

# High Density Fiber Optic Cabling for All Configurations

Fiber Mountain's pre-terminated multi-fiber cables are suitable for all data center cabling needs. **Capable of handling high-speed 10G, 25G, 40G, or 100G applications**, these ultra high-quality fiber optic cables couple with Fiber Mountain's OPX Cross-Connects and L-Series Fiber Port Aggregators to provide superb performance.



## Through Safety & Compliance Testing

Each Fiber Mountain cable is serialized before being tested. Multimode cables are tested at a wavelength of 850nm, while Single Mode cables are tested at both 1310nm and 1550nm. Copies of all test reports are included with shipments, documenting Insertion Loss and Return Loss for each end of the cable. All fibers are cleaned and tested to industry and regulatory standards (see table on reverse). Cables are also secured in at least two places to prevent stress during shipping and handling.

**High quality glass-core bend-insensitive fibers ensure efficient and consistent data transmission, while robust LC or MPO connectors minimize insertion and return loss. All cables are available in Single Mode or Multimode with either A, B, or C polarity and UL-rated Plenum, Riser, or LSZH jackets.**

## Fiber Specifications

Single Mode Fibers	Multimode Fibers
Fiber Attenuation	
0.5 dB/km @ 1310 and 1550nm	3.0 dB/km @ 1310 and 1550nm
Effective Modal Bandwidth (EMB)	
N/A	4700 MHz-km
Over Filled Launch (OFL) Bandwidth	
N/A	3500 MHz-km

## Insertion & Return Loss

SM LC UPC	SM MPO APC
Insertion Loss (1310nm and 1550nm)	
0.1 dB typical	0.1 dB typical
0.3 dB max	0.35 dB max
Return Loss (1310nm and 1550nm)	
-50 dB min	-55 dB min
MM LC UPC	MM MPO UPC
Insertion Loss (850nm)	
0.1 dB typical	0.1 dB typical
0.3 dB max	0.35 dB max
Return Loss (850nm)	
-20 dB min	-20 dB min

# Fiber Optic Cable Options

- ①**  
**MPO-to-MPO and LC-to-LC configurations**
- ②**  
**Plenum, Riser or LSZH**
- ③**  
**Standard and custom lengths are available**
- ④**  
**Single mode OS2 or Multi-mode OM4 (OM5 also available upon request)**

## Cable Mechanical Characteristics

LC Cable	12-Fiber MPO Cable	24-Fiber MPO Cable
Temperature		
Operating: 0°C to +70°C Storage: -40°C to +75°C	Operating: 0°C to +70°C Storage: -40°C to +75°C	Operating: 0°C to +70°C Storage: -40°C to +75°C
Nominal Outer Diameter		
2.0 x 4.0 mm (0.08 x 0.16 in)	3.0 mm (0.12 in)	3.8 mm (0.15 in)
Minimum Bend Radius		
Installation: 5.0 cm (2.0 in) Operation: 3.0 cm (1.2 in)	Installation: 4.5 cm (1.8 in) Operation: 3.0 cm (1.2 in)	Installation: 5.7 cm (2.2 in) Operation: 3.8 cm (1.5 in)
Maximum Tensile Strength		
Installation: 100 N (22 lbf) Operation: 30 N (7 lbf)	Installation: 220 N (50 lbf) Operation: 75 N (17 lbf)	Installation: 330 N (75 lbf) Operation: 110 N (25 lbf)
Bend Radius (under no load, in a controlled bend)		
10 mm	10 mm	10 mm
Bend Radius (under long-term tension)		
20 mm	20 mm	20 mm

## About Fiber Mountain

Glass Core represents a new way of thinking about data center infrastructure. With integrated software and hardware innovations, Glass Core infrastructure enables intelligent Layer 1 SDN switching with highdensity optical connectivity for a software-controlled physical layer and unprecedented network speed and agility.

## Services

Fiber Mountain provides a variety of value added services, including hands-on training, on-site installation, and 24x7 technical support. Contact Fiber Mountain for a schedule of available services.

## Warranty

Return to factory hardware repair or replacement for one year.

### Regulatory & Certifications

All Fiber Mountain fiber optic cables meet the following regulatory requirements:

IEC 61300-3-35

Telcordia GR-409-CORE

UL Listed Type OFNR/OFNP CSA FT4, CSA FT6

RoHS Directive 2002/95/EC

EIA/TIA 568-133

### LSZH cables are OFNR listed and meet the requirements of IEC:

61034-1

61034-2

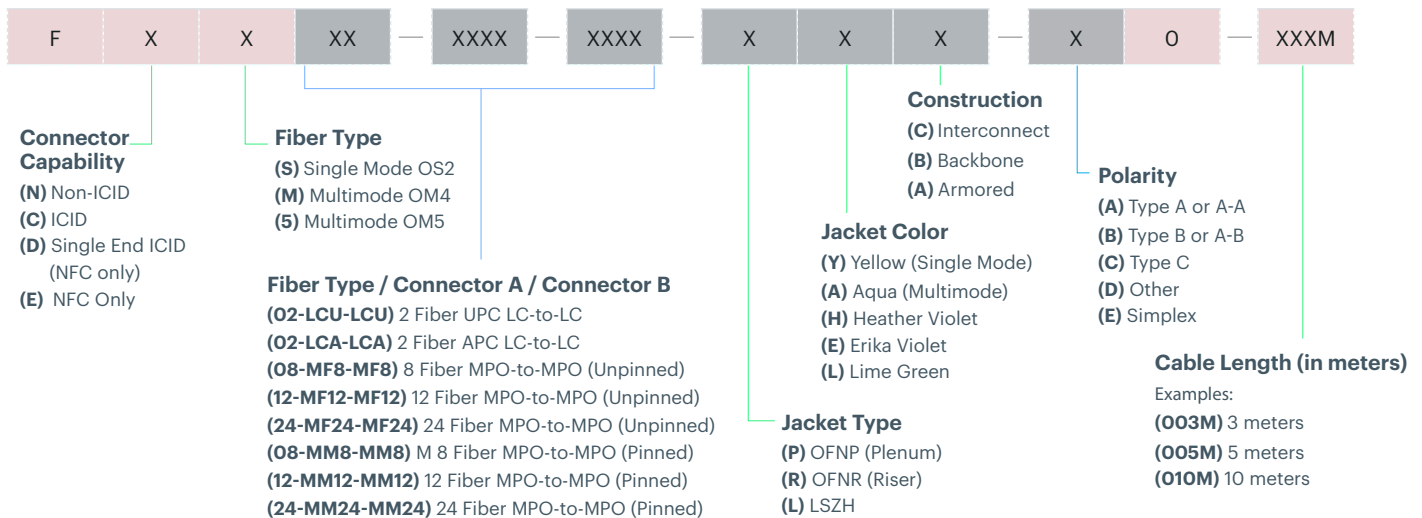
60332-1

60332-1-2

60754-1

60754-2

## Cable Catalog Configurator



#### Custom Order Options - Available Upon Request

OM4 + and OM5

Simplex and Backbone cables

APC LC connectors

Custom connector configurations

Custom cable lengths

Note: Custom orders including the options above may result in longer lead times

#### Cable Order Examples

Single Mode, 2-fiber LC-to-LC, Yellow Plenum Jacket, Polarity Type A, 7 meters

FNS02—LCU—LCU—PYC—A0—007M

Single Mode, 12-fiber MPO-to-MPO Unpinned, Yellow LSZH Jacket, Polarity Type A, 3 meters

FNS12—MF12—MF12—LYC—A0—003M

Multimode, 12-fiber MPO-to-MPO Pinned, Aqua Plenum Jacket, Polarity Type B, 10 meters

FNM12—MM12—MM12—PAC—B0—010M

Multimode, 24-fiber MPO-to-MPO Unpinned, Aqua Plenum Jacket, Polarity Type A, 5 meters

FNM24—MF24—MF24—PAC—A0—005M