Dante

Installation and Operations Manual

Model Number: DFO38012X and DFO48012X

Description: Fiber Optic 10/100 Ethernet Transmission

on 1 MM or SM Optical Fiber

10/100M
Fast Ethernet Media Converter

User Manual

☞ Brief introduction

Many thanks for purchasing our Fast Ethernet media converter. This product supports IEEE802.3U 100Base-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.

☞ Main features

1. Comply with IEEE 802.3 10 Base-T standard and IEEE 802.3u 100 Base-TX/FX standard.
2. Max. 2M buffer memory built in chip.
3. Back pressure flow control for full duplex IEEE802.3 X and half duplex.
4. Automatic identification of MDI/MDI-X cross-wire.

☞ Technical parameters:

1. Standard Protocol: IEEE802.3 10 Base-T standard
IEEE 802.3u 100Base-TX/FX standard
2. Interface: one Ethernet (RJ-45), one optical interface (SC/ST/FC)
3. Operation mode: full duplex mode or half duplex mode
4. Power supply:
External power: 5V DC 1A
Internal power: 110-265V AC/-48VDC
5. Operating temperature: 0℃-50 ℃
6. Relative humidity: 5%-90% non-condensing
8. TP cable: CAT5, CAT5E, CAT6 UTP cable
9. Optical cable: Multi-mode fiber, Single mode fiber
10 Dimensions:
120mm*90mm*28mm (external power)
173mm*128mm*32mm (internal power)

☞ 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 fiber Fast Ethernet media converter must be used in pair

☞ Packing list

Please check the following items in the package before installing the converter
Fast Ethernet media converter   1set
DC adapter or power cord   1pc
User manual   1copy
Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

☞ Installation

1. Interface
RJ-45 interface
Fast Ethernet media converter adopts twisted-pair with typical length of 100 meter.
Optical interface SC, ST, and FC are available.

2. Connection
The network device (work station, hub or switch) with RJ-45 interface is connected to RJ-45 interface. And the multi/single mode fiber is connected to SC/ST/FC optical interface of the Fast Ethernet media converter. The corresponding LED is on for correct connection. (See the table below for the LED indicator lamp)
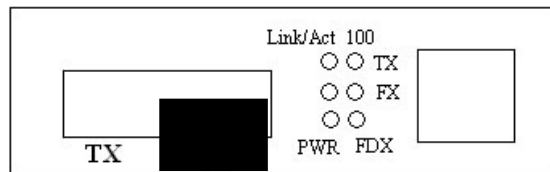
☞ Front plate for external power type
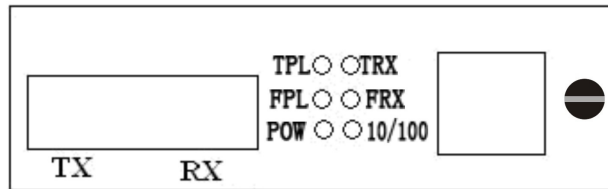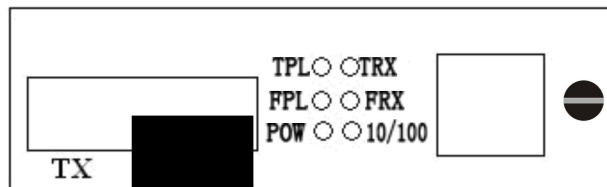
 --Dual fiber

Link/Act 100
○ ○ TX
○ ○ FX
○ ○
TX   RX   PWR FDX

--Single fiber

Link/Act 100
○ ○ TX
○ ○ FX
○ ○
TX   PWR FDX
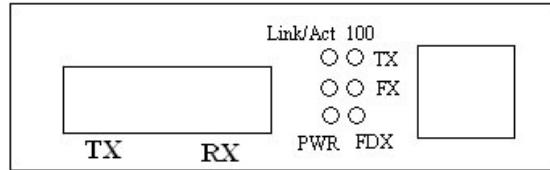
☞ Front plate for internal power type

 --Dual fiber

TPL○ ○TRX
FPL○ ○FRX
POW ○ ○10/100
TX   RX

--Single fiber

TPL○ ○TRX
FPL○ ○FRX
POW ○ ○10/100
TX

☞ 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（FPL）	On	Connection status display for fiber link. "ON" indicates that Fiber link is in correct connection.
	Blink	"Blink" indicates is transmitting through Fx end..
TX Link/Act（TPL）	On	Connection status display for Ethernet link. "ON" indicates that Ethernet link is in correct connection.
	Blink	"Blink" indicates is transmitting through Tx end.
FDX（10/100）	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
FX/100（FRX）	On	Transfer rate of optical interface is 100Mbps.
TX/100（TRX）	On	Transfer rate of electric interface is 100Mbps.
	Off	Rate of Ethernet interface is 10Mbps

☞ Trouble shooting:

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

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