



SRC-3002SFP

1 x 100/1000Base-X SFP to
1 x 10/100/1000Base-T RJ-45
Rugged Media Converter

Description

Connection Technology System (CTS) SRC-3002SFP stands out as a robust media converter, designed to operate efficiently within a broad temperature range spanning from -40 to 75°C. Its functionality extends to converting 100/1000Base-X SFP to a 10/100/1000Base-T RJ-45 port, ensuring full compliance with IEEE 802.3, 802.3u, 802.3ab, and 802.3z standards.

In addition to its rugged capabilities, the SRC-3002SFP, despite being an unmanaged media converter, offers users intuitive configurability and monitoring options. This is facilitated through the DIP switch and LED indicator on its panel. The DIP switch empowers users to control various functions, including Link Alarm, Data-diode, and more.

These user-friendly attributes contribute to the SRC-3002SFP's versatility, transforming it into not just a straightforward product but a comprehensive solution for diverse needs.

Key Features

■ A prime selection for settings with significant temperature variance

The SRC-3002SFP distinguishes itself from other media converters by offering an expanded temperature range. Capable of functioning between -40 and 75°C, it excels in adapting to environments with varying temperature conditions.

■ Instantly grasp when link issue occur

To address the constraint wherein unmanaged devices lack the capability to transmit messages to the central server, CTS has introduced the Link Alarm function. This feature promptly notifies network managers of issues as they arise.

■ Assurance for Cyber Security: Data Diode

A data diode integrated into this model guarantees unidirectional data flow, allowing data packets to travel in only one direction. This prevents any possibility of data leakage or unauthorized access by blocking reverse communication channels, thus securing sensitive information and critical systems. Additionally, users can customize the direction of data transfer to meet their specific needs.

■ Lighter weight and better cooling capability

CTS opted for aluminum as a component of the case in the SRC-3002SFP series, enhancing heat dissipation capabilities and reducing overall weight compared to an all-iron construction.

■ Targeted Applications

- FTTX Metro Ethernet Implementations.

Specification

■ Interface

RJ-45 Port

- 1 x 10/100/1000Base-T RJ-45

Fiber Port

- 1 x 100/1000Base-X SFP

Standards

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3u 100Base-FX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X

■ H/W Specification

- MAC Address Table: 2K
- Non-blocking Switching Fabric: 4Gbps
- Throughput @ 64Bytes: 2.9Mpps
- Jumbo Frame: 9K Bytes
- Packet Buffer: 1Mbit
- Store and Forward Switching Mechanism
- Auto-Cross over for MDI/MDI-X in TP port
- Auto-Negotiation in TP Port
- Full/Half Duplex Mode Operation

■ Forward/Filter Rate

- 10M: 14,880/14880pps
- 100M: 148,800/148,800pps
- 1000M: 1,488,000/1,488,000pps

■ LED

- Power, Status,
- TP Link/Act/Speed, F/O Link/Act/Speed

■ DIP Switch

- Manual/Auto for TP Auto-Negotiation
- TP speed 100/1000Mbps
- Force/Auto Mode for F/O
- F/O speed 100/1000Mbps
- Enable/Disable Link Alarm
- Enable/Disable Data-diode
- Data-diode Direction
 - block Fiber to RJ-45 direction
 - block RJ-45 to Fiber direction

■ Installation Method

- Flat type DIN-rail kit
- Flat type wall-mount kit
- Magnetic-mount kit (optional)
- Slim type DIN-rail kit (optional)
- Slim type wall-mount kit (optional)

■ Power Requirement

- Power Input: 12~57 VDC
(2-pin removable terminal block or DC jack)
- Max. Power Consumption: 2.45W (8.36 BTU/h)

■ Environmental Condition

- Operation: -40°C~75°C
- Storage: -40°C~85°C
- Humidity: 5%~95% RH, Non-Condensing

■ Dimension & Weight

- Size: 71 x 94 x 26mm (W x D x H)
- Weight: 190g
- Housing: Aluminum(Upper), Iron(Bottom), IP30

■ Standards and Certifications

CE/FCC Class A

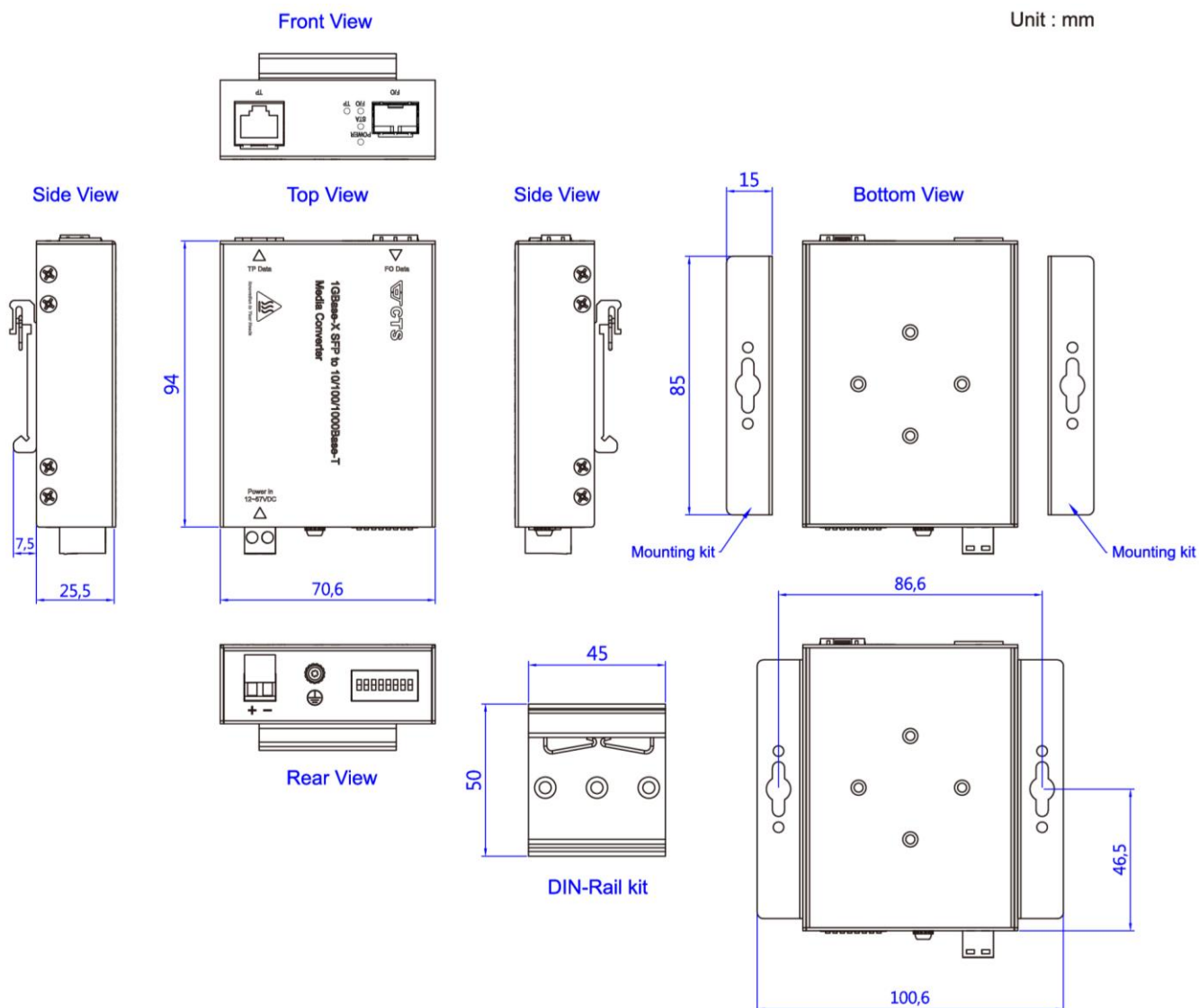
- Safety: EN/IEC 62368-1
- EMC: EN 55032 / EN 55035
- ESD
 - Air Discharge: +/-8kV
 - Contact Discharge: +/-4kV
- EFT
 - DC input: +/-0.5kV
 - Signal (RJ-45): +/-0.5kV
- Surge Protection
 - DC input: +/-3kV
 - Signal (RJ-45): +/-3kV

UKCA/RCM

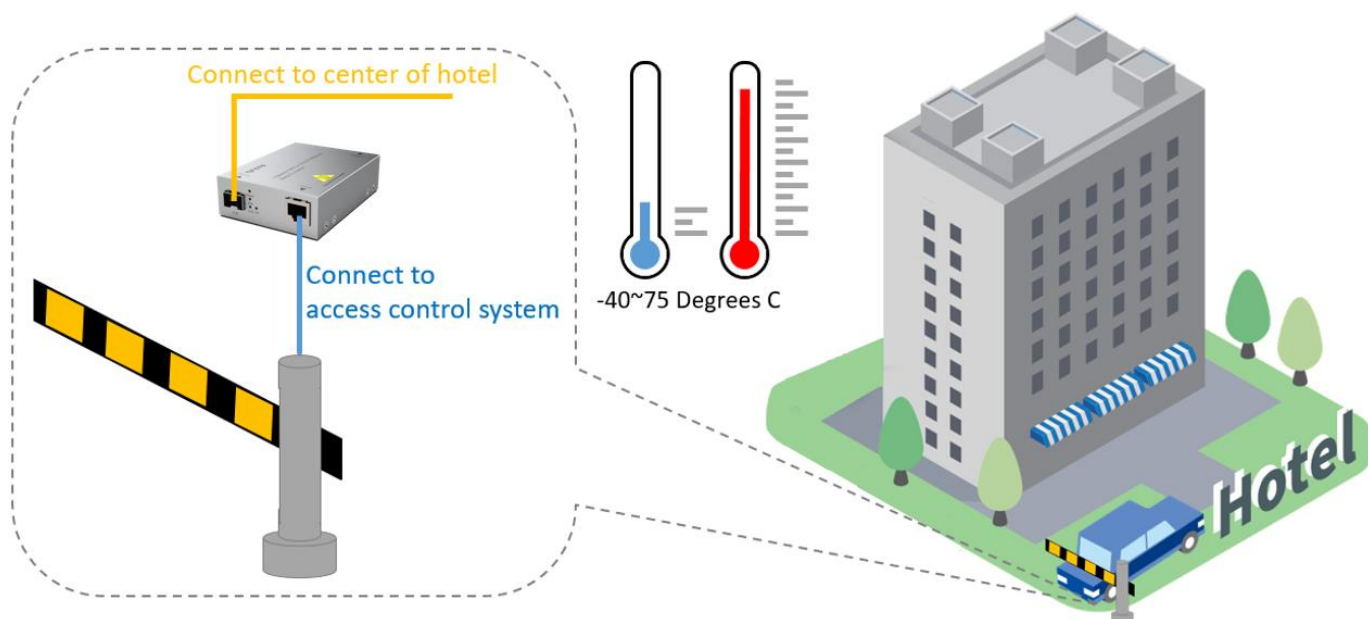
RoHS 2.0

Dimension

Unit : mm



Application Diagram



Order Information

Model	Fiber Slot			TP Port		Support Power Source
	Speed(Mbps)	Type	Slot	Speed(Mbps)	Port	
SRC-3002SFP	100/1000	SFP	1	10/100/1000	1	1 x 12~57V DC with 2-pin removable terminal block
SRC-3002SFP(DC Jack)	100/1000	SFP	1	10/100/1000	1	1 x 12~57V DC

Note: An adapter/power supply is not included in the SRC-3002SFP series package.

Accessory

SFP-31-D

Model	Specification					
	Speed	Type	Connector	Distance	Wavelength	Operating Temperature
SFP-31FC-D	1000Mbps	MM	LC	550M	850nm	-40°C ~ 85°C
SFP-31FC-(MM-02)-D	1000Mbps	MM	LC	2KM	1310nm	-40°C ~ 85°C
SFP-31FC(SM-10/20)-D	1000Mbps	SM	LC	10/20KM	1310/1310nm	-40°C ~ 85°C
SFP-31W2A(SM-10/20)-D	1000Mbps	WDM	LC	10/20KM	TX: 1310/1310nm	-40°C ~ 85°C
					RX: 1550/1550nm	
SFP-31W2B(SM-10/20)-D	1000Mbps	WDM	LC	10/20KM	TX: 1550/1550nm	-40°C ~ 85°C
					RX: 1310/1310nm	

Slim Type Installation

Model	Mounting Method	Support Model
SRC/CVT Slim Wall Mount Kit	Slim type wall mounting	SRC/CVT Series Media Converter
SRC/CVT Slim Wall+DIN Rail Kit	Slim type wall mounting & DIN-rail	SRC/CVT Series Media Converter

Accessory

Power Supply

Model	Output Voltage Range	Maximum Output Watt	Operating Temperature
SDR-480-48	48~55V	480W	-25°C ~ 70°C
SDR-240-48	48~55V	240W	-25°C ~ 70°C
SDR-120-48	48~55V	120W	-25°C ~ 70°C
SDR-75-48	48~55V	75W	-25°C ~ 70°C
NDR-480-48	48~55V	480W	-20°C ~ 70°C
NDR-240-48	48~55V	240W	-20°C ~ 70°C
NDR-120-48	48~55V	120W	-20°C ~ 70°C
NDR-75-48	48~55V	75W	-20°C ~ 70°C
MDR-60-48	48~56V	60W	-20°C ~ 70°C
MDR-20-12	10.8~13.2V	20W	-20°C ~ 70°C

NOTE: Please refer to the power supply datasheet for details regarding the operating temperature and derating curve. Subsequently, choose the suitable power supply based on your specific requirements and operating environment.

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