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Opti-Core® Fiber Optic Patch Cords and Pigtails

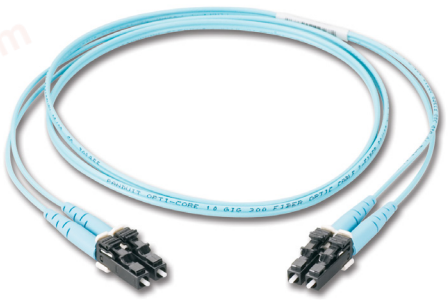
PANDUIT®

SPECIFICATION SHEET

technical information

The Opti-Core® patch cords support network applications in main, horizontal and equipment distribution areas and are available in riser (OFNR) and low smoke zero halogen (LSZH) rated jacket materials. In addition, pre-terminated fiber optic pigtails support fusion splice field termination applications.

Both fiber optic patch cords and pigtails are available in OM1, OM3, OM4, OM4+, OM5 and OS2 fiber types to meet the demands of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fibre Channel.



application

Provide interconnect and cross-connect of applications in entrance facilities, telecommunications rooms, data centers, at the desk and network applications to interconnect pre-terminated cassettes in main distribution, horizontal distribution, and equipment distribution areas.

construction

Fiber count:	Simplex (1-fiber) jacketed Duplex (2-fiber) jacketed zipcord Tight buffered
Cable jacket ratings:	Riser (OFNR) Low Smoke Zero Halogen (LSZH)
Fiber types:	Singlemode: OS2/A2 (25G) Multimode: OM1 (10G) OM3 (40G) OM4 (100G) OM4+ (100G) OM5 (100G)
Connector types end 'A':	Simplex or duplex LC, SC
Jacket color:	OS2: Yellow OM1: Orange OM3: Aqua OM4: Aqua OM4+ Signature Core™: Aqua OM5: Lime Green Buffered fiber (pigtail): Blue
Connector types end 'B':	Simplex or duplex LC, SC

Note: OM4+ Signature Core™ and OM5 only support a duplex zipcord with duplex LC connectors.

optical properties

Connector insertion loss (IL):	Standard:	0.15 dB max. (OM1, OM3, OM4, OM5) 0.25dB max. (LC OS2) 0.50dB max. (SC OS2)
	Ultra:	0.10 dB max (OM4, OM4+, OM5)
Connector return loss (RL):		20dB min. (OM1) 26dB min. (OM3, OM4, OM4+, OM5) 55dB min. (OS2)

physical properties

Cable outside diameter (OD):	1.6mm duplex 3mm simplex 900 micron
Connector cable retention:	50 N @ 0°C 19.4 N @ 90°C
Connector durability:	500 cycles
Bend radius, minimum:	900µm: 9mm 1.6mm: 16mm 3mm: 29mm

environmental properties

Storage and shipping temperature:	-40°C to 70°C
Operating and installation temperature:	-10°C to 60°C

standards

Meets or exceeds	LSZH IEC 60332-1-2 IEC 60332-3-24 IEC 60754-1 IEC 60754-2 IEC 61034-2 TIA-604-3 (FOCIS-3) TIA-604-5 (FOCIS-10) TIA 568.3-D IEC 60793-2-10 Ed 6 IEC11801-1 Ed 3 OM5 ANSI/TIA-492AAAE
Restriction of Hazardous Substances (RoHS) Compliance:	All patch cord components meet the requirements of Directive 2002/95/EC.

Note: OM4+ Signature Core™ and OM5 fibers are 100% standards compliant meeting all OM3 and OM4 specifications. The actual supported reach also depends on the electrical and optical characteristics of the VCSEL transceiver.

OM4+ Signature Core™ provides on average 20% longer reach than OM4 defined standard for all applications using Ethernet, Fibre Channel and Cisco BiDi technologies.

OM5 includes additional bandwidth characterization at 953nm to support extended distances when using SWDM.

For more information, visit www.panduit.com/signature-core

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part number

Example: FZ2ERLNSNSNM005 = Fiber OM4, 2-fiber, 1.6mm cable, riser rated, LC duplex to SC duplex, Standard IL, 5 meters

Character	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Example	F	Z	2	E	R	L	N	S	N	S	N	M	0	0	5

1 – Fiber Product
F = Fiber

2 – Fiber Type
6 = OM1
X = OM3
Z = OM4
9 = OS2
S = OM4+ Signature Core™*
W = OM5*

3 – Fiber Count
1 = 1-fiber
2 = 2-fibers

4 – Cable Type
B = 900µm buffer
E = 1.6mm
3 = 3.0mm (Only for SC to SC cords)

5 – Jacket Type
L = LSZH (Low Smoke Zero Halogen)
N = (No Jacket) 900µm Buffered Fiber
R = OFNR (Riser)

6 – Connector Type – End A
1 = LC
2 = ST
3 = SC
L = LC duplex
S = SC duplex

7 – Connector Variant
N = No variant

8 – Connector Type – End B
1 = LC
2 = ST
3 = SC
L = LC duplex
N = None; pigtail
S = SC duplex

9 – Connector Variant
N = No variant

10 – Performance/Construction
S = Standard IL (A-B)
N = Ultra IL (A-B)

11 – Other
N = No variant

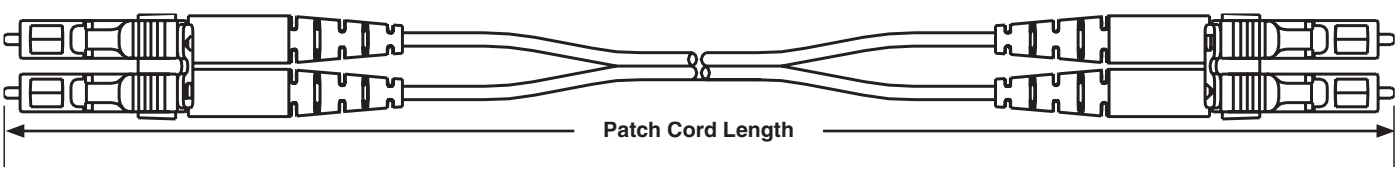
12 – Unit of Length
M = Meters

13, 14, 15 – Length
0.5-050

Note: For hybrid cords, the SC connector is always on End B.

* LC to LC only

fiber optic patch cord detail



Other options are available as follows; contact Panduit for part number:
Connector Type: LC/APC, SC/APC, ST, LC Keyed
Performance/Construction: Standard IL – Flipped (A-A)
Other: Non-standard colored cable

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FBSP54--WW-ENG
12/2023