

## Media Converter 10/100/1000 Mbps



### Detailed Product Description

#### 1. Overview

The Media Converter complies with IEEE802.3z, IEEE802.3AB Standards. It is designed to convert data signal between 10/100/1000 Base-T and 1000Base-SX/LX fast Ethernet. It supports 10/100/1000 Base-T and 1000Base-SX/LX applications. The data signal converted by such high performance media converter can be transmitted up to 120km Maximum by two fiber-optical cable.

The Converter is equipped with two fiber optic connectors for (One for transmitting-TX and one for receiving-RX) and one auto-sensing RJ-45 jacks and one external power supply receptacle. Six LED indicators are built-in for easy diagnosing and monitoring the status of power, Unshielded Twisted Paired (UTP) Link, UTP Activity, Fiber Link, Fiber Activity, Full duplex and data rates. It can be configured automatically for Full Duplex or Half Duplex operation.

It is compact, cost-effective, low dissipative, high reliable and stable. It can be used in standalone applications, or Rack-Mounted applications where multiple media converter can be inserted into a rack-mount chassis (Up to 10 units), and allowing all the converters to be powered by a single internal power supply.

#### Features:

- 1) High stability and excellent reliability
- 2) Auto negotiation for 10/100M TP port speed
- 3) Full duplex 10/100Mbps Ethernet up to 120km (dual fiber), 80km (single fiber)

- 4) Half/full duplex identify automatically
- 5) Plug and play installation
- 6) 6/9 LEDs for monitoring the status of power, FX/Link ACT and TX Link/ACT
- 7) Net-management is optional
- 8) 5VDC external SMPS for 3300/3310/3900 series
- 9) 220 VAC or 48 VDC internal power supply is optional for 3320/3330 series

## 2. Specifications:

### 2.1 Performance introduction (Table1)

Parameter	Type
Data rate(Mbps)	10/100/1000
Optical Wavelength (nm)	850,1310,1550(for Over 60Km long distance)*
Fiber type( $\mu$ m)	Single mode 9/125 Multi-mode 50/125
Connector type	SC/PC or ST/PC
Max distance(km)	20,40,60,100*
Power supply	2A, + 5VDC $\pm$ 5%
Operating temperature	0 $\sim$ 70 C
Storage temperature	-40 $\sim$ 80 C
Relative humidity	5% to 90% non Condensing
Size	95mmx71mmx26mm

**Table 1 : performance introduction**

\* Note : Please refer to Specifications.

## 2.2 Appearance (Fig.2,Table2)



**Fig.2 Front Panel**

LED	Color	Function
RX	Green	The light on means the TX port is receiving data
TX	Green	The light on means the TX port is transmitting data
FX	Green	The light on means the FX port is connected. The light blinking means the FX is transmitting data
1000	Green	The light on means the power of TX is 1000M.
POW	Green	The light on means the power is connected.
10/100		The light on means the TX port' s speed is 100M. The light off means TX port's peed is 10M.

**Table 2.LED performance**

### 3. DC Jack and DC-DC Power Adapter

The DC jack' s central post is 2.5mm wide, it conforms to the DC receptacle (2.5mm) on the 19-inch Converter Rack slot or DC-DC Power adapter.

DC-DC Power Adapter:

DC Input:-48V

DC Output: 1A, +5VDC

### 4. Check list

Before you start installing the Converter, verify the package contains the following:

- 1) The 10/100Base-TX to 100Base-FX Ethernet Media Converter X1
- 2) The DC-DC Power Adapter X1

3) This User' s Manual X1

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

## 5. Installing the Converter

### 5.1 For as a standalone unit:

5.1.1 Verify if the DC-DC adapter conforms to your country DC power requirement then insert the power plug

5.1.2 Check the type of UTP (see fig.3)

UTP complies with IEEE802.3 Standards, and has two types :T568A T568B

Note: G: Green ; O:Orange; B: Blue; P:Palm

Parallel cable: connect T568A to T568A , or T568B to T568B

Crossing-over cable: connect T568A to T568B

5.1.3 TP port list (Fig.4)

### 5.2 Installing

5.2.1 TP port installing Auto – sensing for paralle and cross cable

5.2.2 Fiber port installing Connect the FX port on the media converter with the Single-mode SC fiber connectors.

5.2.3 Connect the SMPS power adaptor

5.2.4 Check the appearance that converter instructions light

If the connections is correct, all the LED will be on; Otherwise checking the Connection of Fiber port and TP port.