Trademarks

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Copyright Statement

FCC Warning

The CVT-3002-PLUS-DR 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 package should contain the following items:

- CVT-3002-PLUS-DR Media Converter
- AC-DC Power Adapter
- User's Guide

Please notify your sales representative immediately if any item is missing or damaged.

2. Overview

CVT-3002-PLUS-DR is designed to meet the massive needs for Gigabit network deployment and able to extend a copper based Gigabit network via fiber cable. It is fully compliant with IEEE 802.3, 802.3u, 802.3ab, 802.3z, and 802.3x standards. It can be installed into a CVT Converter RACK. The installation and operation procedures are simple and straightforward. Operation status can be locally monitored through a set of Diagnostic LED indicators located in the front panel.

Major Features:

- TP and Fiber Auto-Negotiation
- MDI/MDIX Auto-Crossover
- Flow Control and Back Pressure
- 9K bytes Jumbo Frame
- Store and Forward switching mechanism
- 2K MAC address
- Link Alarm
- 100/1000Mbps dual rate fiber uplink

3. Installation

❶	Attach fiber cable from the CVT-3002-PLUS-DR to the fiber network. The fiber connections must be matched – transmit socket to receive socket.
❷	Attach a UTP cable from the 10/100/1000Base-T network to the RJ-45 port on the CVT-3002-PLUS-DR.
❸	Connect the power adapter to the CVT-3002-PLUS-DR and check that the Power LED lights up. The TX Link/Act and F/O Link/Act LEDs will light up when all the cable connections are satisfactory.

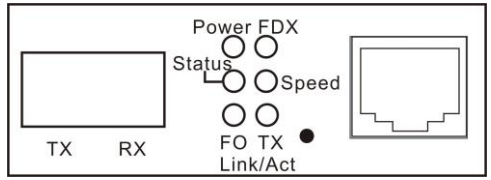

Figure 1. CVT-3002-PLUS-DR Dual Fiber Front Panel

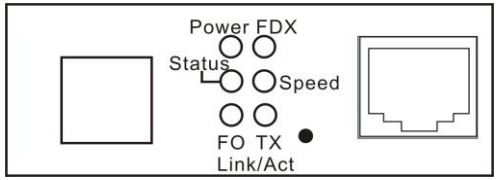

Figure 2. CVT-3002-PLUS-DR WDM & SFP Front Panel

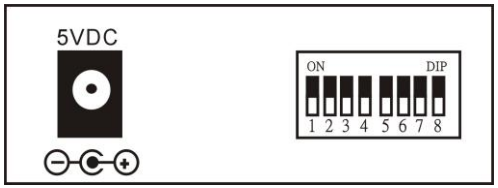

Figure 3. CVT-3002-PLUS-DR Converter Rear Panel

4. DIP SWITCH Setting

The default setting for PIN 1 and 6 is ON. The rest pins are OFF.

Pin NO.	Function	OFF	ON
1	TP Auto-Negotiation	Disable	Enable
2	Manual TP speed	10M	100M
3	Manual TP speed	N/A	1000M
4	Duplex mode	Half	Full
5	Flow Control	Disable	Enable
6	F/O mode	Force	Auto
7	Link Alarm	Disable	Enable
8	Reserved	-	-

NOTE:

❶ Before adjusting the configuration of the DIP Switch, the power should be unplugged.
❷ Before changing TP speed and duplex mode setting, please make sure PIN 1 is set to OFF.
❸ When TP speed is set to 10M or 100M manually, PIN 3 needs to be turned OFF.
❹ Under 1000Mbps, it supports full-duplex mode only.

5. LED Description

LED	Color	Function
Power	Green	Power is available.
TX Link/Act	Green	TX cable connection with remote device is good.
	Blinking	TX traffic is present.
FO Link/Act	Green	F/O works in 100M.
	Orange	F/O works in 1000M.
	Blinking	F/O traffic is present.
FDX	OFF	TX works in Half-Duplex.
	Green	TX works in Full-Duplex.
Speed	OFF	TX works in 10M.
	Green	TX works in 100M.
	Orange	TX works in 1000M.
Status	Green	TX and F/O link is up.
	Orange	TX or F/O link is down.

6. Technical Specifications

Standards	IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x	
Interface	1 X 10/100/1000 RJ-45 connector 1 X 100/1000 F/O port or SFP Slot	
LED	Power, FDX, Status, Speed, FO Link/ACT, TX Link/ACT	
Power	I/P AC 100-240V O/P DC 5V	
Power Consumption	1.5W	
Weight	0.2kg	
Dimensions	71mm(W)X94mm(D)X26mm(H)	
Temperature	Operating: 0º~50ºC Storage: -20º~60ºC	
Humidity	5%~90% RH non-condensing	
Certification	FCC/CE Class A	
Media	TP:	EIA/TIA-568 CAT 5e, 1000M
	Fiber:	50/125 or 62.5/125μm multi-mode 9/125 or 10/125μm single-mode
***** Please contact us for further reports and updates.		

NOTE: Specifications may change without prior notice.

7. Fiber Transceiver Information

Dual Rate

2 Wave-Length WDM

TYPE	W2A(SM-10)	W2B(SM-10)
Connector Type	SC	SC
Wavelength	1310/1550nm	1550/1310nm
Typical Distance	10 Km	10 Km
Min TX PWR	-10.0dBm	-10.0dBm
Max TX PWR	-3.0dBm	-3.0dBm
Sensitivity	-20.0dBm	-20.0dBm
Link Budget	10.0dB	10.0dB

1000M

Single-Mode

TYPE	BTFC(SM-10)
Connector Type	SC
Wavelength	1310nm
Typical Distance	10 Km
Min TX PWR	-9.5dBm
Max TX PWR	-3.0dBm
Sensitivity	-20.0dBm
Link Budget	10.5dB

NOTE: Specifications may be changed without prior notice.

Contact Information

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CONNECTION TECHNOLOGY SYSTEMS

CVT-3002-PLUS-DR SERIES

10/100/1000Base-T to 100/1000Base-X Standalone Gigabit Media Converter

User's Guide

Version 2.2