

## Trademarks

CTS is a registered trademark of Connection Technology Systems Inc. Contents subject to revision without prior notice.

All other trademarks remain the property of their owners.

## Copyright Statement

Copyright © Connection Technology Systems Inc.

This publication may not be reproduced as a whole or in part, in any way whatsoever unless prior consent has been obtained from Connection Technology Systems Inc.

## FCC Warning

The CVT-2512 Series 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 that 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.



This is a lead-free and RoHS-compliant product.

## 1. Checklist

The carton should contain the following items:

- CVT-2512 Converter
- AC-DC Power Adapter
- CD (User's guide & MIB file)

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

## 2. Overview

CVT-2512 Series are designed to meet the increasing needs for Fast Ethernet network deployment and are able to extend a copper-based network via fiber cable to a maximum distance up to 80KM.

CVT-2512 Series are fully compliant with IEEE 802.3 and 802.3u 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.

### Features

- 10/100Base-TX to 100BASE-FX Converter
- Standard: IEEE 802.3 and 802.3u
- Interface: 1 x RJ-45 LAN connector  
1 x SC connector or 1 x SFP Slot  
1 x Diag Button
- Store and Forward Switching Mechanism
- Auto-Negotiation in TX port
- MDI/MDIX Auto-Crossover supported
- LED: Power, FDX, Status, Speed, FO Link/Act, TX Link/Act
- Support Flow Control
- Support Link Alarm
- Support Jumbo Frame 9K bytes (Only in TX 100Full)
- Support Selectable ISP Ethernet Tag Type
- Q-in-Q Double Tag configuration by Console Management
- Support DHCP Client
- Support SNMP / Web Managed interface
- Support SNMP v1 and v2c
- Support HTTP Firmware Upgrade
- Support Power Down Trap Management

## 3. Installation

- Attach fiber cable from the CVT-2512 to the fiber network. The fiber connections must be matched – transmit socket to receive socket.
- Attach a UTP cable from the 10/100BASE-TX network to the RJ-45 port on the CVT-2512.
- Connect the power adapter to the CVT-2512 and check whether the Power LED indicator lights up. The TX Link/Act and FO Link/Act LED indicator will light up when all the cable connections are satisfactory.

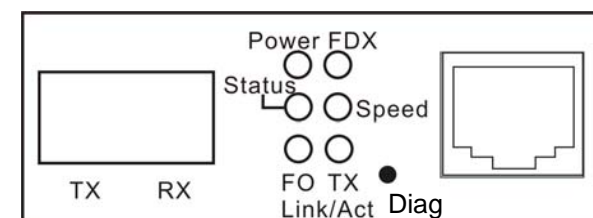


Figure 1. CVT-2512 Dual-Fiber Front Panel

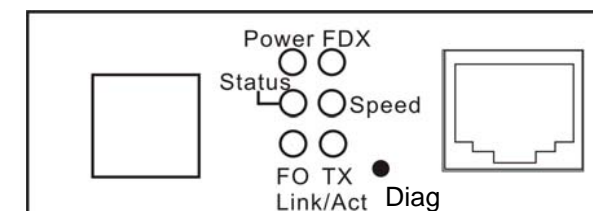


Figure 2. CVT-2512 Single-Fiber & SFP Front Panel



Figure 3. CVT-2512 Series Rear Panel

## 4. LED Description

LED	Color	Function
Power	Green	Lit when power is available.
TX/Link Act	Green	Lit when TX cable connection with the remote device is good. Blink when TP traffic is present.
	Orange	Blink when Fiber or Copper link is down in Link Alarm enabled mode.
FO/Link Act	Green	Lit when Fiber cable connection with the remote device is good. Blink when FO traffic is present.
	Orange	Blink when Fiber or Copper link is down in Link Alarm enabled mode.
FDX	Green	Lit when TP works in Full-Duplex. Not-Lit when TP works in Half-Duplex.
Speed	Green	Lit when TP works in 100M. Not-Lit when TP works in 10M or is not linked.
Status	Green	Lit when TP and FO link is up. Blink when Loopback test is performed.
	Orange	Lit when TP or FO link is down. Blink when diagnostic testing is failed.

## 5. Technical Specifications

Standards:	IEEE 802.3, 802.3u
Interface:	1 x RJ-45 LAN connector 1 x SC connector or SFP Slot 1 x Diag button
Operation LED:	Power, FDX, Status, Speed, FO/Link Act, TX/Link Act
Power:	I/P AC 100-240V O/P DC 5V, 1.6A
Power Consumption:	3W
Shipping Weight:	0.6KG
Dimensions:	71mm(W)X94mm(D)X26mm(H)
Temperature:	Operating: 0~50 °C Storage: -20~60 °C
Humidity:	5%~90% RH
Emission:	Electrical: UL, CSA EMI: FCC Class A, CE

\*Please contact us for further reports and updates.

Media:	
TP	EIA/TIA-568 CAT 5e, 100M
Fiber	50/125, 62.5/125um multi-mode fiber 9/125, 10/125um single-mode fiber

## 6. DIP SWITCH Setting

The factory default setting for PIN 1 is ON. The rest of Pins are OFF.

Pin NO. & Button	Function	OFF	ON
1	TX Auto-Negotiation	Disable	Enable
2	Manual TX Data Rate 10M/100M	10M	100M
3	Reserve	Always OFF	
4	Flow Control	Disable	Enable
5	Reserve	Always OFF	
6	Reserve	Always OFF	
7	Link Alarm	Disable	Enable
8	TP Configuration	From S/W	From DIP
Diag button	Press once for Loopback test. Press for 10 seconds to restore factory default setting.		

**Note:** Before changing Data Rate and Duplex mode setting, please make sure Auto-Negotiation is disabled.

## Ordering Information

### Multi-mode

CVT-2512BTFC:	SC/1310nm/2Km
CVT-2512BTFT:	ST/1310nm/2Km

### Single-mode

CVT-2512BTFC(SM-30):	SC/1310nm/30Km
CVT-2512BTFC(SM-50):	SC/1310nm/50Km
CVT-2512BTFC(SM-80):	SC/1310nm/80Km
CVT-2512BTFC(SM-100):	SC/1550nm/100Km

### Wave-Length WDM

CVT-2512W2A(SM-20/40):	SC/TX-1310nm, RX-1550nm/20Km, 40Km
CVT-2512W2B(SM-10/20/40):	SC/TX-1550nm, RX-1310nm/20Km, 40Km

### SFP

CVT-2512SFP:	With 100Mbps SFP Slot
--------------	-----------------------

# CVT – 2512 Series

## 10/100Base-TX to 100Base-FX OAM Management Converter

## User's Guide

V 0.91