10/100M Media converter series

FCC warning

The 10/ 100M series media converter have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These standards are designed to provide reasonable protection against harmful interference when these devices are operated in commercial environment These devices can use, generate and radiate radio frequency energy and may cause harmful interface to radio communications unless installed in accordance with this User's Guide. Operation of this device in a residential area is likely to cause harmful interface which will make the user responsible for the appropriate remedial action at his/her own expense.

CE mark Warning

These are Class A products. In a domestic environment these products may cause radio interface in which case the user will need to consider adequate preventative measures.

Package Content

Thank you for purchasing our Ethernet Media Converter. Before you start installing the Media Converter, verify the following items in the package

1. Media Converter
2. User's Manual
3. Power Adapter

10/100 Series Converter

The 10/ 100M Series 10/ 100BASE-TX to 100BASE-SX/LX converter is primarily designed for larger

and higher bandwidth demanding workgroups that require expansion of the Ethernet network. The 10/ 100M features a RJ45 jack and a SC or SFP fiber optic connector, connecting the 10/ 100BASE-TX network to the 100BASE-SX/LX (fiber optic) network. At full duplex mode, the converter can extend distance up to 550 meters for multi-mode fiber and up to 80 kilometers for Single-mode fiber. It is fully compliant with IEEE 802.3u & 802.3 standards. The Installation & operation procedures of the 10/ 100M Series are simple & straightforward. User can monitor the real time operation status easily via a set of LED located in the front panel.

Package Content

1. MDI-MDIX Auto-crossover supported
2. Support flux controlling of full duplex/backpressure of half duplex
3. Comply to IEEE802.3 100Base-SX/LX &IEEE 802.3u 100Base-T
4. Work wavelength 850nm、1310nm、1550nm optional
5. Link between RJ45 and fiber port, dynamic data transmission, full/half duplex, speed lights indication
6. Supply Slot, internal power and external power, UTP port supports 10/ 100M auto-negotiation

Cable Connection of 10/100M Series Converter

Port type	Cable Type	Max.Length
10/ 100BASE-T	Cat. 5, 5E UTP, RJ-45	100 meters
100BASE-SX	Multi-mode Fiber of 850n (62.5/ 125μm)	220 meters
100BASE-SX	Multi-mode Fiber of 850nm (50/ 125μm)	550meter
100BASE-LX	Single-mode Fiber of 1310nm(9/ 125um)	10- 100km

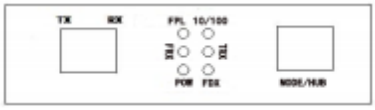
LED Indication

Please refer to the following table for LED indication of 10/ 100M Series Converter

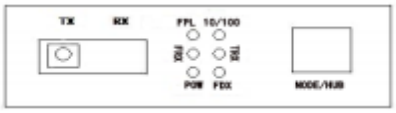
LED	Status	Indication
POW	ON	The Power is on
FPL	ON	when detects the optical signal

	OFF	when no optical signal detects
10/100	ON	TP Speed is 100M
	OFF	TP Speed is 10M
FDX	ON	Full Speed
	OFF	half Speed
FRX	Flash	Fiber Data
TRX	Flash	UTP Data

Physical Description



1X9 fiber connector



SFP fiber connector

Specifications of 10/100M Series Converter

MODEL	1 、10/100M Series	2 、10/100M Series
STANDARD	IEEE802.3u 100BASE-T;	IEEE802.3u 100BASE-T;
	IEEE802.3 100BASE-SX	IEEE802.3 100BASE-LX
INTERFACE	RJ-45 part x 1 (10/ 100 Mbps) SC/SFP connector Fiber port x 1 (100 Mbps)	
TP CONNECTIONS	10/ 100BASE-T: UTP Category 5, 5E	
FIBER CONNECTIONS	100BASE-SX:62.5/ 125 μm or 50/ 125μm multi-mode fiber, SC/SFP connector	100BASE-LX:9 or 10/ 125μm Single-mode fiber, SC/SFP connector
LED INDICATIONS	POW , FPL , 10/100 , FDX , FRX , TRX	
MAX.DISTANCE	550m~2km	10km ~100km
ENVIRONMENT	Operating Temp:0~+70C Storage Temp: -40~+85C Humlblty:10~90% non-condensing	
POWER	5V 1000mA	
NET WELGHT	650 g/pair	

EMISSION	FCC Class A, CE

Typical Optical Power Budget

10/100M Series					
Connector	SC	SC	SC	SC	SC
Wavelength	850nm	1310nm	1310nm	1310nm	1550nm
Typical	550m/220m	20Km	40Km	60Km	80- 100Km
Optical power	≥- 12dBm	≥- 14dBm	≥- 11dBm	≥-6dBm	≥-5dBm
Sensitivity	≤-23dBm	≤-34dBm	≤-36dBm	≤-38dBm	≤-38dBm

Installation

As with any electric device, you should place the equipment where it will not be subject to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following

requirements:

Please follow the steps to install the media converter. This Converter is a plug-and-play device.

1. Turn off the power of the device/station in the network in which the media converter will be installed.

2. Ensure that there is no activity in the network.

3. Attach fiber cable from the media converter to the fiber network. The fiber connections must be Matched-Transmit socket to receive socket

4. Attach a UTP cable from the 100Base-Tx network to the RJ-45 port on the product

5. Connect the power cord to the media converter and check if the power LED light sup. The TRX Link and FRX link LED will light when all the cable connections are satisfactory.

6.Turn on the power of the device/station.