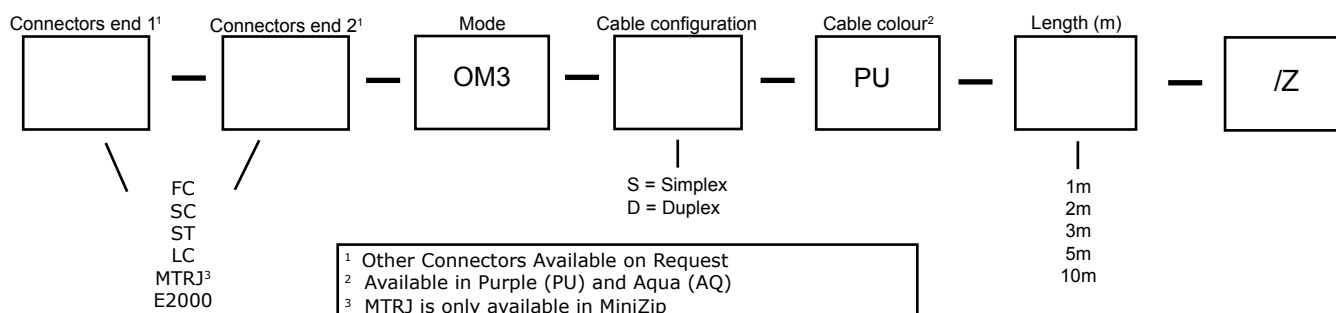
Cable Specification

Characteristics	Simplex	Duplex
Cable Material	LSZH or PVC	LSZH or PVC
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1 / IEC 60332-3	

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	1500 @ 850nm / 500 @ 1310nm
Bandwidth LEMB (MHz x km)	2000 @ 850nm
Max Ethernet Transmittable Distance	Please refer to Fibre Comparison Chart

Part Number Generator



50/125 (OM4) Optical Fibre Patchcords

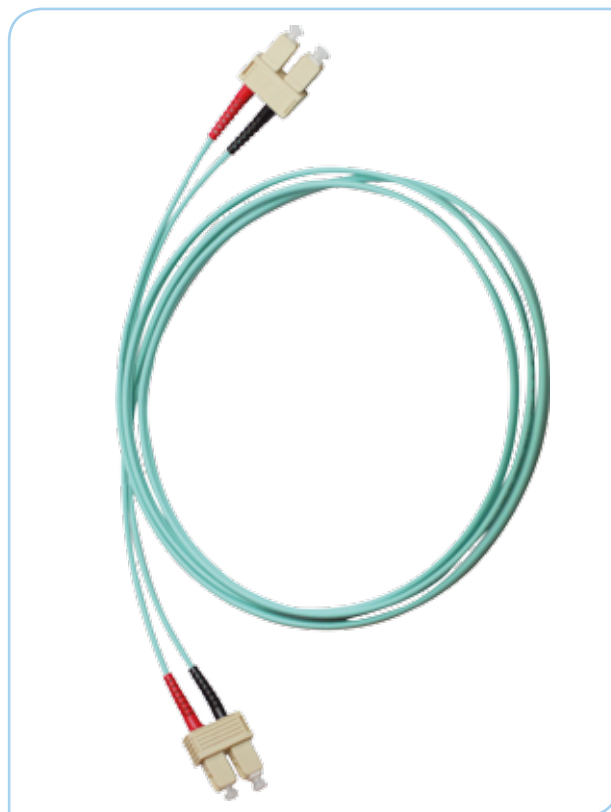
Optronics multimode patchcords are used to connect high speed and legacy networks like Gigabit Ethernet, Fast Ethernet and Ethernet. The multimode patchcords are manufactured using LSZH cables which conform to IEC, EIA TIA and Telecordia standards. The OM4 patchcords are terminated with standard Optronics connector which gives optimum optical performance.

Features / Benefits

- > SC, LC, ST, FC and MTRJ connectors
- > Low smoke zero halogen (LSZH) cable in aqua colour
- > 900µm tight buffer
- > OM4 fibre conforms to ITU-651, TIA/EIA 492AAAD
- > Simplex and duplex assemblies
- > Duplex assemblies available with clips (SC and LC)
- > Different connector performance range for specific application

Applications

- > For use in 10 Gb/s high speed LAN networks over a 300 m indicative link length at 850 nm (SX) wavelength using a laser launch
- > For use in 1 Gb/s high speed LAN networks over a 1000 m indicative link length at 850 nm (SX) wavelength using a laser launch
- > High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet
- > Data centers
- > Premises cabling in data networks including backbone, riser and horizontal
- > Supports video, data and voice services



Connector Specification

OPTICAL PERFORMANCE	MULTIMODE	CONFORMANCE
IL Max/Master (Acceptance)	0.30 dB	IEC 61300-3-4
Ave/Master*	0.15 dB	IEC 61300-3-4
Ave/Random*	0.20 dB	IEC 61300-3-34

Fibre Specification

CHARACTERISTICS	
Attenuation (dB) / km	2.8 @ 850nm / 0.8 @ 1310nm
Bandwidth OFL (MHz x km)	3500 @ 850nm / 500 @ 1310nm
Max Ethernet Transmittable Distance	Please refer to Fibre Comparison Chart

Cable Specification

Characteristics	Simplex	Duplex
Cable Material	LSZH or PVC	LSZH or PVC
Strength Member	Aramid	Aramid
Crush (N)	1000	1000
Operating Temperature (°C)	-20 to 60	-20 to 60
Fire Specification	IEC 60332-1 / IEC 60332-3	

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