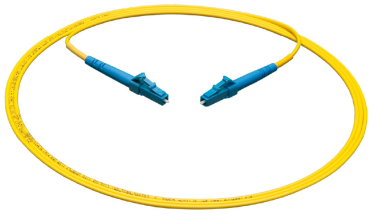

# Lightera's Jumper Family for Central Offices, Data Centers, or Other Patching Application

LC, SC, Shuttered SC, SN, MDC, FC, and ST2 Connectors

BEAD COMPLIANT AVAILABLE

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| Features And Benefits | • 100% optically tested in the factory<br>• Wide variety of connector options and cable options available<br>• Available in a wide variety of fiber types<br>• Ultra Polish (UPC) and Angled Polish (APC) available for Single-Mode Connectors<br>• The LC, SC, ST2 and FC products offer pull proof connections and maintain optical contact under load |
| Product Description | Patch Cords and Jumpers are used to provide optical connection for fiber optic electronics. The use of the patch cord provides a quick and easy method for routing fiber patches in data centers, head-ends, cellular hubs and central offices. The patch cord can be used in an interconnect or cross-connect path connecting the incoming fibers to the electronic equipment and providing patching within the fiber paths. Patch Cords and Jumpers include simplex, duplex and quadplex (quad) assemblies. Larger fiber counts are available in multifiber type assemblies as connectorized cables and multifiber connector assemblies. |
| LC Jumper | Lightera offers LC simplex and duplex jumpers, pigtails, and hybrid assemblies. The LC Unibody® Connector used on LC patch cords features a trigger mechanism that allows the connector to be easily engaged and disengaged. The trigger also prevents the plug from snagging when patch cords or jumpers are routed. There are a number of boot options with the LC connector for tight bends and limited mounting space with either a 90 degree clip or short boot and 40 degree boot options. LC patch cords and jumpers are available with 900 µm tight-buffered optical fiber or 1.6, 2.0, 3.0 and 4.8 mm diameter cordage. The 1.2, 1.6 mm cordage is the smallest in the industry and provides greater jumper density in a fully loaded rack and helps prevent congestion in overhead racks. |

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| SC Jumper | The push-pull mating of the SC connector configuration allows the connector to be easily engaged and disengaged. The connector is easily configured into a duplex connector by the use of the 2A1 clip either from the factory with multimode connections or in the field. The SC connector also offers various boot options including the short boot for use in limited spaces. SC patch cords and jumpers are available with 900 µm tight-buffered optical fiber or 1.2, 1.6, 2.0, 3.0 and 4.8 mm diameter cordage. |

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| FC Jumper | FC connectors have long been used for specific electronic equipment applications. The connector utilizes a twist on cap that is engaged by the key. The assemblies are available with 900 µm tight-buffered optical fiber or 1.6, 2.0 and 3.0 mm diameter cordage. |

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| ST Jumper | ST connectors have long been used for data and Department of Transportation (DOT) applications. The connector utilizes a ramped bayonet with a "twist-lock". The assemblies are available with 900 µm, 1.6 mm, 2.0 mm and 3.0 mm diameter cordage. |

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## Jumper Specifications

**Single-Mode**

| Connector | Insertion Loss Max. Standard Deviation | Return Loss Max. | Temperature Range | Cable Retention |
|---|---|---|---|---|
| LCU/LCS | 0.25/0.05 dB | -55 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| LCA/LAS | 0.5/0.05 dB | -65 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| SCU/SCS | 0.3/0.05 dB | -55 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| SCA/SAS/SHA | 0.5/0.05 dB | -65 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| FCU | 0.25/0.05 dB | -55 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| FCA | 0.3/0.05 dB | -65 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| ST2 | 0.5/0.05 dB | -55 dB | -40 to 85 | Cordage 20 lb |

**Multimode**

| Connector | Insertion Loss Max. Standard Deviation | Return Loss Max. | Temperature Range | Cable Retention |
|---|---|---|---|---|
| LCU/LCS | 0.5/0.05 dB | -20 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| SCU/SCS | 0.5/0.05 dB | -20 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| FCU | 0.25/0.05 dB | -20 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |
| ST2 | 0.6/0.05 dB | -20 dB | -40 to 85 | Cordage 20 lb<br>Pigtails 2 lb |

## Ordering Information: Jumper Assemblies SMART Coding

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| **Examples** | **JP3WY001LCULCU003M** – Jumper Plenum 3.0 mm AllWave® FLEX Optical Fiber Yellow 1 fiber (Simplex) LCU LCU 3 Meters long<br>**JR2WY002SCSSCA003M** – Jumper Riser 2.0 mm AllWave FLEX Optical Fiber Yellow 2 fibers (Zip) SCS SCA 3 Meters long<br>**JV9WY001FCUUNC003M** – Jumper Low Smoke PVC 900 µm AllWave FLEX Optical Fiber Yellow 1 fiber FCU UNC (Pigtail) 3 Meters long |
| **Syntax** | **aaa b c ddd eee fff nnn** |


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| aaa = Cable Design | JH1 = LSZH mm<br>JH2 = LSZH 2.0 mm<br>JH3 = LSZH 3.0 mm<br>JH4 = LSZH 4.8 mm (Simplex Only)<br>JH5 = LSZH 4.8 mm I/O (Simplex Only)<br>JHD = LSZH DFX 2.4 mm (Duplex Only)<br>JDN = Dual Rated 3.0 mm I/O (Simplex Only)<br>JD1 = Dual Rated 1.6 mm<br>JD2 = Dual Rated 2.0 mm<br>JD5 = Dual Rated I/O 4.8 mm<br>JP1 = Plenum 1.6 mm<br>JP2 = Plenum 2.0 mm<br>JP3 = Plenum 3.0 mm<br>JP4 = Plenum 4.8 mm (Simplex Only)<br>JPD = Plenum DFX 2.4 mm (Duplex Only)<br>JPO = Plenum Over-Jacket (Duplex Only)<br>JR1 = Riser 1.6 mm<br>JR2 = Riser 2.0 mm<br>JR3 = Riser 3.0 mm<br>JR4 = Riser 4.8 mm (Simplex Only)<br>JR5 = Riser 4.8 mm I/O (Simplex Only)<br>JR8 = Riser 4.8 mm I/O Toneable (Simplex Only)<br>JRA = Riser 1.2 mm<br>JRD = Riser DFX 2.4 mm (Duplex Only)<br>JRV = 3.0 mm Ruggedized I/O (Simplex Only)<br>JU6 = UV Buffer 600 µm (Simplex Only)<br>JU9 = UV Buffer 900 µm (Simplex Only)<br>JV6 = Low Smoke PVC 600 µm (Simplex Only)<br>JV9 = Low Smoke PVC 900 µm (Simplex Only) |
| b = Fiber Type | B = Blue Tiger (Blue Jacket Only)<br>D = EZ-Bend® (White Jacket Default)<br>K = 50 µm Bend-Insensitive (Orange Jacket Default)<br>L = 62.5 µm Multimode (Orange Jacket Default)<br>W = AllWave FLEX+ (Yellow Jacket Default)<br>3 = LaserWave 300 Bend-Insensitive<br>4 = LaserWave FLEX Wideband OM5 (Lime Green Jacket Default)<br>5 = LaserWave 500 Bend-Insensitive<br>9 = AllWave FLEX Max (White or Yellow Jacket Default) |
| c = Jacket Color | B = Blue (Blue Tiger)<br>O = Orange (50 µm & 62.5 µm Multimode)<br>S = Slate (Optional Color 62.5 Multimode)<br>W = White<br>K = Black (Indoor/Outdoor 4.8 mm Cordage)<br>Y = Yellow (AllWave FLEX)<br>A = Aqua (LaserWave 150 G+, 300, 550) |
| ddd = Fiber Count | 001 = Simplex<br>002 = Duplex Zip<br>004 = Quad Round Cordage (1.6 mm Sub Units Riser Only) |


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| eeefff = Connector Ends "a" & "b" | LCA = LC Angle Polish (Single-Mode Only)<br>LA4 = LC Angle Polish 40 Degree Boot (Single-Mode Only)<br>LAS = LC Angled Polish Short Boot<br>LC4 = LC Ultra Polish 40 Degree Boot<br>LCU = LC Ultra Polish<br>LCS = LC Ultra Polish Short Boot<br>LCF = LC Ultra Polish Soft Boot (900 µm Only)<br>LCD = LC Ultra Polish Single-Mode Duplex w/ Clip<br>SCA = SC Angle Polish (Single-Mode Only)<br>SAS = SC Angle Polish Short Boot<br>SCU = SC Ultra Polish<br>SCS = SC Ultra Polish Short Boot<br>SHA = Shuttered SC Angle Polish (Single-mode only)<br>ST2 = ST2 Ultra Polish (Use with Plenum Cordage)<br>FCA = FC Angle Polish (Single-Mode Only)<br>FCU = FC Ultra Polish<br>UNC = UNConnectorized (Stub, Pigtail) (End "B" Only) |
| nnn = Length | 001 999 |
| g = Unit of Measure | M = Meters (Minimum: 1 m)<br>C = Centimeters (Minimum: 15 cm Simplex/ 45 cm Duplex)<br>F = Feet (Minimum: 1 ft)<br>I = Inches (Minimum: 6 in. Simplex/ 18 in. Duplex) |
| Note | Additional colors available upon request. (i.e. V = Violet, G = Green, B = Blue, L = Lime Green) |

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| Contact Information | For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website. |
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