

# Opti-Core® Fiber Optic Patch Cords and Pigtails – Riser (OFNR) and Plenum (OFNP) Rated

## PANDUIT® SPECIFICATION SHEET

### specifications

RoHS compliant fiber 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 fiber optic pigtaills 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 pigtaills shall include laser optimized OM4, OM3 fiber or OM2, OM1 or OS1/OS2 fiber in 900µm tight-buffered fiber, 1.6mm or 3.0mm simplex or duplex zipcord jacketed cable, or 1.8mm duplex zipcord jacketed cable. Jacketed cable shall be compliant with UL 1666 (OFNR) or NFPA 262 (OFNP) flame ratings. Patch cords and pigtaills shall meet or exceed requirements of TIA/EIA-568-C.3. The fiber connectors shall be FOCIS compliant or compatible, and exceed the requirements of TIA/EIA-455-21A for 500 mating cycles.



### technical information

|                                |                                                                                                                                                                                                                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standards requirements:</b> | All connectors exceed TIA/EIA-455-21A: 500 mating cycles<br>Compliant with: TIA/EIA-568-C.3 and ISO/IEC 11801<br>IEC-61754-7 (International)<br>TIA-604-5 (FOCIS-5)<br>UL 1666 (OFNR) or NFPA 262 (OFNP) flame ratings                                                                       |
| <b>Insertion loss:</b>         | Per connection: 0.10dB typical, 0.25db max (OM1, OM2 and Standard OM3, OM4)<br>0.15db max (optimized OM3 and Optimized OM4) for SC and LC<br>0.30db max for other connectivity<br>0.50dB max. (MT-RJ multimode);<br>0.25dB typical, 0.75dB max. (singlemode),<br>0.35dB max. (LC singlemode) |
| <b>Return loss:</b>            | 20dB min. (multimode); 26dB min. (10Gig™ multimode); 55dB min. (singlemode)                                                                                                                                                                                                                  |

### key features and benefits

|                                                                                                    |                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Factory terminated and 100% tested for insertion loss (all) and return loss (10Gig™ and SM)</b> | Assures high performance for increased up-time and lower cost of ownership                                                                                                                                                                    |
| <b>Riser or plenum rated jacket</b>                                                                | Meets UL 1666 (OFNR) or NFPA 262 (OFNP) flame ratings for standard compliant safety                                                                                                                                                           |
| <b>Singlemode endface geometry 100% factory inspected</b>                                          | Every singlemode endface is inspected in compliance with Telcordia GR-326-CORE, Issue 3 requirements to assure high performance                                                                                                               |
| <b>Singlemode endfaces UPC polished (55dB min. return loss)</b>                                    | Ensure a high quality endface for higher return loss to meet application requirements                                                                                                                                                         |
| <b>Singlemode patch cords include low water peak fiber</b>                                         | Eliminates high attenuation in the E-band and allows operation over the entire 1260nm – 1625nm wavelength range; excellent for CWDM and DWDM applications                                                                                     |
| <b>Certified 10 GbE performance</b>                                                                | 10Gig™ Patch Cords and Pigtaills 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 |
| <b>Test data supplied with each patch cord and pigtail</b>                                         | Establishes a performance reference to streamline maintenance and troubleshooting                                                                                                                                                             |
| <b>Q.C. identification label</b>                                                                   | Quality control reference provides lifetime traceability of test data                                                                                                                                                                         |

### applications

Opti-Core® Fiber Optic Patch Cords and Pigtaills provide interconnect and cross-connect of applications over installations in entrance facilities, telecommunications rooms, data centers and at the desk. They support network applications to interconnect pre-terminated cassettes in main distribution, horizontal distribution and equipment distribution areas. These riser (OFNR) and plenum (OFNP) rated patch cords and pigtaills support installations that require these flame ratings in specific environments.

**www.panduit.com**

Opti-Core® Fiber Optic Patch Cords and Pigtaills are available in OM4, OM3 fiber or OM2, OM1 or OS1/OS2. fiber 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 low smoke zero halogen (LSZH) rated fiber optic patch cords, reference Opti-Core® Fibre Optic Patch Cords – Low Smoke Zero Halogen (LSZH).

#### Opti-Core® Riser (OFNR)\* Fiber Optic Patch Cords

|                                                       |             |
|-------------------------------------------------------|-------------|
| <b>Duplex LC to LC</b><br>1.6mm jacketed cable:       | F^E10-10M^Y |
| <b>Simplex LC to LC</b><br>1.6mm jacketed cable:      | F^A10-10M^Y |
| <b>Duplex SC to SC</b><br>3mm jacketed cable:         | F^D3-3M^Y   |
| <b>Simplex SC to SC</b><br>3mm jacketed cable:        | F^A3-3M^Y   |
| <b>Duplex ST to ST</b><br>3mm jacketed cable:         | F^D2-2M^Y   |
| <b>Simplex ST to ST</b><br>3mm jacketed cable:        | F^A2-2M^Y   |
| <b>FJ® Plug to FJ® Plug</b><br>3mm jacketed cable:    | F^D6P-6PM^Y |
| <b>Duplex MT-RJ to MT-RJ</b><br>1.8mm jacketed cable: | F^Z12-12M^† |

#### Opti-Core® Riser (OFNR)\* Hybrid Fiber Optic Patch Cords

|                                                    |             |
|----------------------------------------------------|-------------|
| <b>Duplex SC to LC</b><br>1.6mm jacketed cable:    | F^E3-10M^Y  |
| <b>Simplex SC to LC</b><br>1.6mm jacketed cable:   | F^A3-10M^Y  |
| <b>Duplex ST to LC</b><br>1.6mm jacketed cable:    | F^E2-10M^Y  |
| <b>Duplex ST to SC</b><br>3mm jacketed cable:      | F^D2-3M^Y   |
| <b>Simplex ST to SC</b><br>3mm jacketed cable:     | F^A2-3M^Y   |
| <b>FJ® Plug to LC</b><br>1.6mm jacketed cable:     | F^E6P-10M^Y |
| <b>FJ® Plug to SC</b><br>3mm jacketed cable:       | F^D6P-3M^Y  |
| <b>FJ® Plug to ST</b><br>3mm jacketed cable:       | F^D6P-2M^Y  |
| <b>Duplex SC to MT-RJ</b><br>1.8mm jacketed cable: | F^Z3-12M^†  |
| <b>Duplex ST to MT-RJ</b><br>1.8mm jacketed cable: | F^Z2-12M^†  |
| <b>FJ® Plug to MT-RJ</b><br>1.8mm jacketed cable:  | F^Z6P-12M^† |

#### Opti-Core® Fiber Optic Pigtaills\*\*

|                                                     |            |
|-----------------------------------------------------|------------|
| <b>LC to pigtail</b><br>900µm buffered fiber:       | F^B10-NM^Y |
| <b>SC to pigtail</b><br>900µm buffered fiber:       | F^B3-NM^Y  |
| <b>ST to pigtail</b><br>900µm buffered fiber:       | F^B2-NM^Y  |
| <b>FJ® Jack to pigtail</b><br>3mm jacketed cable:   | F^D6J-NM^Y |
| <b>FJ® Jack to pigtail</b><br>900µm buffered fiber: | F^B6J-NM^Y |

\*Part numbers listed are for riser (OFNR) rated cable; for plenum (OFNP) rated cable, place a P after the fiber type (^) and drop the Y.

^Substitute for fiber type:

Z = OM4 – 10Gig™ 50/125µm  
ZO = Optimized OM4 – 10Gig 50/125µm  
X = OM3 – 10Gig™ 50/125µm  
XO = Optimized OM3 – 10Gig 50/125µm  
5 (OM2 – 50/125µm), 6 (OM1 – 62.5/125µm) and 9 (OS1/OS2 – 9/125µm). MT-RJ patch cords are only available in OM1 or OM2 fiber.

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

\*\*900µm buffered fiber pigtaills are not flame rated; jacketed pigtaills listed are for riser (OFNR) rated cable.

# Opti-Core® Fiber Optic Patch Cords and Pigtails (OFNR and OFNP)

## Fiber Optic Patch Cord Detail



## Ordering Information

Example:

|   |   |   |    |   |    |   |   |   |
|---|---|---|----|---|----|---|---|---|
| F | X | E | 10 | — | 10 | M | 5 | Y |
| 1 | 2 | 3 | 4  |   | 5  | 6 | 7 | 8 |

**FXE10-10M5Y** = Opti-Core® 10Gig™ LC to LC Duplex Fiber Optic Patch Cord, OM3 – 10 GbE 50/125µm multimode riser rated cable, LC duplex connectors on each end, and 5m in length.

### 2 Fiber Type and Jacket Flame Rating

Riser (OFNR) rated cable (Y at end):

Z = OM4 – 10Gig 50/125µm

ZO = Optimized OM4 – 10Gig™ 50/125µm

X = OM3 – 10Gig 50/125µm

XO = Optimized OM3 – 10Gig™ 50/125µm

5 = OM2 – 50/125µm,

6 = OM1 – 62.5/125µm, or

9 = OS1 – 9/125µm

Plenum (OFNP) rated cable (no Y at end):

ZP = OM4 – 10Gig 50/125µm

ZOP = Optimized OM4 – 10Gig™ 50/125µm

XP = OM3 – 10Gig 50/125µm

XOP = Optimized OM3 – 10Gig™ 50/125µm

5P = OM2 – 50/125µm,

6P = OM1 – 62.5/125µm, or

9P = OS1 – 9/125µm

### 3 Cable Type

B = 900µm tight-buffered fiber

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

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

2 = ST, 3 = SC, 6J = FJ® Jack Module,

6P = FJ® Plug, 10 = LC, 12 = MT-RJ and

N = Pigtail

### 6 Unit of Measure (M = Meters)

### 7 Length

Patch cords:

1m – 10m, 15m, 20m, 25m and 30m lengths.

Pigtails:

1m, 2m, and 3m lengths.

### 8 Riser RoHS Compliance

Riser patch cords and pigtails end with a Y to identify RoHS compliance. Plenum and MT-RJ patch cords are RoHS compliant but do not end with a Y.

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

#### QuickNet™ Pre-Terminated MTP\* Cassettes



FC^24-10Y

FC^12-3Y

#### Opticom® Fiber Adapter Panels (FAPs)



FAP6WAQDLCZ

#### Mini-Com® Fiber Optic Adapter Modules



CMDJAQLCZBL

CMDEISCEI

^Substitute for fiber type: Z = OM4 – 10Gig™ 50/125µm, X(OM3/OM4 – 10Gig™ 50/125µm), 5(OM2 – 50/125µm), 6(OM1 – 62.5/125µm) and 9(OS1 – 9/125µm).

\*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](http://www.panduit.com/warranty)

For more information

Visit us at [www.panduit.com](http://www.panduit.com)

Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800.777.3300 and reference FBSP24

**PANDUIT®**

©2010 Panduit Corp.  
ALL RIGHTS RESERVED.

WW-FBSP24  
10/2010