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FCC Warning

The SRC-5002SFP-MG-BT 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 SRC-5002SFP-MG-BT PoE Media Converter. In this user's guide, "Media Converter" will be used as an alternative name for SRC-5002SFP-MG-BT.

Major Features:

- TP Auto-Negotiation
- MDI/MDIX Auto-Crossover
- 16K bytes Jumbo Frame
- Store and Forward switching mechanism
- 4K MAC address
- Link Alarm
- Alarm (Digital Output)
- Flow Control *
- Up to 60 watts PoE output
- PSE Auto Power Off

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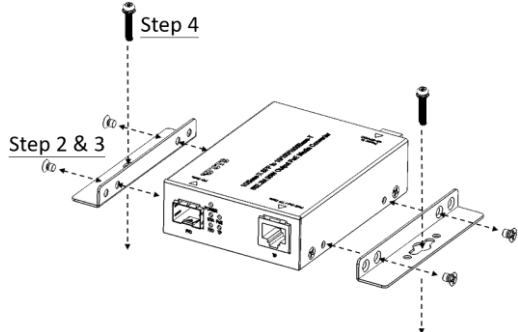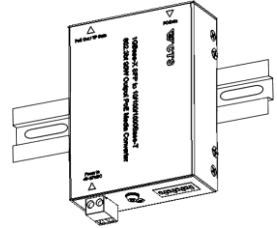
2. Checklist

The items listed below should be included in the package:

- Media Converter
- User's Guide
- 1 x Din-rail bracket (already locked on the media converter)
- 1 x Wall mounting kit

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	The picture guide below is for flat installation. Follow the picture guide to install the media converter flatly by wall mounting or Din-rail. *The following images use the SRC-3002SFP as an example.
	(1) Wall mounting -Step 1: Remove Din-rail bracket -Step 2: Remove 4 screws from housing -Step 3: Re-install 4 screws with wall mounting kit -Step 4: Mount the media converter on the wall

| ❸	(2) Din-rail **NOTE**: Besides the flat installation, we also provide accessories for slim installation, please contact our sales if needed.
❹	Attach fiber cable from the media converter to the fiber network. The fiber connector must be matched – <u>transmit socket to receive socket</u>.
❺	Attach a UTP cable from the 100M/1G/2.5G/5G/10G BASE-T network to the RJ-45 port on the media converter.
❻	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. Note: The wire gauge for the terminal block should be 18 AWG or above.
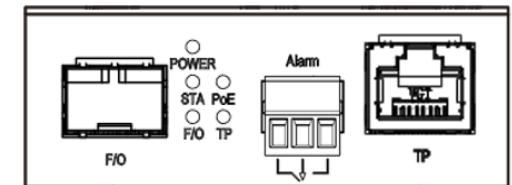
Figure 1. Front Panel of Media converter
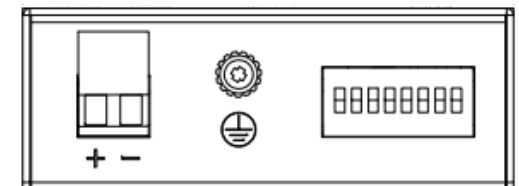
Figure 2. Rear Panel of Media converter

4. DIP SWITCH Setting

The default setting for all PIN is ON.

Pin NO.	Function	OFF / Down	ON / Up
1	Maximum RJ-45 Speed	Up to 2.5Gbps	Up to 10Gbps
2	F/O Mode	Force	Auto
3	Fiber Speed	1Gbps	10Gbps
4	Reserve	-	-
5	Link Alarm	Enabled	Disabled
6	F/O Fault Alarm	Enabled	Disabled
7	TP Fault Alarm	Enabled	Disabled
8	PSE Auto Power Off (PAPO)	Enabled	Disabled

NOTE:
❶ Please power off the device first when you change DIP switch.
❷ Pin 2 can only be activated when Pin 3 is in the OFF position (1Gbps).
❸ If Pin 6 or 7 is set to off (enabled), an alarm will be triggered when the corresponding port has no connection.
❹ Pin 8 can only be activated when Pin 5 is in the OFF position. The PAPO function only works as Link Alarm function is enabled.

5. LED Description

| LED	Color	Function
Power	Green	Power is available.
Status	Green	Both TP and F/O link are established.
	Orange	TP or F/O link is not established.
TP Link/Act /Speed	Off	No link is established.
	Orange	**Lights up** when a 1Gbps/100Mbps link is established.
		Blinks when 1Gbps/100Mbps TP traffic is present.
	Blue	**Lights up** when a 10/5/2.5Gbps link is established.
		Blinks when 10/5/2.5Gbps TP traffic is present.
F/O Link/Act /Speed	Off	No link is established.
	Orange	**Lights up** when a 1Gbps link is established.
		Blinks when 1Gbps F/O traffic is present
	Blue	**Lights up** when a 10Gbps link is established.
		Blinks when 10Gbps F/O traffic is present.
PoE	Off	The port is not delivering PoE.
	Green	The port is delivering PoE to the remote PD.
	Blinking	The PoE function encounters issues, such as: the input voltage is too low or too high; the PoE PD output is short-circuited, or the current is exceeding 2A.

6. Technical Specifications

Standards	IEEE 802.3u, 802.3ab, 802.3z, 802.3bz, 802.3an, 802.3ae, 802.3x, 802.3af, 802.3at, 802.3bt	
Interface	1 x 10/1G SFP+ Slot 1 x 10G/5G/2.5G/1G/100M RJ-45 connector with 802.3af/at/bt PoE injector	
LED	Power, Status, TP Link/Act/Speed, F/O Link/Act/Speed, PoE	
Power Input	48~57 VDC	
Power Consumption (Full-load)	Device: < 108 watts (368.5 BTU/hr)	
Weight	270 g	
Dimensions	71 x 94 x 26mm (W x D x H)	
Temperature	Operating: -20˚C~60˚C Storage: -30˚C~70˚C	
Humidity	5%~90% RH, Non-Condensing	
Certification	CE/FCC Class A	
Media	TP:	EIA/TIA-568 CAT 5e @ 100M, 1G, 2.5G CAT 6A @ 5G, 10G
	Fiber:	50/125 or 62.5/125μm multi-mode 9/125 or 10/125μm single-mode

NOTE: Specifications may change without prior notice. Please contact us for further reports and updates.

7. Alarm Relay Configuration

The 3-pin terminal block (alarm/digital output) located on the front panel is used to connect alarm devices.

❶	Set the DIP switch PIN 6 and 7 according to section four.	
❷	Please refer to the image on the right and the instructions below to connect the wires to the terminal block based on the required normal status for your connected device. - **Normally Closed**: Connect to the left and the middle holes. - **Normally Open**: Connect to the right and the middle holes.	Alarm
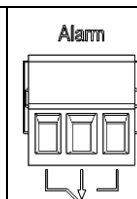
NOTE: Relay output capacity is 1A @ 24VDC

Contact Information

CTS
CONNECTION TECHNOLOGY SYSTEMS

SRC-5002SFP-MG-BT

10/1GBase-X SFP+ to 10/5/2.5/1G/100M Base-T RJ-45 with IEEE 802.3af/at/bt PoE Injector Rugged Media Converter

User's Guide

Version 1.1