

## **Premium Plus Fiber Patch Cords**

#### **APPLICATION**

Premium Plus Fiber Optic Patch Cords are designed to interconnect, or cross connect fiber networks within structured cabling systems including data centers, Broadband CATV, Passive Optical Network (PON), WDM or DWDM multiplexing, FTTH and voice services in ATM and SONET metropolitan and access networks. Quick-turn service is available with orders of up to 100 patch cords and ships within three business days. Contact customer service for details.



## **SPECIFICATION**

Multimode and single-mode patch cords shall be manufactured in the U.S.A. The patch cords shall be compliant with ANSI/TIA-568.3-D. Insertion loss shall be a maximum of 0.25 dB for multimode and single-mode. Multimode return loss shall be greater than 26 dB and greater than 50 dB for single mode connectors. Single-mode angled physical contact connectors (APC) shall have a minimum of 60 dB return loss. Patch cords shall have a pull force of at least 50 N (11.24 lbf) per IEC 61300-2-4. Connector durability of greater than 500 matings for both multimode and single mode. Patch cords shall be individually packaged with part numbers, descriptions, optical performance, code 39 barcode part number printed on each package and QR code to access supporting documentation. Patch cords shall include wrap labels including length, end designation and serial number providing traceability to factory collected test data. Fiber patch cords with LC unibody connectors shall use Spectro-Link™ Technology to support field polarity reversal without twisting or moving fibers. Unibody LC connectors shall have a push/pull grip that, coupled with a one-piece unitized duplex housing, shall assure exact centerline spacing for fast mating in congested patching fields.

#### **FEATURES**

- · Available in simplex, duplex, and pigtail configurations
- LC, LC Unibody, LC/APC, SC, SC/APC, ST, FC and FC/APC connector options
- · Quick-turn service for fast delivery
- TIA compliant color-coded connectors and boots
- · Cable jacket and boots color-coded for easy ID of fiber
- Fiber options: OS2, OM1, OM3, and OM4
- 100% tested for insertion loss and single-mode for return loss
- LC Unibody connector with Spectro-Link Technology includes reversible polarity feature, allowing polarity changes in the field without tools
- Unibody design is ideal for high-density applications, and comes standard with 2.0 mm duplex round cables
- Premium Plus Series cords include a Limited Lifetime Warranty when used with other Leviton cabling and installed by a Leviton certified contractor
- Other jacket colors available as custom with MOQ and lead time applicable
- · Custom configurations via Leviton.com/configurator

## **DESIGN CONSIDERATIONS**

- All connectors have precision pre-radiused or pre-angled zirconia ferrules for consistent end face geometry
- · Single-mode UPC and APC polish
- · FC and ST connectors have metal bodies
- Duplex clips included with duplex configurations
- Bend-insensitive glass (OS2, OM3 and OM4)

#### **STANDARDS & REGULATIONS**

- ANSI/TIA-568.3-D Optical Fiber Cabling and Components Standard
- ANSI/TIA-455-171-B FOTP-171 Attenuation by Substitution Measurement for Short Length Multimode Graded Index and Single-Mode Optical Fiber Cable Assemblies
- IEC 61300-3-34: Attenuation of Random Mated Connectors
- · IEC 61300-3-6: Return Loss of Random Mated Connectors
- ANSI/TIA-598-D Optical Fiber Cable Color Coding
- ISO/IEC 11801-1, -2, -3, -5 Information technology Generic cabling for customer premises
- TIA/EIA-604-10 (LC: FOCIS 10), TIA/EIA-604-3 (SC: FOCIS 3), TIA/EIA-604-2, (ST: FOCIS 2), TIA/EIA-604-4 (FC: FOCIS 4)
- Endface Geometry per IEC61755-3-1 (PC ferrules) and IEC61755-3-2 APC ferrules
- Plenum: National Fire Protection Association standard NFPA 90A
- LSZH rating: IEC 60332-1-2, IEC 60332-3-24, IEC 332-3C
- RoHS

## **PRODUCT SPECIFICATIONS**

### **Premium Plus Fiber Patch Cords**



#### **MECHANICAL SPECIFICATIONS**

Connector Durability: >500 Matings Connector Cable Retention: 50 N (11.24 lbf)

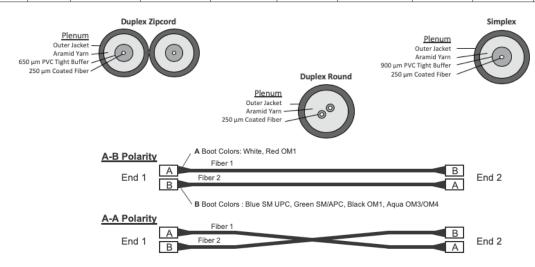
#### **COUNTRY OF ORIGIN**

**USA** 

#### WARRANTY INFORMATION

For Leviton product warranties, go to leviton.com/warranty

Cable Type	Fiber Count	Nominal Diameter	Weight	Tension  LBS (N)		Bend Radius		Temperature Range	
		Inches (MM)	Plenum			Inches (CM)			
			LBS/100FT (kg/km)	Installation	Long Term	Installation	Long Term	Operating/ Installation	Storage
1.6 mm Duplex Zipcord	2	0.06 x 0.12 (1.6 x 3.2)	7 (6)	11 (50)	7 (30)	2.0 (5.0)	1.2 (3.0)		-40°C to 75°C
2.0 mm Duplex Round	2	0.08 (2.0)	5 (7)	11 (50)	7 (30)	1.2 (3.0)	0.8 (2.0)	-20°C to +70°C	
2.0 mm Simplex	1	0.08 (2.0)	3 (5)	11 (50)	7 (30)	2.0 (5.0)	1.2 (3.0)		



Note on Patch Cord:

Length tolerance: < 10-meter (33 ft) patch cords: +7.6 cm/-0, +3 in/-0in

> 10-meter (33 ft) patch cords: +2.0% / -0%

Length is measured from ferrule tip to ferrule tip with protective caps removed

## **OPTICAL SPECIFICATIONS**

## Insertion Loss

Multimode: 0.15 dB typical, 0.25 dB max Single mode: 0.12 dB typical, 0.25 dB max

Return Loss

Multimode: ≥ 26 dB

Single mode: ≥ 50 dB UPC, ≥ 60 dB APC

## **OPTICAL SPECIFICATIONS – LC UNIBODY CONNECTOR**

Insertion Loss

Multimode: 0.15 dB max Single mode: 0.25 dB max

Return Loss

Multimode: ≥ 35 dB Single mode: ≥ 55 dB UPC

# PRODUCT SPECIFICATIONS Premium Plus Fiber Patch Cords



PERFORMANCE SPECIFIATIONS											
Fiber Performance											
Fiber Type	Maximum Attenuation (dB/km)			Bandwidth (MHz'km)		Transmission Distance (meters)					
	850 nm	1300 nm	1310 nm	1550 nm	850 nm	1300 nm	100 Mb	1 GbE	10 GbE	40 GbE	100 GbE
8.2/125 μm Single-mode (OS2)	N/A	N/A	0.4	0.3	N/A	N/A	>5,000 @ 1	>5,000 @ 1310 nm		N/A	N/A
62.5/125 μm MM (OM1)	3.5	1.0	N/A	N/A	200	500	300/300	300/600@ 850/1300 nm	36/300 @ 850/1300 nm	N/A	N/A
50/125 μm LO (10G-300m) MM (OM3)	3.0	1.0	N/A	N/A	2,000*	500**	@ 850/1300 nm	1,000/600 @ 850/1300 nm	300/300 @ 850/1300 nm	100 @ 850 nm	100 @ 850 nm
50/125 μm LO (10G-550m) MM (OM4)	3.0	1.0	N/A	N/A	4,700*	500**		1,040/600 @ 850/1300 nm	550/300 @ 850/1300 nm	150 @ 850 nm	150 @ 850 nm

<sup>\*</sup> The effective modal bandwidth is determined based on an overfill launch (OFL) per ANSI/TIA-455-204, except on laser-optimized fiber types.

<sup>\*\* 10</sup>GbE transmission @ 1,300 nm only applies to 10GBASE-LX4 (CWDM).

OPTICAL FIBER	TYPE/COMPLIANCE	COMPLIANCE
OS2 Single Mode	SMF-28 Ultra	ITU-T Recommendation G.652.D, G.657.A1 compliant
OM1 Multimode	InfiniCor 300	Laser-optimized 62.5 µm multimode fiber
OM3 Multimode	ClearCurve OM3	TIA/EIA 492AAA-B, ITU G651.1 Compliant
OM4 Multimode	ClearCurve OM4	TIA/EIA 492AAAD, ITU G651.1 Compliant

	Make-to-order			PREMIUM PLUS FIBER PATCH CORDS					
Assembly Type	Fiber Type	Cable Rating	Cable Type	Termination		Unit of Measure	Length	Polarity	
• Fiber Patch Cord (PCF)	• 8.2/125um SM OS2 Yellow (S2) • 62.5/125 µm MM OM1 Orange (MI) • 50/125 µm LO 10G-300m MM 0M3 Aqua (M3) • 50/125 µm LO 10G-550m MM OM4 Aqua (M4)	• PLENUM (P) • LSZH (L)	* SIMPLEX 2.0 MM (S2) * DUPLEX ZIPCORD 1.6 MM (DI) * DUPLEX ROUND 2.0 MM (R2)	FIRST END ST (A) CONTROL CONTROL SC (Q) LC (R) SC/APC (E) LC/APC (F) LC Unibody (V) FC (D) FC/APC (G)	SECOND END  ST (A)  CO (Q)  LC (R)  CO (A)  CO (B)  CO (C)  CO	• Meters (M) • Feet (F)	• 0010- 3000*	• Standard A-B (A-B) • A-A (A-A)	

For assistance customizing your trunk cables, please visit leviton.com/configurator or call Tech Support at 800.824.3005.

\*E.g. 0010=001.0 Units

0015 = 001.5 Units

0150 = 015.0 Units

Notes on length:

Min FEET increment: 1-FT,

Lengths > 1-FT: User can select 0.6-Inch increments

Min METER increment: 0.2-M

Lengths > 0.2 M User can select 0.2 M increments

After 49-FT/15 M longer lead times may apply for fractional lengths

For further support information, visit leviton.com/ns/support



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Leviton is dedicated to designing, developing and manufacturing sustainable high-performance structured cabling and speciality cabling solutions. Network Solutions products are available worldwide in over 100 countries. Visit us online to learn more.