 Brief introduction

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

Purchasing guide for Gigabit optical converters

Model	Specifications
TP- LC MM	1000M adaptive, multi-mode 500 meter
TP- LC SM	1000M adaptive, single mode dual fiber 0-80 Km

 Packing list

Please check the following items in the package before the installation of converter.

- Gigabit optical converter 1 piece
- AC/DC adapter (external) 1 piece
- User manual 1 copy

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

 Installation

1. Interface

RJ-45 interface

The transmission media adopts CAT5 and CAT 6 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 interface

If the SFP fiber transceiver you used is dual fiber type, including two interfaces namely TX and RX. When the two sets of optical 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 optical converter through twisted-pair CAT5. Insert the SFP fiber transceiver in the metal cage. Connect the multi-mode/single-mode fiber to the SC/LC fiber interface of the SFP fiber transceiver. Turn the power on. The corresponding LED is on for a correct connection. (See the table below for the LED indicator lamp)

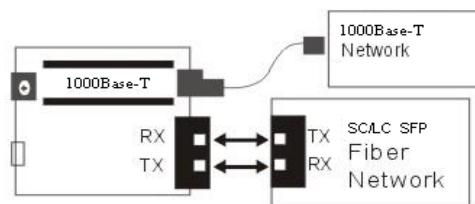


Figure 1 Schematic drawing of connection

 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
SPD	On	The rate of the TP port is 1000Mbps
	Off	The rate of the TP port is 10/100Mbps
LINK/ACT	Blink	Active status display of electrical interface link "Blink" indicates packet goes through TP
F1	Blink	Active status display of the corresponding fiber interface link. "Blink" indicates packet goes through FX
F2	Blink	Active status display of the corresponding fiber interface link. "Blink" indicates packet goes through FX
PWR	On	Power is on and normal.

 Redundant DIP-Switch description:


When the DIP-Switch is on the "OFF" side (Default), the 2 fiber ports are working on the switch mode; When the DIP-Switch is on the "ON" side, the 2 fiber ports are working on the redundant mode.

When the Redundant function enabled, the F1 port work as main channel, if the F1 port link down, the F2 port will link up within 10ms, if the F1 port recovered, the F2 port will link down and F1 link up within 10ms.

※ Note: when the redundant function enabled, the F1 and F2 port MUST be connect to the same fiber device.

 Fiber transmission features:

Product model	Optical wavelength (nm)	Optical power (dbm)	Sensibility (dbm)	Transmission distance
TP-LC MM	850	-6-12	<-16	62.5 μ m:220meter 50 μ m:550meter
TP-LC SM	1310	-6-12	<-18	20Km
TP-LC SM	1310	-3-8	<-21	40Km
TP-LC SM	1550	0-6	<-30	80Km


 Technical parameters:

- Standard Protocol:
IEEE802.3Z/AB 1000Base-T/SX/LX
- Transfer rate: Electrical interface: 10/100/1000Mbps
Fiber interface: 1.25Gbps
- Interface: One UTP RJ-45 interface
Two metal cage for SFP fiber transceiver
- Operation mode: full duplex mode or half duplex mode
- Power supply parameter:
External: 5V DC 2A
- Environmental temperature: 0°C~60 °C
- Storage temperature: -40°C~85°C
- Relative humidity: 5%-90 %(non-condensing)

- TP cable: CAT 5E, CAT 6
- Transfer fiber: multi-mode: 50/125, 62.5/125 μ m
single mode: 8.3/125, 8.7/125, 9/125 or 10/125 μ m
- Dimensions: 26mm x 71mm x 95mm (H x W x D)

 Cautions:

- This product is suitable for indoor application.
- Put on the dust cover of fiber interface when not used.
- It is forbidden to stare at the TX fiber-transfer end with naked eyes.
- Single optical fiber transceiver must be used in pair

 Trouble shooting:

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



GVT-2011

**RJ45 to SFP Gigabit Media
Converter Switch, 2 x SFP, 1 x RJ45**

User manual / QIG

(Please read before using the Media Converter)