10/100/1000M Ethernet Fiber Media Converter

General Description

The media converter transforms the transmission media of Ethernet signal from CAT5 to optical fiber. It can extend the transmission distance to several kilometers or hundred kilometers. This product supports IEEE802.3U IEEE802.3z 1000Base-Tx/Fx protocol, as well as full duplex and half duplex mode.

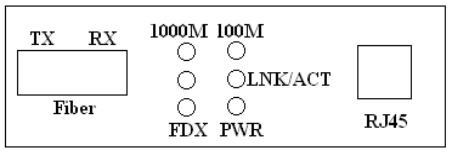
Outline

10/100/1000M Ethernet Fiber Media Converter

Key Features

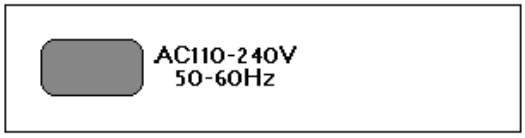
- ☑ LED display for easy monitoring of device status.
- ☑ In conformity to IEEE 802.3 10 Base-T standard. In conformity to IEEE 802.3u 100 Base-TX, IEEE802.3z, IEEE802.3abstandard.
- ☑ Built in high efficiency SRAM for packet buffer, with 1K-entry lookup table and 4-way associative hash algorithm.
- ☑ Half duplex: back pressure flow control.
- ☑ Full duplex: IEEE802.3x flow control.
- ☑ 1K MAC address table, 256K data buffer.
- ☑ Automatic identification of MDI/MDI-X cross line.
- ☑ In conformity to safety code of FCC and 15 CLASS A and CE MARK.

Connection Diagram



Schematic drawing of connection

Back View (external power)



Back View (internal power)

Technical Parameter

	10/100/1000M Media Converter
Protocol	IEEE 802.3 10 Base-T IEEE 802.3u 100 Base-TX IEEE802.3z IEEE802.3abstandard.
Connector	one UTP RJ-45 connector one SC/ST/ connector or SFP slot
Operating mode	full duplex mode or half duplex mode
Power supply	Power adapter (External): 110-265V AC input, 5V1A DC output Power supply (Internal): 110-265V AC input, 5V1A DC output
Operating temperature	0℃~50℃
Relative humidity	5%~90%
TP Cable	Cat5 UTP cable
Transfer fiber	Multi-mode: 50/125, 62.5/125 or 100/140μm Single mode: 8.3/125, 8.7/125, 9/125 or 10/125μm
Dimensions	External power supply: 94mm (L) x 71mm (W) x 26mm (H) Internal power supply: 150mm (L) x 110mm (W) x 28mm (H)

LED indicator lamps

LED indicator	Status	Explanation
Link/Act	On	Connection status display for link. "ON" indicates that link is in correct connection.
	Blink	Active status display of fiber port or RJ45 port. "Blink" indicates packet goes through media converter.
FDX	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
1000	On	Transfer rate of electric interface is 1000Mbps.
100	On	Transfer rate of electric interface is 100Mbps.

Transmission characteristics of single fiber transceiver

Product model	Optical wavelength (nm)	Transmitting optical power (dBm)	Receiving sensitivity (dBm)	Standard loss (dBm)
Single/SC/SM 20km	1310/1550	≥-9	-24	1310nm 0.4dBm/KM 1550nm 0.25dBm/KM 1490nm 0.25dBm/KM
Single/SC/SM 40km	1310/1550	> -4	-24	
Single/SC/SM 60km	1310/1550	> -1	-24	
Single/SC/SM 80km	1490/1550	≥ 0	-24	
SFP version	Depends on SFP	Depends on SFP	Depends on SFP	

Transmission characteristics of dual fiber transceiver

Product model	Optical wavelength (nm)	Transmitting optical power (dBm)	Sensibility (dBm)	Loss enable (dBm)
Dual/SC/MM 550m	1310	-10 ~ -5	-23	7
Dual/SC/SM 20km	1310	-9 ~ -3	-24	11
Dual/SC/SM 40km	1310	-2 ~ 3	-24	20
Dual/SC/SM 60km	1550	-3 ~ 2	-24	19
Dual/SC/SM 80km	1550	-3 ~ 2	-24	24
Dual/SC/SM 100km	1550	0~ 3	-27	27
SFP version	Depends on SFP	Depends on SFP	Depends on SFP	Depends on SFP