

## Single-Mode (SM) SC Fiber Media Converter for 10/100/1000 Networks, Standalone Gigabit Ethernet to SC Fiber Converter, 1310nm, 10km - TAA

**Product ID:** MCMGBSCSM10



This fiber media converter converts and extends a Gigabit Ethernet (1000 Mbps) network up to 10 km over single-mode fiber on 1000BASE-LX networks.

The fiber media converter provides a cost-effective way to transparently convert copper to fiber, or fiber to copper, for connecting remote sub-networks to larger fiber-optic networks. Providing both SC fiber and RJ45 Ethernet ports, it integrates easily into a wide range of Gigabit Ethernet network infrastructures. The RJ45 port supports triple-speed (10/100/1000 BASE-T) auto-negotiation.

Supporting a maximum single-mode fiber cable distance of up to 10 km (6.2 mi.), the media converter delivers a simple and reliable solution for connecting Gigabit Ethernet networks to remote locations, while ensuring solid network performance. It provides optimum network scalability for connecting two or more Ethernet network nodes, for instance, connecting two buildings on the same campus or facility. The media converter also delivers high-speed bandwidth to meet the increasing demands of large-scale workgroups that require expansion of a Gigabit Ethernet network.

### Certifications, Reports and Compatibility



### Applications

- Extend an Ethernet connection by up to 10 km (6.2 miles) over a fiber backbone
- Create an economical Ethernet-fiber/copper-fiber link for connecting remote sub-networks to larger fiber-optic networks/backbones

- Converts Ethernet to fiber, and fiber to copper to provide a cost-effective networking solution

## Features

- **Extend Ethernet Over Distances**: Convert and extend a 10/100/1000 Mbps Ethernet signal to Gigabit single-mode SC fiber, up to 10km (6.2 mi); For specialized edge, industrial / remote deployments requiring long-range, secure wired connectivity
- **Compact and Durable**: Media converter installs almost anywhere with little to no configuration; Also mounts in the MCM7-MEDIA-CHASSIS or MCM15-MEDIA-CHASSIS for clean, professional integration into structured data centers, or server rooms; TAA compliant
- **Reliable Performance Across Mixed Speeds**: Supports IEEE 802.3 standards, Jumbo Frames (up to 9K), full-duplex flow control, auto-negotiation, and auto MDI/MDI-X; Delivers plug-and-play setup and reduced packet loss across legacy and high-speed links
- **Deploy Efficiently in Compact, Power-Sensitive Spaces**: Consumes only 3.75W (typical) via 5V DC input from included power adapter or chassis power supply and rated for 0C to 50C operating environments; Does not support PoE
- **The IT Pro's Choice**: Designed for reliability in edge and on-prem deployments, our media converters are lab-tested and field-proven for seamless integration and maximum uptime; Backed by free lifetime 24/5 multi-lingual technical assistance
- Provides DIP switch supporting Link Fault Pass-through function
- LED Indicators for simple Ethernet/fiber network link monitoring
- 1310 nm wavelength
- Supports IEEE 802.1q Tag VLAN pass through

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### Hardware

|                    |   |
|--------------------|---|
| Warranty           | 2 Years   |
| PoE                | No  |
| WDM                | No  |
| Industry Standards | IEEE 802.3u 100BASE-LX<br>IEEE 802.3ab 1000BASE-T<br>IEEE 802.3x full-duplex flow control<br>IEEE 802.3z 1000BASE-LX<br>IEEE 802.3 10BASE-T |

IEEE 802.1q VLAN pass through

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**Performance**

|                            |  |
|----------------------------|--|
| Maximum Data Transfer Rate | 1000 Mbps (1 Gbps)   |
| Max Transfer Distance      | 10 km (6.2 mi)   |
| Type                       | Single Mode  |
| Wavelength                 | 1310nm   |
| Fiber Operating Mode       | Full-Duplex  |
| Auto MDIX                  | Yes  |
| Jumbo Frame Support        | 9K max.  |
| Switching Architecture     | Store-and-Forward  |
| General Specifications     | Supports a maximum distance of 10 km over SM duplex fiber optic cable (SC connection), and 100m over copper (RJ45 connection)<br><br>Data Transfer Rate Copper: 10/100/1000 Mbps<br><br>Data Transfer Rate Fiber: 1000 Mbps<br><br>ESD Surge Protection: 1KV. Contact discharge - 4KV. Air discharge - 8KV |
| MTBF                       | > 50,000 hours at 25C  |

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**Connector(s)**

|                        |                           |
|------------------------|---------------------------|
| Local Unit Connectors  | 1 - RJ-45                 |
| Remote Unit Connectors | 1 - Fiber Optic SC Duplex |

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**Indicators**

|                |   |
|----------------|---|
| LED Indicators | 1 - Power<br><br>1 - FX Link/Activity<br><br>1 - TP Link/Activity<br><br>1 - 1000 Link: ON - Valid Gigabit Link |
|----------------|---|

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**Power**

|              |                     |
|--------------|---------------------|
| Power Source | AC Adapter Included |
|--------------|---------------------|

|                              |              |
|------------------------------|--------------|
| Input Voltage                | 100 - 240 AC |
| Input Current                | 0.4 A        |
| Output Voltage               | 5 DC         |
| Output Current               | 2 A          |
| Center Tip Polarity          | Positive     |
| Plug Type                    | N            |
| Power Consumption (In Watts) | 10           |

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#### Environmental

|                       |                               |
|-----------------------|-------------------------------|
| Operating Temperature | 0C to 50C (32&degF to 122F)   |
| Storage Temperature   | -10C to 70C (14&degF to 158F) |
| Humidity              | 5 ~ 90% RH                    |

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#### Physical Characteristics

|                   |                  |
|-------------------|------------------|
| Color             | Black            |
| Material          | Steel            |
| Product Length    | 2.8 in [70 mm]   |
| Product Width     | 4.1 in [10.5 cm] |
| Product Height    | 1.0 in [2.6 cm]  |
| Weight of Product | 6.9 oz [196 g]   |

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#### Packaging Information

|                           |                   |
|---------------------------|-------------------|
| Package Quantity          | 1                 |
| Package Length            | 8.9 in [22.6 cm]  |
| Package Width             | 4.7 in [12.0 cm]  |
| Package Height            | 2.8 in [7.0 cm]   |
| Shipping (Package) Weight | 15.1 oz [428.0 g] |

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**What's in the Box**

|                     |  |
|---------------------|--|
| Included in Package | 1 - media converter                              |
|                     | 1 - universal power adapter (NA/JP, UK, EU, ANZ) |
|                     | 1 - quick-start guide                            |

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**Warranty Information**

|          |         |
|----------|---------|
| Warranty | 2 Years |
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*\*Product appearance and specifications are subject to change without notice.*

