# 10/100M Fiber Media Converter Instructions

1. Overview

10/100M Fiber Media Converter converts 100BASE-FX fiber to 10/100Base-TX copper media or vice versa. By converting 10/100Base-TX to 100Base-FX transmitter in Multimode or Single mode Fiber cable, breaking the limit of Ethernet cable transmission short distance. On the premise of guaranteeing high bandwidth transmission over Ethernet, utilize fiber media to achieve a few kilometers or even hundreds of kilometers of long-distance transmission. Use Fiber Media Converter to construct network can save network investment, and it also a good solution for long-distance transmission in the present case that the network equipment is expensive.

Ethernet 1   TX   RX   TX   RX   Ethernet 2
Fiber/2km-120km
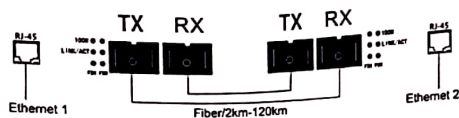
2. Features

- Built-in high efficiency switch core, control broadcast storm, achieve flow control, CRC error checking.
- Support 100Base-FX fiber transmission standard, can be interconnected with other products.
- Support Spanning Tree tectonic fault-tolerant network.
- Auto-negotiation 10/100Mbps, full/half duplex, could smooth upgrade.
- Transmission distance up to 120KM.
- External/Internal power supply stand-alone media converter, Card-type media converter, 14 slots and 16 slots rack chassis, flexible configuration.
- Dual power supply fault-tolerant chassis, Hot-swap module, high reliability.
- High speed cache capacity : 1M Bits.
- Built-in MAC address cache space: 1K.

3. Product Agreement

IEEE802.3 Ethernet Standard

IEEE802.3u Fast Ethernet Standard

IEEE802.3d Spanning Tree Standard

4. Product Categories

1) Classified by shape structure: Desktop type internal/external power supply stand-alone Fiber Media Converter, Card-type Fiber Media Converter, rack chassis type Fiber Media Converter.

2) Classified by fiber quantity : Single fiber media converter and Dual fiber media Converter.

3) Classified by fiber type: Multimode media converter and Single mode media converter.

4) Classified by transfer rate : self-adaptive 10/100M.

5) External power supply could be used with 14 slots rack chassis; Card-type media converter could be used with 16 slots rack chassis.

Each type Fiber Media Converter (8306 chip) Panel structure, please refer to the table as shown below. (It just for reference, the product real appearance prevail in kind)
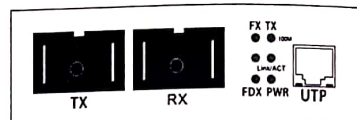

5. LED Indicators

Name	Status	Indication
PWR	On	Power on.
	Off	Power off.
FX	On	There's fiber signal input.
	Off	There's no fiber signal input.
FX Link /Act	On	There's a valid fiber link.
	Flashing	The converter is transmitting data from the fiber port.
	Off	There's no valid fiber link.
FDX	On	The TP port is operating in Full-Duplex.
	Flashing	There's a collision.
	Off	The TP port is operating in Half-Duplex mode.
100M	On	The TP port is connected to 100Base-Tx.
	Off	The TP port is connected to 10Base-Tx device.
TX Link/Act	On	There's a valid link.
	Flashing	The converter is transmitting data from the TP port.
	Off	There's no connection on the TP port.

6. Installation and Connection

1. Fiber Media Converter generally used in pairs. Typical connection shown as following :

Switch   Media Converter   Media Converter   Switch
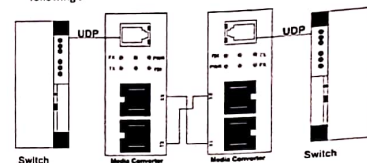
2. Twisted pair connections way:

a) When directly connect with PC, twisted pair is parallel lines.

b) When connect with Switch/Hub, twisted pair is cross lines.

Note: If the Fiber Media Converter supports MDI/MDIX function, twisted pair types is not Limited.

3. The connection of Fiber interface must notice match Single Mode/Multimode. Should connect one end TX Port on the Media Converter with the other end RX Port on