LC UPC to LC UPC Duplex SM With Pull Tab LSZH Yellow Fiber Patch Cable

Our Product Introduction

Basic Information

- Place of Origin: CN
- Brand Name: FiberMania
- Certification: RoHS, CE, ISO9001
- Minimum Order Quantity: 10
- Price: 1.5 - 2.2
- Packaging Details: Standard Packing
- Delivery Time: 3-7 days
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram

Product Specification

- Connector A: LC/UPC
- Connector B: LC/UPC
- Fiber Count: Duplex
- Mode: OS2 9/125μm
- Wavelength: 1310/1550nm
- Fiber Grade: G652D/G.657.A1
- Cable Diameters: 2.0mm/3.0mm
- Insertion Loss: ≤0.3dB
- Return Loss: ≥50dB
- Min. Bend Radius (Fiber Cable): 10/5D (Dynamic/Static)
- Attenuation At 1310 Nm: 0.4 DB/km
- Attenuation At 1550 Nm: 0.3 DB/km
- Polarity: A (Tx) To B (Rx)
- Operating Temperature: -10 To 70°C

Product Description

A **single-mode fiber patch cord** is designed for high-speed, long-distance optical transmission. Built with a 9 µm core that supports only one propagation mode, it virtually eliminates modal dispersion and ensures outstanding signal integrity. The ultra-pure silica core provides exceptionally low attenuation—**0.35 dB/km at 1310 nm** and **0.25 dB/km at 1550 nm**—making it ideal for long-haul, high-bandwidth connectivity.

Equipped with precision-polished connectors such as **LC, SC, ST, and FC**, each patch cord delivers **low insertion loss (<0.5 dB)** and **high return loss (>50 dB)** for stable, reliable physical connections. Rugged jacket materials (PVC or LSZH) offer protection against abrasion and environmental stress, suitable for both indoor and outdoor deployment. Optimized for the **1310 nm** (low dispersion) and **1550 nm** (low loss) windows, single-mode patch cords support **multi-gigabit to 100G+ transmission** across distances of tens of kilometers without the need for signal regeneration.

Features

Single-mode design eliminates modal dispersion for ultra-long-distance performance.
Low fiber attenuation ensures clean, high-quality signals over 10+ km.
Supports 10G to 100G+ high-speed data transmission.
Standard LC/SC/ST/FC connectors with low insertion and high return loss.
Durable PVC/LSZH jackets for indoor, outdoor, and industrial applications.
Optimized for 1310 nm (low dispersion) and 1550 nm (low attenuation) operation.
Excellent resistance to temperature variations and mechanical stress.
Available in armored, plenum, and other specialized constructions.

Specification

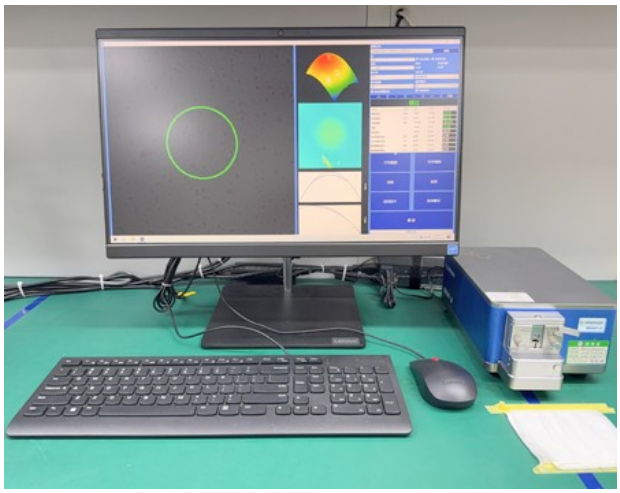
Parameter Category	Parameter	Specification
Physical Parameters	Fiber Type	Single-mode (ITU-T G.652D/G.657A)
	Core/Cladding Diameter	9μm (core) / 125μm (cladding)
	Jacket Diameter	0.9mm, 2.0mm, 3.0mm (customizable)
	Connector Types	LC, SC, ST, FC, E2000, MU (simplex/duplex, male/female)
	Jacket Material	PVC, LSZH, OFNP (Plenum), Armored (steel/kevlar)
Optical Parameters	Transmission Wavelengths	1310nm (low dispersion), 1550nm (low loss), 1625nm (extended band)
	Attenuation	≤0.35dB/km @ 1310nm; ≤0.25dB/km @ 1550nm
	Insertion Loss (IL)	≤0.3dB (typical), ≤0.5dB (max)
	Return Loss (RL)	≥60dB (APC); ≥50dB (UPC)
	Bandwidth	10Gbps@40km, 40Gbps@10km, 100Gbps@2km (wavelength-dependent)
Environmental Parameters	Working Temperature	-40°C to +85°C (-40°F to +185°F)
	Relative Humidity	0% to 95% (non-condensing)
	Flame Rating	UL94-V0 (PVC), OFNP (Plenum LSZH)
Mechanical Parameters	Minimum Bend Radius	10x cable diameter (dynamic); 5x cable diameter (static)
	Tensile Strength	20N (normal); 100N (armored/harsh environments)
	Durability (Mating Cycles)	≥1000 cycles (no performance degradation)
Compliance & Standards	Industry Standards	IEC 61754-20 (connector interfaces), RoHS 2.0 compliant
Customization Options	Length	0.5m–100m (standard); up to 2000m (special order)
	Boot Material	Rubber, metal, reinforced plastic

Applications

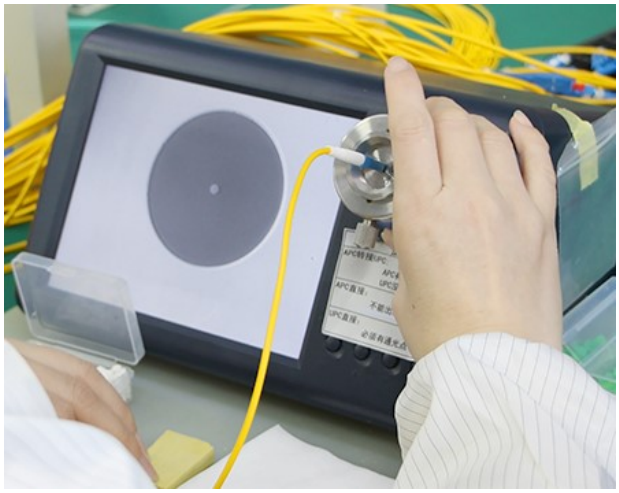
High-density interconnects between servers, switches, and storage systems.
Long-haul optical networks for intercity or international voice/data/video transmission.
Last-mile fiber broadband connections to homes and businesses.
Industrial and harsh-environment sensing systems requiring real-time data.
Long-distance HD video and surveillance transmission.
Low-latency optical links for medical imaging and surgical equipment.

Quality Control and Testing Program

IL and RL Testing
Conduct testing on the insertion loss and return loss of cables to verify their reach and ensure stable signal transmission.



3D Interferometer Testing
Evaluate the connectors or ferrules of cables to verify that the apex offset, radius of curvature, and fiber height are within the specified parameters, ensuring a successful connection of fiber optic lines.



3D Interferometer Testing
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Production Line and Equipment

Certifications

Packing & Shipping

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