# MC-2GT-SFP

## 2-Port 10/100/1000Base-TX to 1000Base-FX SFP Converter



## User Manual

☞Brief introduction

MC-2GT-SFP is a dual copper and one fiber Gigabit Ethernet converter and switch, and is designed to make conversion between 10/100/1000Base-T and 100/1000Base-X with SFP connector. This converter supports IEEE802.3 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 us 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 (330feets).
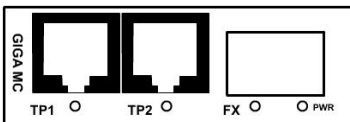
Fiber interface

SFP fiber interface is of 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/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 SFP 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.

| TP1 | GREEN: 1000M Link/Act |
|---|---|
| | RED:100M Link/Act |

| | Dual color:10M Link/Act * |
|---|---|
| TP2 | GREEN: 1000M Link/Act |
| | RED:100M Link/Act |
| | Dual color:10M Link/Act * |
| FX | ON: optic fiber cable is connected well |
| PWR | ON: the power is ok |

*Dual color: Two LED chips (in one package) are all bright or blinking at the same time.

☞ Introduction to DIP switches

| NO | Function | Status | Description |
|---|---|---|---|
| 1 | Reserved | X | X |
| 2 | Jumbo frame | OFF | Normal |
| | | ON | Up to 9KB |
| 3 | Port isolation * | OFF | Disable |
| | | ON | Enable |
| 4 | FX 100M | OFF | FX 1000M |
| | | ON | FX 100M |

*between two RJ-45 ports

☞Main features

1. In conformity to IEEE802.3 IEEE802.3Z 1000Base-Tx/Fx standards.
2. Supports IEEE802.3X flow control.
3. Supports 100Base-FX interface.
4. Supports auto MDI-MDIX function.
5. Supports jumbo frame up to 9.6KB.
6. Supports port based isolation.

☞Technical parameters:

1. Standard Protocol:

IEEE 802.3,IEEE802.3Z 1000 Base-TX/FX, IEEE802.3X,

2. Connector: 2 RJ-45 Jacks, one SFP Slot one DC-inlet connector
3. Operation mode: full duplex or half duplex mode
4. Power supply parameter:   5-12VDC
5. Environmental temperature: 0℃-50 ℃
6. Relative humidity: 5%-90%
8. TP cable: Cat5e or CAT6 UTP cable
9. Optical fiber:

Multi-mode:

50/125, 62.5/125 or 100/140 $\mu$ m

Single mode:

8.3/125, 8.7/125, 9/125 or 10/125 $\mu$ m

10 Dimensions:

90mm (L) x 60mm (W) x 20mm (H)

(Not including SFP transceiver module length)

☞Cautions:

1. This product is suitable for indoor applications.
2. Put on the dust cover of fiber interface when not used.
3. It is forbidden to stare at the TX fiber-transfer end with naked eyes.
4. WDM transceivers must be used in pair.

☞Trouble shooting:

1. Device is not matched. Please select the corresponding network device according to the transfer rate of the product (10Mbps or 100Mbps or 1000Mbps) when connected to other network devices.

2. 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.