

Optical Fiber Adapter

TECHNICAL DATA SHEET

**SC Adapter MM-OM4-SX-UPC 2.5mm
MMF**



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Product Description:

The SC Adapter MM-OM4-SX-UPC 2.5 mm Multimode Fiber (MMF) is a high-performance fiber optic adapter designed to connect two SC/UPC simplex multimode fiber connectors with excellent optical accuracy and low insertion loss.



It features a precision zirconia ceramic alignment sleeve that ensures accurate fiber alignment and stable signal transmission. Optimized for OM4 laser-optimized multimode fiber systems, this adapter supports high-speed data transmission for modern data centers, cloud infrastructure, storage networks, and enterprise applications.

Features:

- SC/UPC simplex OM4 multimode adapter
- Precision zirconia ceramic alignment sleeve
- Low insertion loss and stable optical performance
- Supports ultra-high-speed optical transmission
- Snap-in installation for patch panels and ODFs
- High durability and repeatability
- Compact lightweight construction
- Optimized for laser-optimized OM4 fiber systems

Applications:

- Data centers and cloud computing infrastructure
- 10G / 40G / 100G Ethernet networks
- Storage Area Networks (SAN)
- Enterprise structured cabling systems
- Telecom and communication systems
- Fiber patch panels and ODF systems

Benefits:

- Ensures precise fiber core alignment
- Minimizes optical attenuation and signal loss
- Supports high-bandwidth network applications
- Enhances reliability in high-speed transmission systems
- Easy installation and maintenance
- Suitable for dense fiber management environments
- Long operational lifespan with stable performance
- Ideal for data centers, SAN, and cloud infrastructure



Technical Specifications:

Parameter	Specification
Connector Type	SC Simplex (SX)
Fiber Type	Multimode OM4 (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	Violet (OM4 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