

Optical Fiber Patch Cord

TECHNICAL DATA SHEET

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



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Product Description:

The LSZH Fiber Optic Patch Cord Multimode OM2 (50/125 μm) FC-UPC to FC-UPC Simplex 3.0 mm is designed for reliable short- to medium-distance optical communication in telecom, enterprise, laboratory, and industrial environments.

It features FC connectors with **threaded screw-type coupling**, ensuring secure and vibration-resistant connections for stable optical performance.

The simplex configuration uses a single fiber core for one-way transmission, making it suitable for testing systems, monitoring equipment, and dedicated signal paths. OM2 multimode fiber provides improved bandwidth and transmission performance compared to OM1.

Features:

- FC–FC threaded connectivity for secure and stable connection
- Simplex design for single-direction 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 telecom, industrial, and laboratory applications

Construction:

| Parameter | Details |
|------------------|-------------------------------|
| Fiber Type | Multimode (MM) |
| Fiber Standard | OM2 (50/125 μm) |
| Cable Structure | Simplex (1 Fiber) |
| Cable Diameter | 3.0 mm |
| Outer Jacket | LSZH (Low Smoke Zero Halogen) |
| Connector A | FC/UPC |
| Connector B | FC/UPC |
| Ferrule Material | Zirconia Ceramic |
| Strength Member | Aramid Yarn (Kevlar) |

Applications:

- Telecom and communication systems
- Laboratory and testing equipment
- Patch panels and ODF systems
- Data centers and enterprise networks
- Monitoring and signal routing applications
- Industrial fiber optic installations

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 | Simplex (Single Fiber) |

Environmental Conditions:

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