

## Trademarks

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## FCC Warning

The CVT-5002SFP-MG media converter has 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. Overview

Thank you for purchasing CTS CVT-5002SFP-MG Media Converter. In this user's guide, "Media Converter" will be used as an alternative name for the CVT-5002SFP-MG.

### Major Features:

- TP Auto-Negotiation
- MDI/MDIX Auto-Crossover
- 16K Bytes Jumbo Frame
- Store and Forward switching mechanism
- 4K MAC address
- Link Alarm
- Data-diode
- Flow Control \*

\* Automatically enabled when the F/O port operates at 10G, and the copper port operates at 5G, 2.5G, 1G or 100M.

## 2. Checklist

The items listed below should be included in the package:

- Media Converter
- AC-DC Power Adapter
- Quick Guide

Please contact your sales representative for assistance immediately if any item is missing or damaged.

## 3. Installation

❶	Set the DIP switch according to section four.
❷	Insert the SFP/SFP+ transceiver into the SFP/SFP+ slot.
❸	Attach fiber cable from the media converter to the fiber network. The fiber connector must be matched – <u>transmit socket to receive socket.</u>
❹	Attach a UTP cable from the 10G/5G/2.5G/1G/100M BASE-T network to the RJ-45 port on the media converter.
❺	Connect the power source to the media converter and check that the Power LED lights up. The TP Link/Act/Speed and F/O Link/Act/Speed LEDs will light up when all the cables are properly connected.

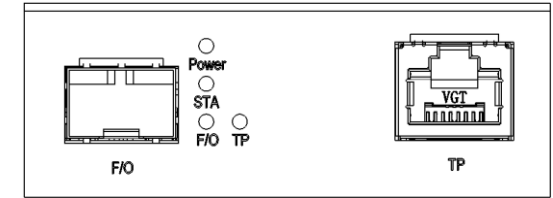


Figure 1. Front Panel of Media converter

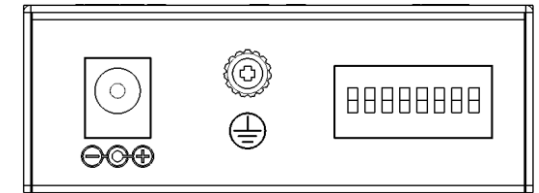


Figure 2. Rear Panel of Media converter

## 4. DIP SWITCH Setting

The default setting for PIN 1 through PIN 3 are ON, PIN 4 through PIN 8 are OFF.

Pin NO.	Function	OFF / Down	ON / Up
1	Maximum RJ-45 Speed	Up to 2.5Gbps	Up to 10Gbps
2	Fiber Mode	Force	Auto
3	Fiber Speed	1Gbps	10Gbps
4	Reserve	-	-
5	Link Alarm	Disabled	Enabled
6	Data-diode	Disabled	Enabled
7	Data-diode Direction	Block TP to fiber port direction	Block fiber to TP port direction
8	Reserve	-	-

### NOTE:

- ❶ Please power off the device first when you change DIP switch.
- ❷ Pin 3 can only be activated when Pin 2 is in the OFF position.
- ❸ Pin 7 can only be activated when Pin 6 is in the ON position.
- ❹ Pin 7 can determine the blocking direction of Data-diode when Pin 6 is in the ON position.

## 5. LED Description

LED	Color	Function
Power	Green	Power is available.
TP Link/Act /Speed	Off	No link is established.
	Orange	<b>Lights up</b> when a 1Gbps/100Mbps link is established. <b>Blinks</b> when 1Gbps/100Mbps TP traffic is present.
	Blue	<b>Lights up</b> when a 10/5/2.5Gbps link is established. <b>Blinks</b> when 10/5/2.5Gbps TP traffic is present.
F/O Link/Act /Speed	Off	No link is established.
	Orange	<b>Lights up</b> when a 1Gbps link is established. <b>Blinks</b> when 1Gbps F/O traffic is present
	Blue	<b>Lights up</b> when a 10Gbps link is established. <b>Blinks</b> when 10Gbps F/O traffic is present.
Status	Orange	TP or F/O link is not established.
	Green	Both TP and F/O link are established.

## 6. Technical Specifications

<b>Standards</b>	IEEE 802.3u, 802.3ab, 802.3z, 802.3bz, 802.3an, 802.3ae, 802.3x	
<b>Interface</b>	1 x 10/1GBase-X SFP+ 1 x 10G/5G/2.5G/1G/100MBase-T RJ-45	
<b>LED</b>	Power, Status, TP Link/Act/Speed, F/O Link/Act/Speed,	
<b>Power Input (Main Body)</b>	12VDC	
<b>Power Adapter</b>	I/P 100-240VAC O/P 12VDC, 1A	
<b>Max. Power Consumption</b>	6.4 watts (21.8 BTU/hr) **	
<b>Weight</b>	210g	
<b>Dimensions</b>	71mm(W)x94mm(D)x26mm(H)	
<b>Temperature</b>	Operating: 0°~50°C Storage: -20°~60°C	
<b>Humidity</b>	5%~90% RH, Non-Condensing	
<b>Certification</b>	CE/FCC Class A	
<b>Media</b>	TP:	EIA/TIA-568 CAT 5e @ 100M, 1G, 2.5G CAT 6A @ 5G, 10G
	Fiber:	50/125 or 62.5/125 $\mu$ m multi-mode 9/125 or 10/125 $\mu$ m single-mode
* Please contact us for further reports and updates. ** The wattage of power consumption will differ based on the fiber transceivers.		

**NOTE:** Specifications may change without prior notice.



## CVT-5002SFP-MG

**10/1GBase-X SFP+ to  
10G/5G/2.5G/1G/100MBase-T RJ-45  
Standalone Media Converter**

**User's Guide**

**Version 1.1**

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