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FCC Warning

The Fast Ethernet Switching Converter series converters 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 a commercial environment. These devices generate, use, and can radiate radio frequency energy and may cause harmful interference to radio communications unless installed in accordance with this User's Guide. Operation of these devices in a residential area is likely to cause harmful interference 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 interference in which case the user will need to consider adequate preventative methods.

1. Checklist

The Fast Ethernet Switching Converter carton should contain following items:

- Fast Ethernet Switching Converter
- AC-DC Power Adapter

Please notify your sales representative immediately if any items are missing or damaged.

2. Overview

Fast Ethernet Switching Converter is designed to meet the needs for massive optical fiber network deployment and able to extend a legacy copper based network via fiber cable to a maximum distance of up to 100KM.

Fast Ethernet Switching Converter is fully compliant with IEEE 802.3 & 802.3u standards; built-in Switching ASIC has turned Fast Ethernet Switching Converter function more like a 2 ports switch than a traditional converter. User can get all switching benefits such like traffic segmentation, frames checking & error filtering. In addition, Link Alarm allow user to monitor & maintain their critical fiber link more easily and effectively.

The installation & operation procedures of the Fast Ethernet Switching Converter are simple & straightforward. Operation status can be monitored through a set of Diagnostic LED located in the front panel.

FEATURES

- 10/100Base-TX to 100Base-FX converter
- Store & Forward switching mechanism
- Comply to IEEE 802.3, 802.3u
- MDI/MDIX Auto-Crossover supported
- Auto-Negotiation or Manual mode setting of Speed & Duplex mode
- LED Indication
 - Power, FDX,
 - TP 100, TP Link/Activity
 - FX 100, FX Link/Activity
- Fiber Link Alarm function

3. Installation

The installation procedure is simple and straightforward.

- Attach fiber cable from the Fast Ethernet Switching Converter to the fiber network.
- Attach UTP cable from the 10/100Base-TX network to the RJ-45 port on the Fast Ethernet Switching Converter.
- Connect the power adapter to the Fast Ethernet Switching Converter and check that the Power LED lights up. The TP Link and FX Link LED will light when all the cable connections are satisfactory.

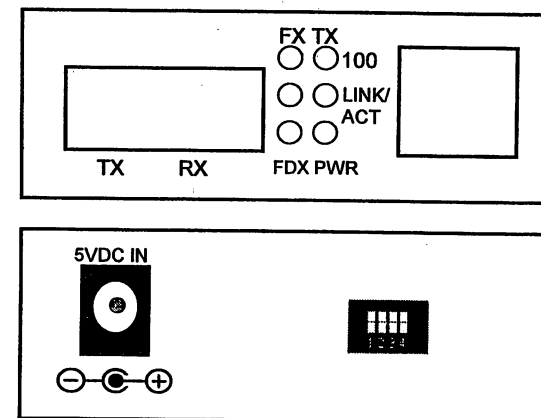


Fig. 1 Fast Ethernet Switching Converter Front & Rear Panel

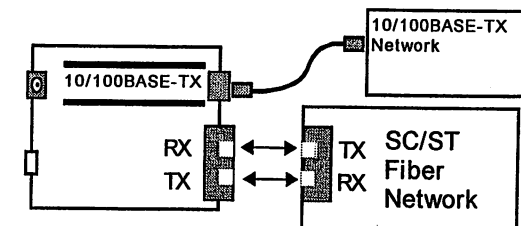


Fig. 2 Basic Network Connection

4. LED Description

LED	Color	Function
PWR	Green	Lit when power is available
FX 100	Green	Lit when FX port speed is 100M
FX Link/ACT	Green Blink	Lit when fiber link is up Blink when traffic present
FDX	Green	Lit when TP port Full Duplex Mode is enabled
TP 100	Green	Lit when TP port speed is 100M
TP Link/ACT	Green Blink	Lit when TP link is up Blink when traffic present

5. Technical Specifications

Standards	IEEE 802.3 & IEEE 802.3u
Switching Mechanism	Store & Forward
MAC table	1K Entries
Forward & Filter Rate (64 Bytes)	10Base-T 14,800 pps 100Base-TX 148,800 pps
LED	Power, FDX, TP 100, TP Link/Act, Fiber 100, Fiber Link/Act
Power	DC 5V, 1.6A
Power Consumption	5W
Weight	0.6 Kg
Dimensions	71mm x 97mm x 26mm(W x D x H)
Temperature	Operating: 0 ~ 50 °C Storage: -20 ~ 60 °C
Humidity	5% ~ 90% RH
Safety	UL, CSA
Emission	FCC/CE Class A
For further reports, please contact us for update	
UTP	Cat. 5 UTP cable
Fiber	50/125, 62.5/125, or 100/140 μ m multimode 8.3/125, 8.7/125, 9/125 or 10/125 μ m single-mode

6. Rear Panel DIP Switch

Pin 1 Off/On	TP Auto-negotiation	Enable/Disable
Pin 2 Off/On	TP Speed	100M/10M
Pin 3 Off/On	TP Duplex	Full / Half
Pin 4 Off/On	Link Alarm	Disable/Enable

Default set OFF from PIN 1 to PIN 4

Please perform Power On reset after modify the Dip Switch setting.

7. Link Alarm

Link Alarm allow user easily to identify and diagnose the linking status. If set Link Alarm switch to Enable, UTP and Fiber port can link up only when both linking conditions are good. In addition, if any of the fiber or UTP port link down during operation, the other port will also turn down link to alert the user. Turn Link Alarm switch to Enable provide user transparent link indication between two network devices interconnected by Fast Ethernet Switching Converter .

If disable the Link Alarm. The UTP and fiber port will link up base on their individual linking condition. Further, if fiber port link down during operation, it will not turn down the UTP port link and vice versa.

Operating Mode

This converter can support switch mode and pure converter mode which bases on

Switch Mode

- A. Link Alarm Disable
- B. Link Alarm Enable and TP port link to 10Mbps

Pure Converter Mode

Link Alarm Enable and TP port Link to 100Mbps and Full Duplex

Notice

When Link Alarm Enable please make sure TP working In Full Duplex

Optolinx
CVT-100BTFT

Fast Ethernet Switching Converter

User's Guide

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