

Optical Fiber Pigtail

TECHNICAL DATA SHEET

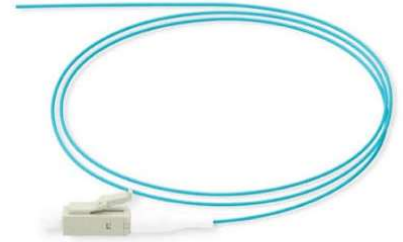
**Fiber Pigtail, LC UPC to Unterminated,
Simplex, OM3, LSZH**



ST Multi Mode Fiber Optic Pigtail UPC OM2 ITU-T G.651 12 Fiber

Product Description

The Fiber Optic Pigtail LC/UPC to Unterminated is a factory-terminated simplex fiber assembly designed for high-performance fiber splicing and termination applications. It features a precision-polished LC/UPC connector on one end and an unterminated fiber on the other, enabling quick and reliable fusion splicing into Optical Distribution Frames (ODFs), fiber termination boxes (FTBs), patch panels, and high-density data center cabling systems.



Manufactured with OM3 laser-optimized multimode (50/125 μm) optical fiber 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 connector on one end, unterminated fiber on the other
- OM3 laser-optimized multimode fiber (50/125 μm)
- Simplex construction
- Low insertion loss and excellent return loss
- High-precision zirconia ceramic ferrule
- 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)
- Enterprise LAN Networks
- Industrial Ethernet
- Campus Networks
- Patch Panels
- Telecommunications Networks
- Optical Communication Systems

Product Parameters

Item	Specification
Connector A	LC/UPC
Connector B	Unterminated
Fiber Type	OM3 (50/125 μm)
Fiber Standard	ITU-T G.651.1
Cable Construction	Simplex
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