Brief introduction

Many thanks for purchasing Gigabit media converter! This product supports IEEE802.3Z/AB 1000Base-SX/LX protocol, the working mode of duplex full mode and half mode. The copper port is adaptive to the rate of 10/100/1000M Gigabit media converter. This manual is for various models of adaptive 10Base-T, 100Base-T, and 1000Base-T media converter. The following purchasing guide is for customer to refer to.

Purchasing guide for Gigabit media converter

Model	Specifications
TP ← → SC/FC/ST MM	10/100/1000M, multi-mode 500 meter, SC/FC/ST
TP ← → SC/FC/ST SM	10/100/1000M, single mode 0-80 Km, SC/FC/ST
TP←→LC SM/MM	10/100/1000M, SFP slot

Packing list

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

Gigabit optical media converter	1 piece
AC/DC power Adapter (external type)	1 piece
User manual	1 copy

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

Installation

1. Interface

Copper port

The transmission media adopts CAT5/CAT5E/CAT6 twisted-pair. It is recommended to use quality RJ-45 and well-made jumper. It features the function of automatically identifying the through line and cross wire.

Fiber port

The fiber interface is of duplex mode type, including two interfaces, namely TX and RX. When the two sets of media converter are interfaced or connected to switchboard with fiber interface, the fiber is in cross connection, namely "TX-RX" "RX-TX".

2. Connection

Connect the network device (work station, hub or switch) to the RJ-45 jack of the media converter through twisted-pair CAT5. Connect the multimode/single mode fiber to SC/ST/LC fiber interface of the media converter. Turn the power on. The corresponding LED is on for a correct connection. (See the table below for the LED indicator lamp)

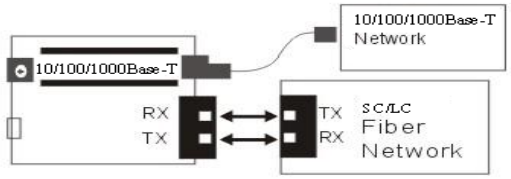


Figure 1 Schematic drawing of connection

Explanation for LED indicator lamp

The LED indicator lamps serve as device monitoring and error display. The following explains each LED indicator.

LED	Status	Explanation
FDX	On	Converter works in the full duplex mode.
	Off	Converter works in the half duplex mode.
FX Link/ACT	Blink	Active status display of fiber port link "Blink" indicates packet goes through FX
1000	On	Rate of copper port is 1000Mbps
100	On	Rate of copper port is 100Mbps
TP Link/ACT	Blink	Active status display of copper port link "Blink" indicates packet goes through TP
PWR	On	Power is on and normal.

When both 1000 and 100 are Off, RJ45 Port is working at 10Mbps.

Fiber transmission features:

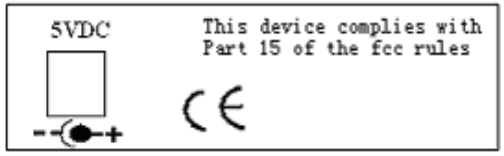
Product model	Optical wavelength (nm)	Optical power (dbm)	Sensibility (dbm)	Transmission distance
TP- MM	850nm	-3~-10.5	≤-20	62.5 μm:220meter 50 μm:550meter
TP- SM	1310nm	0~-8	≤-21	20Km
TP- SM	1550nm DFB	-3~-10	≤-24	40Km
TP- SM	1550nm DFB	1~-6	≤-26	60Km
TP- SM	1550nm DFB	4~-2	≤-26	80Km
TP- MM	850nm	-3~-10.5	≤-20	62.5 μm:220meter 50 μm:550meter
TP- SM	1310nm	0~-8	≤-21	20Km
TP- SM	1550nm DFB	-3~-10	≤-24	40Km
TP- SM	1550nm DFB	1~-6	≤-26	60Km

☞ Technical parameters:

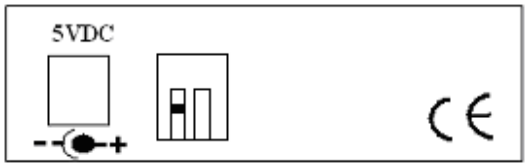
1. Standard Protocol:
   IEEE802.3Z/AB 1000Base-T/SX/LX
2. Transfer rate:
   Copper port: 10/100/1000Mbps
   Fiber port: 1.25Gbps
3 Interface: One UTP RJ-45 interface
   One SC/LC/FC interface
4. Operation mode: full duplex mode or half duplex mode
5. Power supply parameter:
   External: 5V DC/2A
6. Environmental temperature:-20℃~70 ℃
7. Relative humidity: 5%-90% non-condensing
8. TP cable: CAT.5, CAT.5E, CAT.6
9. Transfer fiber: multi-mode: 50/125, 62.5/125μm
   Single mode: 8.3/125, 8.7/125, 9/125 or 10/125μm
10 Dimensions:
   External power supply: 26mm x 71mm x 94mm

☞ 2 Back Pannel

Type A:



Type B:



DIP-Switch: (Type B only)

*Toggle ON pin 1 to enable LFP; OFF to disable

*Toggle ON pin 2 to enable Flow Control; OFF to disable

☞ Caution:

1. This product is suitable for indoor application.
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. Single optical fiber transceiver must be used in pair (A, B)

A: TX1310RX1550nm B: TX1550/RX1310nm.

☞ Trouble shooting:

1. Line loss is excessive during the fiber wiring

Excessive loss in adaptor connector plug-in and fiber soldering welding and excessive intermediate nodes may cause excessive loss rate or abnormal operation.

2. If power loss is excessive in the fiber, please check and clean the fiber patch cord connectors.

P/N: 41NE-MC311000-B00

Gigabit Ethernet Media Converter

10/100/1000Base-Tx to 1000Base-X

User manual

(Please read before using the Media Converter)