

Optical Fiber Patch Cord

TECHNICAL DATA SHEET

LSZH Fiber Optic Patch Cord MM (OM2) 50/125 (ST-UPC/ST-UPC) Duplex 3.0 mm



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Product Description:

The LSZH Fiber Optic Patch Cord Multimode OM2 (50/125 μm) ST-UPC to ST-UPC Duplex 3.0 mm is designed for short- to medium-distance optical communication in enterprise networks, industrial systems, and legacy fiber infrastructures.



It uses ST connectors with a **bayonet twist-lock mechanism**, ensuring a secure and vibration-resistant connection. The duplex structure supports simultaneous transmit and receive (Tx/Rx), making it suitable for bidirectional communication in Ethernet and structured cabling systems.

OM2 multimode fiber provides improved bandwidth and performance compared to OM1, supporting higher data rates over short distances.

Features:

- ST–ST secure twist-lock connectivity
- Duplex design for simultaneous Tx/Rx transmission
- OM2 multimode fiber with improved bandwidth over OM1
- LSZH jacket for enhanced fire safety
- Low insertion loss and stable optical performance
- Durable 3.0 mm cable construction
- High resistance to vibration and mechanical stress
- Suitable for industrial and enterprise environments



Construction:

Parameter	Details
Fiber Type	Multimode (MM)
Fiber Standard	OM2 (50/125 μm)
Cable Structure	Duplex (Zipcord – 2 Fibers)
Cable Diameter	3.0 mm
Outer Jacket	LSZH (Low Smoke Zero Halogen)
Connector A	ST/UPC
Connector B	ST/UPC
Ferrule Material	Zirconia Ceramic
Strength Member	Aramid Yarn (Kevlar)

Applications:

- Data centers and server rooms
- LAN (Local Area Networks)
- Ethernet switches and routers
- Structured cabling systems
- Patch panels and ODF systems
- Industrial and legacy fiber networks

Fiber Specifications:

Parameter	Value
Fiber Type	Multimode
Standard	OM2 (50/125 μm)
Operating Wavelength	850 nm / 1300 nm
Attenuation @850 nm	≤ 3.0 dB/km
Attenuation @1300 nm	≤ 1.0 dB/km
Bandwidth	500 MHz·km @850 nm
Mode Type	Graded-index multimode
Compatibility	Backward compatible with OM1 systems

Optical Performance:

Parameter	Value
Insertion Loss	≤ 0.3 dB
Return Loss	≥ 35 dB
Repeatability	≤ 0.1 dB
Durability	≥ 1000 mating cycles
Transmission Type	Duplex (Tx/Rx)

Environmental Conditions:

- Operating Temperature: -20°C to +70°C
- Storage Temperature: -25°C to +70°C
- Indoor installation only