TFC-1000 Series

1000Base-T to 1000Base-SX/LX

Gigabit Ethernet

Media Converter

Quick Installation Guide

FCC Class B Certification

This equipment has been tested and found to comply with the regulations for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Class B Compliance (Japan)

注意
　この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準
に基づく第一種情報技術装置です。この装置を家庭環境で使用すると電波妨
害を引き起こすことがあります。この場合には使用者が適切な対策を講ずる
よう要求されることがあります。

Introduction

Thank you for choosing the 1000Base Gigabit Ethernet Media Converter, The Converter introduced here provides one channel media conversion between 1000BASE-TX and 1000BASE-FX.

About Media Converter

This Media Converter is a network technology specified by IEEE 802.3ab and IEEE 802.3z 1000BASE-TX/FX standards.

Product Features

- One-channel media conversion between 1000BASE-TX and 1000BASE-FX
- Fiber media allows: multimode fiber and singlemode fiber using SC connector
- Auto negotiation of duplex mode on TX port
- Auto-MDI for TX port
- Full wire-speed forwarding rate
- Front panel status LEDs
- Setup as a stand-alone device or with the optional 16-slot chassis
- Hot-swappable when used with the 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.
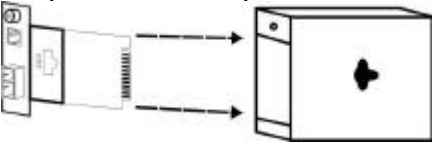
Connecting to Power
1.   This Converter is a plug-and-play device.
2.   Connect the supplied AC to DC power
     adaptor with a power voltage of
     7.5Vdc/1.5Amp to the DC-Jack on the
     converter, and then attach the plug into a
     standard AC outlet.

ATTENTION!

**The fiber port supports "full-duplex mode" only.
Please make sure the fiber connection to the media
converter's fiber port is manually set to 1000Mbps
Full-Duplex mode.**

Installing in a Chassis

The Converter can be fit into any of the expansion slots on optional 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 on the chassis.

Step 3- Fit the converter onto the carrier and tightens the screw to secure it.

LED Indicator

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

PWR◯ ◯LINK/ACT

LEDs	State	Indication
Power (PWR)	On (solid)	Power on
	off	Power off
LINK/ACT	On (solid) On (blinking)	Linked Activity
	off	Not Linked

Specifications

Standards:	IEEE802.3ab 1000BASE-TX
	IEEE802.3z 1000BASE-SX/LX
Data Transfer Rate:	1,488,000pps for 1000Mbps
Duplex Mode:	Full-Duplex
LED indicators:	PWR, LNK/ACT
Media Interface:	RJ-45, SC
EMI Compatiblity:	FCC Class B
	CE Certification, Class B
	VCCI Class B
Temperture:	Storage: -10℃ ~ 70℃
	Operating: 0℃ ~ 40℃
Humidity:	10% ~90% non-condensing
Power Consumption:	0.6 Watts (maximum)

Ordering Information

Please include the following information when ordering:
1. Fiber type: multi-mode or single-mode
2. Fiber connector type: SC, LC or MT-RJ
3. Segment distance range for the fiber port

TX port		
Connector Type	Cabling	Segment Distance
RJ-45	Copper Wire	Max. 100 m
FX port		
Connector Type	Cabling	Segment Distance
SC	Multi-Mode Fiber	Max. 550 m
SC	Single-Mode Fiber	Max. 10 km
SC	Single-Mode Fiber	Max. 20 km