# Opti-Core™ Fibre Optic Patch Cords — Low Smoke Zero Halogen (LSZH) Rated



#### specifications

RoHS compliant fibre optic patch cords shall include simplex or duplex LC, SC, ST or MT-RJ connectors, or FJ or keyed FJ plugs or jacks on both ends. RoHS compliant fibre optic pigtails shall include simplex or duplex LC, SC, ST, or MT-RJ connectors, or FJ or keyed FJ plugs or jacks on one end and open (unterminated) on the other end. Patch cords and pigtails shall include laser optimised OM4, OM3 fibre or OM2, OM1 or OS1/OS2 fiber in 900µm tight-buffered fibre, 1.6mm or 3.0mm simplex or duplex zipcord jacketed cable, or 1.8mm duplex zipcord jacketed cable. Jacketed cable shall be compliant with IEC-60332-3 (LSZH) flame ratings. Patch cords and pigtails shall meet or exceed requirements of TIA/EIA-568-C.3. The fibre connectors shall be FOCIS compliant or compatible, and exceed the requirements of TIA/EIA-455-21A for 500 mating cycles.



#### technical information

All connectors exceed TIA/EIA-455-21A: 500 mating cycles Standards requirements: Compliant with: TIA/EIA-568-C.3 and ISO/IEC 11801 IEC-61754-7 (International) TIA-604-5 (FOCIS-5) IEC-60332-3 (LSZH) flame rating 0.10dB typical (multimode), 0.25db max. (OM1, OM2 Insertion Per connection: loss: and Standard OM3, OM4) 0.15db max. (optimized OM3 and Optimized OM4) for SC and LC 0.30db max. for other connectivity 0.50dB max. (MT-RJ multimode); 0.25dB typical singlemode, 0.35dB max., (SM-UPC) for LC, 0.50dB max. (SM-UPC) for other connectivity Return loss: 20dB min. (multimode); 26dB min. (10Gig™ multimode); 55dB min. (singlemode)

#### key features and benefits

noy routured and	501101110
Factory terminated and 100% tested for insertion loss (all) and return loss (10Gig <sup>™</sup> and SM)	Assures high performance for increased up-time and lower cost of ownership
Low smoke zero halogen rated jacket	Meets IEC-60332-3 (LSZH) flame rating for standard compliant safety
Singlemode endface geometry 100% factory inspected	Every singlemode endface is inspected in compliance with Telcordia GR-326-CORE, Issue 3 requirements to assure high performance
Singlemode endface UPC polished (55dB min. return loss)	Ensure a high quality endface for higher return loss to meet application requirements
Singlemode patch cords include low water peak fibre	Eliminates high attenuation in the E-band and allows operation over the entire 1260nm – 1625nm wavelength range; excellent for CWDM and DWDM applications
Certified 10 GbE performance	10Gig <sup>™</sup> Patch Cords and Pigtails are tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m for OM3 and up to 550 meters for OM4 at 850nm to assure high performance and reliability
Test data supplied with each patch cord	Establishes a performance reference to streamline maintenance and troubleshooting
Q.C. identification label	Quality control reference provides lifetime traceability of test data

### applications

Opti-Core ™ Fibre Optic Patch Cords provide interconnect and cross-connect of applications over installations in entrance facilities, telecommunications rooms, data centres and at the desk. They support network applications to interconnect pre-terminated cassettes in main distribution, horizontal distribution, and equipment distribution areas. These low smoke zero halogen (LSZH) rated patch cords support installations that require these flame ratings in specific environments. Opti-Core™ Fibre Optic Patch Cords

and Pigtails are available in OM4, OM3 fibre or OM2, OM1 or OS1/OS2 fibre types to meet the demands of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fibre Channel systems while maintaining compatibility with Ethernet, Fast Ethernet, FDDI and ATM. If application requires riser (OFNR) or Plenum (OFNP) rated fibre optic patch cords or pigtails, refer to Opti-Core™ Fibre Optic Patch Cords or Pigtails − Riser (OFNR) and Plenum (OFNP) Rated specification sheet.

#### Opti-Core™ Low Smoke Zero Halogen (LSZH) Fibre Optic Patch Cords

Duplex LC to LC

1.6mm

jacketed cable: F^LE10-10M‡

Duplex SC to SC

3mm

jacketed cable: F^LD3-3M‡

**Duplex ST to ST** 

3mm

jacketed cable: F^LD2-2M‡

Duplex MT-RJ to MT-RJ 1.8mm

jacketed cable: F^LZ12-12M‡

Opti-Core™ Low Smoke Zero Halogen (LSZH) Hybrid Fibre Optic Patch Cords

Duplex SC to LC

1.6mm

jacketed cable: F^LE3-10M‡

Duplex ST to LC

1.6mm

jacketed cable: F^LE2-10M‡

Duplex ST to SC

3mm

jacketed cable: F^LD2-3M‡

Duplex SC to MT-RJ 1.8mm

jacketed cable: F^LZ3-12M‡

Duplex ST to MT-RJ 1.8mm

jacketed cable: F^LZ2-12M‡

Duplex FJ™ Plug to MT-RJ 1.8mm

jacketed cable: F^LZ6P-12M‡

Substitute for fibre type:

Z = OM4 − 10Gig<sup>™</sup> 50/125µm ZO = Optimized OM4 − 10Gig<sup>™</sup> 50/125µm

 $X = OM3 - 10Gig^{\text{m}} 50/125\mu\text{m}$ 

XO = Optimized OM3 - 10Gig<sup>™</sup> 50/125μm

 $5 = OM2 - 50/125\mu m$ ,  $6 = OM1 - 62.5/125\mu m$ , or

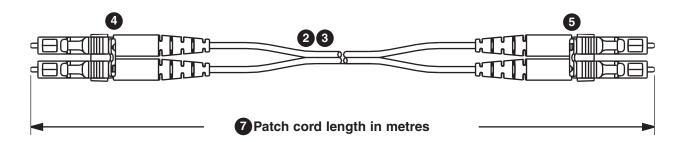
 $9 = OS1 - 9/125\mu m$ 

‡Substitute for length in metres: Patch cords 1m – 10m, 15m, 20m, 25m or 30m; pigtails – 1, 2, or 3. Contact Customer Service for other available lengths.

www.panduit.com

# Opti-Core™ Fibre Optic Patch Cords (LSZH)

### Fibre Optic Patch Cord Detail



## Part Number Configurator

Example:



XL 2



10 -

M 6

7



FXLE10-10M5 = Opti-Core <sup>™</sup> 10Gig <sup>™</sup> LC to LC Duplex Fibre Optic Patch Cord, OM3/OM4 – 10Gig <sup>™</sup> 50/125μm multimode low smoke zero halogen rated cable, LC duplex connectors on each end, and 5m in length.

#### 2 Fibre Type and Jacket Flame Rating

Low Smoke Zero Halogen (LSZH) rated cable:

ZL = OM4 − 10Gig<sup>™</sup> 50/125µm

ZOL = Optimized OM4 - 10Gig<sup>™</sup> 50/125μm

XL = OM3 - 10Gig<sup>™</sup> 50/125µm

XOL = Optimized OM3 - 10Gig<sup>™</sup> 50/125µm

 $5L = OM2 - 50/125\mu m$ ,

 $6L = OM1 - 62.5/125\mu m$ , or

 $9L = OS1 - 9/125\mu m$ 

#### 3 Cable Type

D = 3mm duplex zipcord jacketed cable

S = 3mm simplex jacketed cable

E = 1.6mm duplex zipcord jacketed cable

F = 1.6mm simplex jacketed cable

Z = 1.8mm duplex zipcord jacketed cable

# 4 and 5 Connector Styles

10

5

Select one style for each end, listing lower number first, or 6P first.

2 = ST, 3 = SC, 6P =  $FJ^{\text{™}}$  Plug, 10 = LC, 12 = MT-RJ or 16 = E-2000

6 Unit of Measure (M = Metres)

#### 7 Length

Patch Cords: 1-10, 15, 20, 25 and 30 metre lengths. Pigtails: 1, 2, and 3 metre lengths.

#### 8 RoHS Compliance

All patch cords and pigtails are RoHS compliant.

Note: Not all cable types and connector combinations are available. Contact customer service for availability and other lengths.

^Substitute for fibre type:  $Z = OM4 - 10Gig^{\text{™}} 50/125\mu\text{m}$ ,  $X(OM3 - 10Gig^{\text{™}} 50/125\mu\text{m})$ ,  $5(OM2 - 50/125\mu\text{m})$ ,  $6(OM1 - 62.5/125\mu\text{m})$  and  $9(OS1/OS2 - 9/125\mu\text{m})$ . \*MTP is a registered trademark of US Conec Ltd.

WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA Markham, Ontario cs-cdn@panduit.com Phone: 800.777.3300 PANDUIT EUROPE LTD. London, UK cs-emea@panduit.com Phone: 44.20.8601.7200 PANDUIT SINGAPORE PTE. LTD. Republic of Singapore cs-ap@panduit.com Phone: 65.6305.7575 PANDUIT JAPAN Tokyo, Japan cs-japan@panduit.com Phone: 81.3.6863.6000 PANDUIT LATIN AMERICA Guadalajara, Mexico cs-la@panduit.com Phone: 52.33.3777.6000 PANDUIT AUSTRALIA PTY. LTD. Victoria, Australia cs-aus@panduit.com Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to www.panduit.com/warranty



