Ethernet Fiber Optic Transceiver
Model:UT-2177
10M&100M MEDIA CONVERTER

Term of Use

To help you with a better understanding of the product's functions and features, and to use the product correctly, effectively, and safely, please note the following:

①. Please read the instruction manul, and follow the procedures for installation and operations.

②. All devices' parameters have been appropriately set up before leaving the factory. Please do not change the settings.

Ⅰ. Introduction

The 10/100M fiber optic transceiver is used for data communication between 100Base-TX twisted pair and 100Base-FX cable, or between 10Base-T twisted pair and 10Base-FL cable. It is the most suitable for the connectors between intelligent community, or fiber optic, and the desktop. It automatically adjusts 10Mbps and 100Mbps transmission speed, and it makes user upgrades more convenient. It enhances the network transmission distance from the limited 100M twisted pair to more than 100KM. It simply realizes the interconnection between server motherboard, repeaters, hubs, and terminals.

Ⅱ.Functions and Features

1. The quality optical integration module provides excellent optical and electrical properties. It ensures reliable data transmission and long working life.
2. It supports both full-duplex and semi-duplex modes, and it also possesses auto-negotiation capability.
3. 10Mbps and 100Mbps adjust automatically. No manual adjustment required.
4. Electrical interface supports fully automatic cross-identification. No manual operation required.
5. Built-in store and forward mechanism, cache 128KB, supports multiple protocols.
6. Support maximum transmission data packets of 1600bytes
7. Conform with carrier-class operating standards, average 50,000+ no-error operation hours.
8. Power supply: DC5V Input 1A
9. SC fiber optic interface (ST or FC interface optional)

Ⅲ.Appearance Description

DIP Switch:

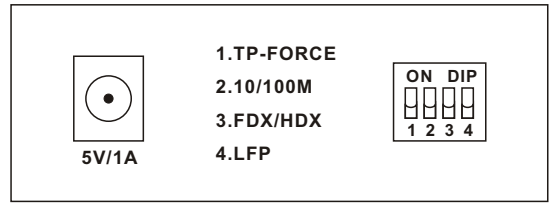
● When DIP switch1 is set to "OFF", switch and switch are not in operation mode. Switch 2 and 3 can only be configured when Switch 1 is set to "NO".

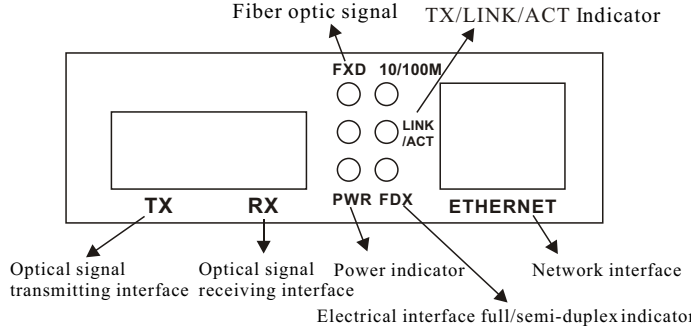
● When DIP switch2 is set to "OFF", the electrical interface opearting rate is at 100M; when set to "NO", the interface operating rate at 10M.

● When DIP switch3 is set to "OFF", the electrical interface is at full-duplex operation status; when set to "NO", the interface is at semi-duplex operation status.

● When DIP switch4 is set to "OFF", LFP function is banned; when set to "NO", LFP alarm function is then activated. LFP function is used to detect the connection between optical and electrical interfaces. When remote optical or electrical interface is disconnected, it notifies and disconnect the corresponding local optical or electrical interface, and the indicator will be off. This helps technicians to quickly identify the point of connection error.

Side view





Ⅳ. Technical Standards

EEE802.3 Ethernet and IEEE802.3 U Ethernet are supported

1.Technical Parameters

Index parameter		Technical parameter			
		Multi-mode		Single mode	
Optical Properties	Emission wavelength nm	850	1310	1310	1550
	Transmission distance km	0 ~ 2	0 ~ 5	10 ~ 60	15 ~ 120
	Emission Power dBm	-5 ~ -18	-5 ~ -18	-12 ~ 2	-12 ~ 2
	Receiving sensitivity dBm(≤)	-28	-32	-35	-35
	Optical saturation dBm	-3	-3	-3	-3
	Optical loss dBm/km	-3	0.5	0.4	0.25
	Fiber optic interface type	SC、FC、ST interfaces, optional			
Other requirements	Receive and Send data rate	100Mbps、10Mbps			
	Cache	128KB			
	Operation mode	Full/semi-duplex mode			
	Power supply requirement	DC5V/1A power supply			
	Operation termperature	0 ~ 70℃			
	Storage temperature	-40 ~ 70℃			
	Relative humidity	5% ~ 90%			
	Dimensions	103mm × 71.5mm × 26mm			

2、Fiber connection parameters

① Transmission fiber optic

Multi-mode：50/125，62.5/125，100/140μm

Single-mode：8.3/125，8.7/125，9/125，10/125μm

② Transmission Distance

Multi-mode：5km

Single-mode：20km、40km、60km，is user requires.

Connection cable UTP5：100m

Ⅴ. Equipment Installation and Startup

1、Check box

Open the package and check items with List 5-1. If anything missing or damaged, please contact your local distributor immediately.

List 5-1 Supplies List

Name	External 10/100M Transceiver	Power supply	Warranty Card	Instruction Manual	Certificate of Conformance
Quantity	1	1	1	1	1

2、Installation

Install according to the following illustration (Figure 5-1)

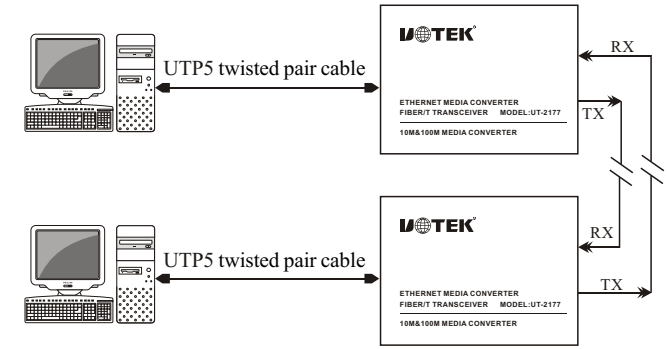


Figure 5-1

3、Equipment Operation Status

Indicator Status

■ When PWR indicator is on, the power supply is normal.

■ When 10/100M indicator is on, the fiber optic transceiver is opearting at 100MBPS.

■ When the fiber optic cable is connected correctly, the FX/LINK/ACT indicator lights on. It flashes when data is in transmission.

■ When the twisted pair cable is connected correctly, TX/LINK/ACT indicator lights on. It flashes when data is in transmission.

■ When the twisted pair cable is operating at full-duplex mode, FDX lidicator lights on. Otherwise it is operating at semi-duplex mode.