

MC-1000 SERIES Mini Gigabit Media Converter User Manual



Brief introduction

This mini 10/100/1000Base-TX to 1000Base-FX Media Converter supports IEEE802.3U IEEE802.3z 1000Base-TX/FX protocols.

Packing list

Please check the following items in the package before installing the media converter.

| | |
|----------------------|--------|
| Mini media converter | 1 Unit |
| AC/DC Power adaptor | 1 PCS |
| User Manual | 1 Copy |

Please contact the dealer immediately for any loss or damage to the above items.

Installation

1. Interface

RJ-45 interface

The transmission media adopts CAT5e or CAT6 twisted-pair with maximum length up to 100 meters (330 feet).

Fiber interface

SC fiber interface is duplex mode type, including two interfaces, namely TX and RX. When the two sets of optical transceiver are interfaced or connected to switch with fiber interface, the fiber is in cross connection, namely "TX-RX", "RX-TX" (direct butting for single optical fiber transceiver module).

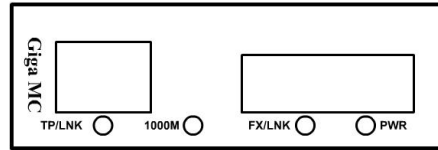
Power supply interface

The AC to DC power adaptor is connected to DC-input jack of media converter.

2. Connection

The network device (IP camera, wireless AP, VoIP phone, etc) with RJ-45 interface is connected to RJ-45 jack of

media converter through twisted-pair. And the multi/single mode optical fiber is connected to SC fiber interface of the optical transceiver module. Then connect the AC power adaptor, the media converter will work. The corresponding LED is on for correct connection (See the table below for the LED indicator lamp).



Description for LED indicator lamp

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

| | |
|--------|--|
| TP/LNK | Bright: twisted pair is connected well, but no data transmission Blinking: receiving data |
| 1000M | ON: 1000M (TP) OFF: 100M/10M (TP) |
| FX/LNK | Bright: optic fiber cable is connected well, but no data transmission Blinking: when receiving data |
| PWR | ON: the power is ok |

Introduction to DIP switches

| NO | Function | Status | Description |
|----|---------------|---------------|----------------------|
| 1 | LFP function | OFF | Disable |
| | | ON | Enable |
| 2 | Forward mode* | H bit OFF/OFF | Store and forward |
| | | L bit OFF/ON | Modified cut through |
| 3 | L bit | ON/OFF | Smart pass through |
| | | ON/ON | Pass through |
| 4 | FX 100M | OFF | FX 1000M |
| | | ON | FX 100M |

*combined keys

Main features

- In conformity to IEEE802.3U IEEE802.3z 1000Base-Tx/Fx standards.
- Supports IEEE802.3x flow control.
- Supports 100Base-FX interface.
- Supports auto MDI-MDIX function.
- Supports LLCF function.

Technical parameters:

- Standard Protocol:

IEEE 802.3u 1000 Base-TX, IEEE802.3z, IEEE802.3ab standards

- Connector: one UTP RJ-45 connector, one SC connector, one DC-inlet connector
- Operation mode: full duplex or half duplex mode
- Power supply parameter: DC 5-12V
- Environmental temperature: 0°C - 50 °C
- Relative humidity: 5%-90%
- TP cable: Cat5e or Cat6 UTP cable
- Optical 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:
 - 90mm (L) x 60mm (W) x 20mm (H)
 - (Not including transceiver length)

Cautions:

- This product is suitable for indoor applications.
- 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.
- WDM transceiver must be used in pair.

Trouble shooting:

- Device is not matched. Please select the corresponding network device according to the transfer rate of the product (100Mbps or 1000Mbps) when connected to other network devices.
- Line loss is excessive during the fiber wiring. Excessive loss in connector plug-in and fiber soldering, and excessive intermediate nodes may cause excessive loss rate or abnormal operation.



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