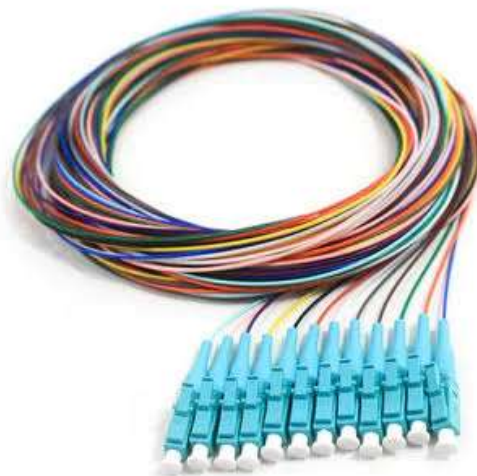


Optical Fiber Pigtail

TECHNICAL DATA SHEET

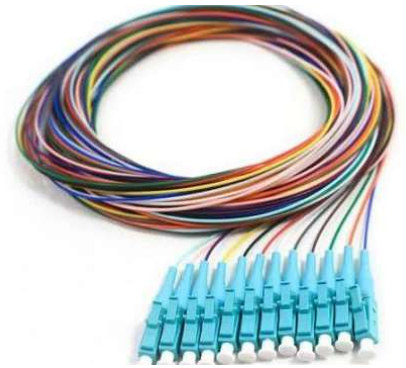
12 Fiber LC Multi Mode Fiber Optic Pigtail UPC OM3 – ITU-T G.651



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Product Description

The Fiber Optic Pigtail LC/UPC to Unterminated is a factory-terminated 12-fiber optical pigtail designed for high-density fiber termination and fusion splicing applications. It features LC/UPC connectors on one end and unterminated fibers on the opposite end, enabling efficient installation in Optical Distribution Frames (ODFs), patch panels, fiber termination boxes, and high-density data center cabling systems.



Manufactured with OM3 laser-optimized multimode (50/125 μm) optical fiber compliant with ITU-T G.651.1, and protected by a Low Smoke Zero Halogen (LSZH) jacket, this pigtail delivers excellent optical performance for Gigabit Ethernet, 10 Gigabit Ethernet, storage area networks (SAN), and enterprise optical networks.

Product Features

- LC/UPC connectors on one end, unterminated fibers on the other
- 12-fiber construction
- OM3 laser-optimized multimode fiber (50/125 μm)
- Compliant with **ITU-T G.651.1**
- Low insertion loss and excellent return loss
- High-precision zirconia ceramic ferrules
- LSZH (Low Smoke Zero Halogen) jacket
- Aqua-colored cable for OM3 identification
- Factory polished and 100% optically tested
- Excellent mechanical durability and reliability

Applications

- Optical Distribution Frames (ODF)
- Fiber Termination Boxes (FTB)
- Data Centers
- Enterprise LAN Networks
- Storage Area Networks (SAN)
- 10G/40G/100G Ethernet Networks
- High-density Patch Panels
- Telecommunications Networks

Product Parameters

Item	Specification
Connector A	LC/UPC
Connector B	Unterminated
Fiber Count	12 Fibers
Fiber Type	OM3 (50/125 μm)
Fiber Standard	ITU-T G.651.1
Cable Construction	12-Fiber
Jacket Material	LSZH

Optical Specifications

Parameter	Value
Fiber Type	OM3 (50/125 μm)
Fiber Standard	ITU-T G.651.1
Connector Type	LC/UPC
Polish Type	UPC
Operating Wavelength	850 / 1300 nm
Insertion Loss	≤ 0.30 dB (Typical ≤ 0.20 dB)
Return Loss	≥ 35 dB
Repeatability	≤ 0.20 dB
Interchangeability	≤ 0.20 dB
Durability	≤ 0.20 dB change after 500 mating cycles

Environmental Performance

Test Item	Condition	Requirement
High Temperature	+85°C, 96 Hours	$\Delta\text{IL} \leq 0.2$ dB
Low Temperature	-40°C, 96 Hours	$\Delta\text{IL} \leq 0.2$ dB
Thermal Cycling	-40°C to +85°C	$\Delta\text{IL} \leq 0.2$ dB
Humidity	95% RH, 96 Hours	Stable Performance

Mechanical Reliability

Test Item	Requirement
Mating Durability	≥ 500 Cycles
Tensile Strength	≥ 10 N
Vibration Resistance	$\Delta IL \leq 0.2$ dB
Shock Resistance	$\Delta IL \leq 0.2$ dB
Twist Test	Meets IEC Requirements