

Optical Fiber Adapter

TECHNICAL DATA SHEET

**SC Adapter MM-OM2-DX-UPC 2.5mm
MMF**



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Product Description:

The SC Adapter MM-OM2-DX-UPC 2.5 mm Multimode Fiber (MMF) is a high-precision duplex fiber optic adapter designed to connect two SC/UPC multimode fiber connectors with low insertion loss and reliable optical performance.



It features precision zirconia ceramic alignment sleeves that ensure accurate fiber alignment and stable signal transmission. Optimized for OM2 multimode fiber systems, this adapter is ideal for LAN networks, data centers, telecom rooms, patch panels, and optical distribution systems.

Features:

- SC/UPC duplex OM2 multimode adapter
- Precision zirconia ceramic alignment sleeves
- Duplex configuration for simultaneous Tx/Rx communication
- Low insertion loss and stable optical performance
- Snap-in installation for patch panels and ODFs
- High durability and repeatability
- Compact lightweight construction
- Reliable long-term connection stability

Applications:

- LAN (Local Area Networks)
- Data centers and server rooms
- Telecom and communication systems
- Optical Distribution Frames (ODF)
- Fiber patch panels
- Enterprise structured cabling systems

Benefits:

- Ensures accurate fiber core alignment
- Minimizes optical attenuation and signal loss
- Supports stable multimode data transmission
- Improves network reliability and efficiency
- Easy installation and maintenance
- Suitable for high-density fiber environments
- Durable construction for long operational lifespan
- Ideal for LAN, telecom, and data center applications

Technical Specifications:

Parameter	Specification
Connector Type	SC Duplex (DX)
Fiber Type	Multimode OM2 (50/125 μm)
Ferrule Size	2.5 mm (SC Standard)
Polish Type	UPC (Ultra Physical Contact)
Insertion Loss	≤ 0.2 dB (Typical), ≤ 0.3 dB Max
Return Loss	≥ 35 dB
Alignment Sleeve	Zirconia Ceramic
Mating Durability	≥ 1000 Cycles
Repeatability	≤ 0.2 dB Variation
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Humidity	Up to 95%
Compliance Standards	IEC 61754-4, TIA/EIA 604-3
RoHS Compliance	Yes
Color	Beige (OM2 Identification)

Environmental Specifications:

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	Up to 95%
Flame Rating	UL94-V0 (Optional)
Vibration Resistance	Stable Optical Performance Under Vibration
Shock Resistance	High Mechanical Durability
Dust Protection	With Dust Caps
Corrosion Resistance	Resistant to Corrosion and Moisture
Indoor / Outdoor Use	Primarily Indoor Applications
RoHS Compliance	Yes