

Optical Fiber Adapter

TECHNICAL DATA SHEET

**SC Adapter MM-OM3-DX-UPC 2.5mm  
MMF**



## **SC Adapter MM-OM3-DX-UPC 2.5mm MMF**

### **Product Description:**

The SC Adapter MM-OM3-DX-UPC 2.5 mm Multimode Fiber (MMF) is a high-performance duplex fiber optic adapter designed to connect two SC/UPC OM3 multimode fiber connectors with low insertion loss and reliable optical performance.



It features precision zirconia ceramic alignment sleeves that ensure accurate fiber core alignment and stable signal transmission. Optimized for OM3 laser-optimized multimode fiber systems, this adapter supports high-speed optical communication for data centers, enterprise networks, storage systems, and telecom infrastructure.

The duplex configuration supports simultaneous transmit and receive (Tx/Rx) communication, making it suitable for modern high-bandwidth networking environments.

### **Features:**

- SC/UPC duplex OM3 multimode adapter
- Precision zirconia ceramic alignment sleeves
- Duplex configuration for simultaneous Tx/Rx communication
- Low insertion loss and stable optical performance
- Supports high-speed optical transmission
- Snap-in installation for patch panels and ODFs
- High durability and repeatability
- Compact lightweight construction

**Applications:**

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

**Benefits:**

- Ensures precise fiber core alignment
- Minimizes optical attenuation and signal loss
- Supports high-bandwidth transmission systems
- Improves network reliability and communication stability
- Easy installation and maintenance
- Suitable for high-density fiber environments
- Long operational lifespan with stable performance
- Ideal for data centers and enterprise applications

**Technical Specifications:**

<b>Parameter</b>	<b>Specification</b>
Connector Type	SC Duplex (DX)
Fiber Type	Multimode OM3 (50/125 $\mu$ m)
Ferrule Size	2.5 mm (SC Standard)
Polish Type	UPC (Ultra Physical Contact)
Insertion Loss	$\leq 0.2$ dB (Typical), $\leq 0.3$ dB Max
Return Loss	$\geq 35$ dB
Alignment Sleeve	Zirconia Ceramic
Mating Durability	$\geq 1000$ Cycles
Repeatability	$\leq 0.2$ 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	Aqua (OM3 Identification)

**Environmental Specifications:**

<b>Parameter</b>	<b>Specification</b>
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