

## FI-MC-GA Series 10/100/1000M Media Converter

### DESCRIPTION

The **FI-MC-GA** series comply with IEEE 802.3/ab Gigabit Ethernet standard. It supports two types of media for network connection such as 10/100/1000 Base-T to 1000 Base SX/LX and connects these two types of segments to operate smoothly

Converter fits in FI-LINK media converter chassis as plug in module and can be used in standalone applications as well.

**FI-MC-GA** series Fiber Media Converter transforms 1000Base-T (Copper Gigabit) media to 1000Base-SX/LX (Fiber Gigabit) media and vice versa. The 1000Base-T port supports full-duplex Gigabit connection at wire speed with RJ45 connector. The fiber Gigabit connection supports shortwave (SX) or longwave (LX) laser optic with multi-mode or single-mode SC type connector.

This converter will give your Copper Gigabit connection the ability to interface with fiber connection over a distance up to 80 km!

10/100/1000M means, FI-MC-GA that media converter that converts the electrical signal of a 10/100/1000 Ethernet signal from copper to fiber. This solution will offer a low-cost integration option for network managers who want to migrate from 10/100 networks to Gigabit Ethernet. Gigabit only switches can now be connected to 10/100 networks without the need to upgrade the 10/100 side, allowing network managers to add new equipment gradually.

### Main features

Compliant with : IEEE 802.3 10 Base-T standard ; IEEE 802.3u 100 Base-TX/FX standard ; IEEE 802.3z 1000Base-T and 1000Base-LX standard .

One 10/100/1000Base-T RJ-45 port autosensing featured!

One 1000Base-LX/SX Port w/ SC/ST-Type Connector

Status LED indicators for Power, Link/Activity, Full-Duplex, and Speed

Wall-Mountable, pluggable in universal chassis, or desktop

Available in SingleFiber WDM versions - 1310/1550 nm wavelenghts used

### Explanation for LED indicator lamp

LED indicator lamps serve as device monitoring and trouble display. The following is the explanation for each LED indicator lamp.

LED	function	status	Describing
PWR	Power LED	ON	Power is ON.
		OFF	Power is Fail.
FX	Fiber port signal detect LED	ON	Laser is receiving.
		OFF	No laser input.
FX-LINK/ACT	Fiber port link/action status LED	ON	Fiber link is ok.
		Blink	Data is been received or transmitted



		OFF	Fiber link is fail.
1000M	UTP port speed LED	ON	1000M speed
		OFF	100M speed
TX-LINK/ACT	UTP port link/action status LED	ON	Link is ok.
		Blink	Data is been received or transmitted
		OFF	Link is fail.
FDX/COL	UTP port duplex LED	ON	Full duplex
		OFF	Half duplex

**Technical parameters:**

- Standard Protocol: IEEE802.3 10 Base-T standard  
IEEE 802.3u 100Base-TX/FX standard  
IEEE 802.3z 1000Base-TX/FX standard
- Connector: one UTP RJ-45 connector, one SC/ST connector
- Operation mode: full duplex mode or half duplex mode
- Power supply parameter: outside: 5V DC 2A  
built-in: 110-265V AC 48VDC
- Environmental temperature: 0°C-60 °C
- Relative humidity: 5%-90%
- TP cable: Cat5 UTP cable
- Transfer fiber:  
multi-mode: 50/125, 62.5/125 or 100/140µm  
single mode: 8.3/125, 8.7/125, 9/125 or 10/125µm
- Dimensions:  
External power supply: 70.5 (L)X94 (W)X26.5 (H) mm ( can be installed in FI-MCC-14 chassis )  
Internal power supply: 110 (L)X140 (W)X40 (H) mm

**Cautions:**

- This product is suitable for indoor application.
- Put on the dust cover of fiber interface when not used.
- It is forbidden to stare at the TX fiber-transfer end with naked eyes.
- Single optical fiber transceiver must be used in pair (See the attachment description in delivery).

**Trouble shooting:**

- Device is not matched. Please select the corresponding network device according to the transfer rate of the product (10Mbps or 100Mbps) when connected to other network devices (network card, hub, switch).
- Line loss is excessive during the fiber wiring. Excessive loss in connector plug-in and fiber soldering welding, and excessive intermediate nodes may cause excessive loss rate or abnormal operation.