

10/100/1000M Fiber Optical Media Converter



PRODUCT OVERVIEW

10/100/1000M Ethernet media converter adopts switching technology to fulfill media conversion. It complies with IEEE802.3z and IEEE802.3ab standards, and supports two types of media network connections: 10/100/1000Base-T and 1000Base-SX/LX. It inter-converts electrical signals of 10/100/1000Base-T twisted pairs with optical signals of 1000Base-SX, extending the transmission distance of a network from 100m via copper cables to 220m (fiber size: 62.5/125 μ m)/550m (fiber size:50/125 μ m) via fiber optical cables. It supports transmission in multi-mode dual fiber; single-mode dual fiber, single-mode single fiber.

MAIN FEATURE

- 1.Supporting inter-conversion between 10/100/1000Base-TX and 1000Base-SX
- 2.Supporting full-duplex and half-duplex and its auto-sensed
- 3.Supporting automatic cross connection of twisted pair interfaces, facilitating system commissioning and installation
- 4.Supporting the transmission of extra-long VLAN packets
- 5.Supporting Quality of Service (QoS) and ensuring the transmission of VoIP packets
- 6.Supporting STP to form a redundant network

TECHNICAL

Parameter	Specifications
Access mode	10/100/1000Mbps Gigabit Ethernet
Standard	IEEE802.3ab 1000Base-T , IEEE802.3z 1000Base-SX/LX Gigabit thernet,IEEE802.1qVLAN,IEEE802.1p QoS,IEEE802.1d Spanning Tree

Wavelength	850nm/1310nm/1550nm
Transmission distance	Dual-fiber multi-mode: 220m (62.5/125μm)/550m (50/125μm) Dual-fiber single-mode: 25/40/60/80Km Single-fiber single-mode: 25/40Km Category-5 twisted pair: 100m
Port	One RJ45 connector: connected to STP/UTP category-5 twisted pair One fiber port: Multi-mode SC (fiber size: 50,62.5/125μm) Single mode SC/FC (fiber size: 9/125μm)
Conversion means	Media conversion
Delay	<10us
BER	<10 ⁻⁹
MTBF	100,000 hours
LED	PWR (power supply), FX LINK (optical link action), TP LINK1000 (twisted pair link1000M), TP LINK100 (twisted pair link 100M), TP ACT (twisted pair packet forwarding)
Power Supply	AC110-220V to DC5V 2A
Power consumption	5W
Operating temperature	-10~55°C
Operating humidity	5%~90%
Maintaining temperature	-40~70°C
Maintaining humidity	5% ~ 90% non-condensing
Dimensions	26mm (H) * 70mm (W) * 94 mm (D) (external power supply)
	30mm (H) * 110mm (W) * 140 mm (D) (internal power supply)

PACKING LIST

Please check the following items in the package before installing the transceiver.

The media converter	1pcs
AC/DC power adapter	2pcs
Warranty card	1pc
User's manual	1copy

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

EXPLANATION FOR LED INDICATOR LAMP

LED indicator lamp	status	Explanation
PWR	ON	Power is ON.
	OFF	Power is Fail.
FX-LINK/ACT	ON	Fiber link is ok.
	Blink	Data is been received or transmitted
	OFF	Fiber link is fail.
	ON	Link is ok.

TX-LINK/ACT	Blink	Data is been received or transmitted
	OFF	Link is fail.
FDX/COL	ON	Full duplex
	OFF	Half duplex
SD	ON	Fiber signal is detected.
1000M	ON	1000M speed
	OFF	100M speed

INSTALLATION

1. Interface

RJ-45 interface

The transmission media adopts CAT5 twisted-pair with typical length of 100 meter. It features the function of automatically identifying the through line and cross wire

Fiber interface

SC/ST 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).

2. Connection

The network device (work station, hub or switch) with RJ-45 interface is connected to RJ-45 jack of optical transceiver through twisted-pair. And the multi/single mode fiber is connected to SC/ST fiber interface of the optical transceiver. Then switch on. The corresponding LED is on for correct connection. (See the table below for the LED indicator lamp)

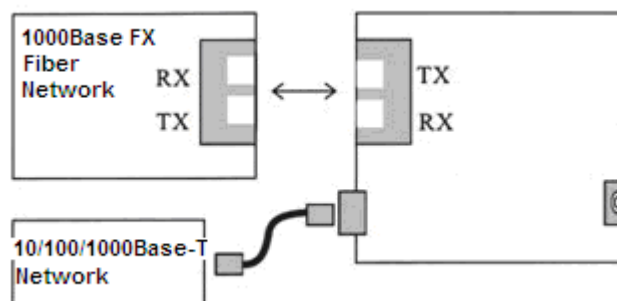


Figure 1: Basic Network Connection

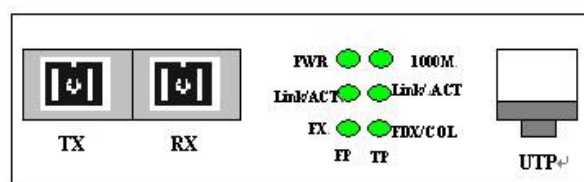


Figure 2: Front panel

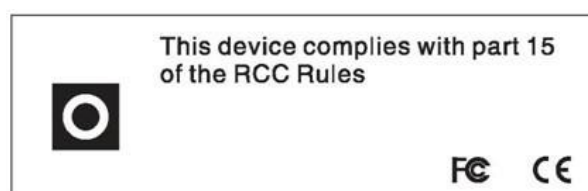


Figure 3: Back panel

CAUTIONS

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 (See the attachment description in delivery).

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 (network card, hub, switch).
2. 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.