# Opti-Core® LC Uniboot Pull-Boot Duplex Fibre Optic Patch Cords



# **SPECIFICATIONS**

The Opti-Core Pull-Boot LC Duplex Fiber Optic Patch Cords shall provide high performance essential for today's high-speed systems with a connector that allows easy polarity change in the field without any mechanical components that can be unfastened or misplaced. In addition, the 2.0mm, 2-fiber round unitary cable construction reduces cable volume by 50 percent making the patch cords ideal for reducing cable congestion in extremely high density patch fields. These patch cords are available in plenum (OFNP) or low smoke zero halogen (LSZH) rated jacket materials along with OM4, OM4+, OM5, and OS2 fiber types. The connectors are available in UPC (multimode and singlemode) and APC (singlemode only) end faces.



#### **STANDARDS**

| Meets or exceeds:  | 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, OS2 ITU-T G.657.A2 |
|--|---|
| Restriction of Hazardous<br>Substances (RoHS)<br>Compliance: | All patch cord components meet the requirement of Directive 2011/65/EU  |

OM4+ Signature Core<sup>™</sup> and OM5 fibers are 100 percent 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 percent 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

#### CONSTRUCTION

| Fiber count:              | Duplex (2-fibers) Round                        |                        |            |                    |  |  |  |  |  |  |
|---------------------------|--|------------------------|------------|--------------------|--|--|--|--|--|--|
| Cable jacket ratings:     | Plenum (OFNP)<br>Low Smoke Zero Halogen (LSZH) |                        |            |                    |  |  |  |  |  |  |
| Fiber types:              | Singlemode: OS2                                |                        | Multimode: | OM4<br>OM4+<br>OM5 |  |  |  |  |  |  |
| Connector types, End 'A': | Duplex LC Uniboot                              |                        |            |                    |  |  |  |  |  |  |
| Connector types, End 'B': | Duplex LC Uniboot                              |                        |            |                    |  |  |  |  |  |  |
| Jacket color:             | OS2:<br>OM4/OM4+:<br>OM5:                      | Yellow<br>Aqua<br>Lime |            |                    |  |  |  |  |  |  |

## **APPLICATION**

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

#### PHYSICAL PROPERTIES

| Cable outside diameter (OD): | 2.0mm                       |
|------------------------------|-----------------------------|
| Connector cable retention:   | 50 N @ 0°C<br>19.4 N @ 90°C |
| Connector durability:        | 500 cycles                  |
| Bend Radius, Min:            | 20mm                        |

## **ENVIRONMENTAL PROPERTIES**

| Temperature range: | Storage and shipping: -40°C to 70°C Operation and installation: -10°C to 60°C |
|--------------------|---|
|                    |   |

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#### **OPTICAL PROPERTIES**

| Connector insertion loss (IL): | Optimized: | 0.15dB max<br>(OM4, OM4+, OM5)<br>0.25dB max (OS2)             | Ultra: | 0.10dB max<br>(OM4, OM4+, OM5) |  |
|--------------------------------|------------|--|--------|--------------------------------|--|
| Connector return loss (RL):    |            | 55dB min (Singlemode fiber)<br>65dB min (Singlemode fiber/APC) |        | (Multimode fiber)              |  |

## PART NUMBER CONFIGURATOR

Example: FZ2RLU1U1ONM005 = Fiber, OM4, 2-fiber, 2mm Round, LSZH, LC Uniboot to LC Uniboot, Optimized IL, 5 Meters

| Character | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|-----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Example   | F | Z | 2 | R | L | U | 1 | U | 1 | 0  | N  | М  | 0  | 0  | 5  |

1 - Fiber Product F = Fiber 8 - Connector Type U = LC Duplex Uniboot 2 - Fiber Type Z = OM49 - Connector Variant 1 = UPCS = OM4+ Signature Core 2 = APC Singlemode W = OM510 - Performance/ O = Optimized IL (A-B) 9 = OS2N = Ultra IL (A-B) Construction 3 - Fiber Count 2 = 2-fibers 11 - Connector Variant N = No variant R = Round 2.0mm 4 - Cable Type 12 - Length, Unit M = Meters 5 - Jacket Type L = LSZH (Low Smoke Zero Halogen) 13 - Length 001 - 050 P = OFNP (Plenum) 14 6 - Connector Type -U = LC Duplex Uniboot 15

2 = APC Si

End A

7 - Connector Variant

2 = APC Singlemode

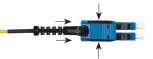
1 = UPC

## CHANGING POLARITY: LC DUPLEX UNIBOOT FIBER OPTIC PATCH CORDS

**NOTE:** When dots on housing are matching color the connector indicates straight through (A-B)



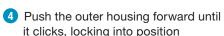
 Hold the housing and push the boot forward toward the connector



2 Rotate both connectors 180°



3 Rotate the connector body 180°





**NOTE:** Polarity is changed into pair flipped (A-A) when the dots have different colors





Opti-Core LC Uniboot Pull-Boot Duplex Fiber Optic Patch Cords are pre-labeled with the RapidID™ Network Mapping System to enable faster tracing, placing, and network documentation.

Learn more: www.panduit.com/rapid-id

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