

10/100M Fiber Media Converter (external power)

Model:A3



Brief introduction

Many thanks for purchasing Fast Ethernet optical transceiver! This product supports IEEE802.3UI100Base-Tx/Fx protocol, as well as full duplex and half duplex mode. This manual is for adaptive 100M, 10M/100M transceivers. The following purchasing guide is for customer's reference.

Purchasing guide for optical transceivers

Model	Specifications	
10100E-MCM-2	10/100M adaptive, multi mode 2km,	□
10100E-SCM-25	10/100M adaptive, single mode 25km, SC	✓
10100E-SCM-40	10/100M adaptive, single mode 40km, SC	□
10100E-SCM-60	10/100M adaptive, single mode 60km, SC	□
10100E-SCM-100	10/100M adaptive, single mode 100km, SC	□

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 (10/100M).

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).

1. 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)

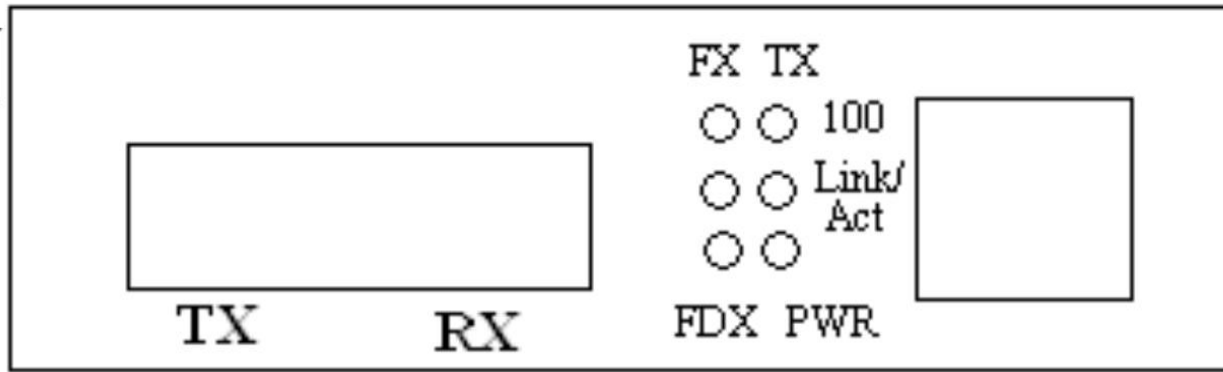
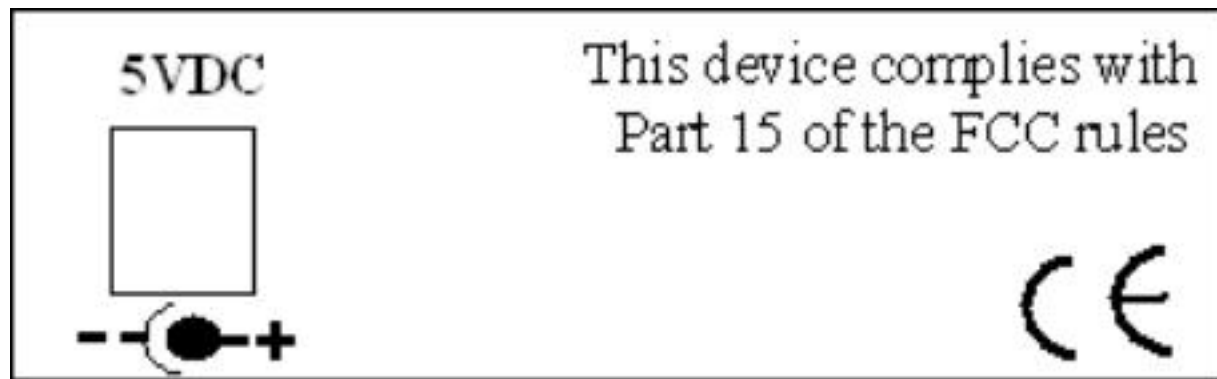


Figure 1 Schematic drawing of connection



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 indicator lamp	Status	Explanation
FX Link/Act	On	Connection status display for fiber link. "ON" indicates that Fiber link is in correct connection.
	Blink	Active status display of fiber link "Blink" indicates packet goes through Fx end.
TX Link/Act	On	Connection status display for electric link. "ON" indicates that electric link is in correct connection.
	Blink	Active status display of fiber link "Blink" indicates packet goes through Tx end.

FDX	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
FX	On	Transfer rate of optical interface is 100Mbps.
TX	On	Transfer rate of electric interface is 100Mbps.
	Off	Rate of electric interface is 10Mbps

Transmission characteristics of single fiber transceiver

Product model	Optical wavelength (nm)	Transmitting optical power	Receiving sensitivity	Transmission distance (km)
10100E-SM (25km)	1310/1550 1550/1310	-12-6	-12	25
10100E-SM (40km)	1310/1550 1550/1330	-3-5	<-31	40
10100E-SM (60km)	1310/1550 1550/1330	-5-9	<-44	60

Main features

- In conformity to IEEE 802.3 10 Base-T standard.
In conformity to IEEE 802.3u 100 Base-TX/FX standard.
- Max. 2M buffer memory built in chip.
- Back pressure flow control for full duplex IEEE802.3 X and half duplex.
- Automatic identification of MDI/MDI-X cross line.
- High-performance 1.4Gbps memory bandwidth.
- In conformity to safety code of FCC and 15 CLASS A and CE MARK.