

# 10/100BASE-TX to 100BASE-FX Media Converter

User's Guide

Rev. 01 (JUN. 2002)

10071/1101/11/116003



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Rev. 01 (Jan. 2002) 6012-9600128 1907M110MM16001 Printed In Taiwan

### INTRODUCTION

Thank you for choosing the 10/100BASE Fast Ethernet Media Converter, The Converter introduced here provides one channel media conversion between 10/100BASE-TX and 100BASE-FX.

#### **About Media Converter**

The Media Converter is a network technology specified by IEEE 802.3 10BASE-T, IEEE802.3u 100BASE-TX, 100BASE-FX standards.

#### **Product Features**

- ✓ One-channel media conversion between 10/100BASE-TX and 100BASE-FX
- ✓ Fiber media allows: multi-mode fiber using SC, LC or MT-RJ connector; single-mode fiber using SC connector
- Auto negotiation of speed and duplex mode on TX port
- ✓ Auto MDI-X on TX port
- One slide switch for configuring fixed half/full duplex modes
- ✓ Store-and-forward mechanism
- ✓ Back-pressure & IEEE802.3x compliant flow control
- ✓ Full wire-speed forwarding rate
- ✓ Front panel status LEDs
- ✓ Used as a stand-alone device or with a chassis
- ✓ Hot-swappable when used with a chassis

## INSTALLATION

This chapter gives step-by-step installation instructions for the Converter.

Selecting a Site for the Equipment

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

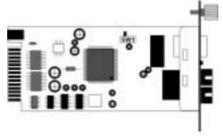
- 1. The ambient temperature should be between 32 and 104 degrees Fahrenheit (0 to 40 degrees Celsius).
- 2. The relative humidity should be less than 90 percent, non-condensing.
- 3. Surrounding electrical devices should not exceed the electromagnetic field (RFC) standards for IEC 801-3, Level 2 (3V/M) field strength.
- 4. Make sure that the equipment receives adequate ventilation. Do not block the ventilation holes on each side of the switch or the fan exhaust port on the side or rear of the equipment.
- 5. The power outlet should be within 1.8 meters of the switch.

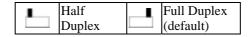
## Connecting to Power

- 1. This Converter is a plug-and-play device.
- 2. Connect the supplied AC to DC power adaptor with a power voltage of 7.5Vdc/1.5Amp to the receptacle on the rear panel of the converter, and then attach the plug into a standard AC outlet with a voltage range from 100 to 260 Vac.

#### Sliding Switch

There is a sliding switch for duplex mode setting for fiber port. Refer to the table below for more details.



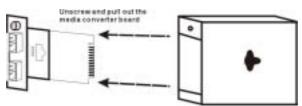


### **Connecting to Power**

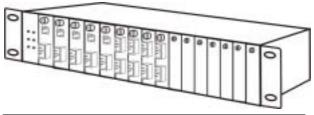
- 3. This Converter is a plug-and-play device.
- 4. Connect the supplied AC to DC power adaptor with a power voltage of 7.5Vdc/1.5Amp to the DC-Jack on the converter, and then attach the plug into a standard AC outlet.

### Installing in a Chassis

The Converter can be fit into any of the expansion slots on a special designed chassis.

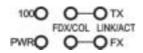


- First, install the converter onto a carrier supplied with the chassis:
- Step 1- Unscrew and pull out the media converter board.
- Step 2- Plug in the media board to any of the vacant slot.
- Step 3- Fit the converter onto the carrier and use the screw to secure it.



## **LED** Indicator

The LED indicators give you instant feedback on status of the converter:



LEDs	State	Indication	
Power (PWR)	Steady	Power on	
	Off	Power off	
100 Mbps	Steady	Runs at 100Mbps on TX port	
(100)	Off	Runs at 10Mbps on TX port	
TX Port (TX) FX Port (FX) FDX/COL	Steady (FDX)	Connection in full duplex mode	
		FDX stands for FULL-DUPLEX	
	Lights off	Connection in half duplex mode	
	Blinking (COL)	Data collision	
TX Port (TX) FX Port (FX) LINK/ACT	Steady	A valid network connection	
	(LINK)	established	
	Lights off	Not Linking	
	` ,	Transmitting or receiving data	
		ACT stands for Activity	

## **SPECIFICATIONS**

Applicable Standards	IEEE 802.3 10BASE-T
	IEEE802.3u 100BASE-TX & 100BASE-FX
Fixed Ports	1 TX port, 1 FX port
Speed	10/20Mbps for half/full-duplex
	100/200Mbps for half/full-duplex
Forwarding rate	148,800pps
LED Indicators	Per Unit- (2 LEDs): Power; Speed( 100 )
	Per Port- (2 LEDs): FDX/COL, LINK/ACT
Cable	10BASE-T –
	2-pair UTP Cat. 3,4,5, up to 100 m (328 ft)
	100BASE-TX
	2-pair UTP Cat. 5, up to 100 m (328 ft)
	100BASE-FX
	62.5/125um multi-mode fiber optic cable, up to 2 km
	10/125um single-mode fiber optic cable, up to 75 km
Dimensions	L120 × W88 × H25 mm
Weight	305 g
Power	External power adaptor 7.5V 1.5A
Power Consumption	7.2W Max.
Temperature	Operating:0°C ~ 40°C (32°F ~ 104°F)
	Storage: -25°C ~ 70°C (-13°F ~ 158°F)
Humidity	10 ~ 90%, non-condensing
Emissions	FCC part 15 Class B, CISPR ClassB, VCCI Class B, CE Mark