

**Optical Fiber Adapter**

**TECHNICAL DATA SHEET**

**LC Adapter MM-OM2-DX-UPC 1.25mm  
MMF**



## **LC Adapter MM-OM2-DX-UPC 1.25mm MMF**

### **Product Description:**

The LC Adapter MM-OM2-DX-UPC 1.25 mm Multimode Fiber (MMF) is a high-precision duplex fiber optic adapter designed to connect two LC/UPC OM2 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 OM2 multimode fiber systems, this adapter is suitable for LAN networks, telecom systems, patch panels, data centers, and structured cabling applications.

The duplex configuration supports simultaneous transmit and receive (Tx/Rx) communication for efficient bidirectional optical connectivity.

### **Features:**

- LC/UPC duplex OM2 multimode adapter
- Precision zirconia ceramic alignment sleeves
- Duplex configuration for simultaneous Tx/Rx communication
- Low insertion loss and stable optical performance
- Compact high-density LC design
- Snap-in installation for patch panels and ODFs
- High durability and repeatability

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

## Technical Specifications:

Parameter	Specification
Connector Type	LC Duplex (DX)
Fiber Type	Multimode OM2 (50/125 $\mu\text{m}$ )
Ferrule Size	1.25 mm (LC 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 61754-20, TIA/EIA 604-10-A
RoHS Compliance	Yes
Color	Beige (OM2 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