

## SRC-3002SFP

$1 \times 100 / 1000$ Base-X SFP to
$1 \times 10 / 100 / 1000$ Base-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 $75^{\circ} \mathrm{C}$. 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.

## 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 $75^{\circ} \mathrm{C}$, 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.

- Send or Receive, Send-\&-Receive : Data-diode When security concerns prompt the need to limit connections between the local and remote sides, the Data Diode function is the solution. Customers can configure this function for single or bi-directional transmission, customizing the direction according to their requirements.
- 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.


## Target Applications

- FTTX Metro Ethernet Implementations.


## Specification

- Interface
$-1 \times 100 / 1000$ Base-X SFP Slot
$-1 \times 10 / 100 / 1000$ Base-T RJ-45
- 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: 14,880/14,880pps
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
-DC Input: 12~57V
(2-pin removable terminal block or DC jack)
-Max. Power Consumption: 2.45W (8.36 BTU/h)
- Environmental Condition
-Operation: $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$
-Storage: $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C}$
-Humidity: 5\%~95\% RH, Non-Condensing
- Dimension \& Weight

Size: $71 \times 94 \times 26 \mathrm{~mm}(\mathrm{~W} \times \mathrm{D} \times \mathrm{H})$
Weight: 190 g
Housing: Aluminum(Upper), Iron(Bottom), IP30

- EMC/Safety

FCC Class A, CE
ESD

- Air Discharge: +/-8kV
- Contact Discharge: +/-4kV

EFT

- DC Input: +/-0.5kV

Surge Protection: +/-3kV

Dimension


## Application Diagram



Order Information

| Model | Fiber Slot |  |  | TP Port |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Speed <br> (Mbps) | Type | Slot | Speed <br> (Mbps) | Port | Support Power Source |

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

## Accessory

SFP-31-D

| Model | Specification |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Speed <br> (Mbps) | Type | Connector | Distance | Wavelength | Operating <br> Temperature |  |
| SFP-31FC-D | 1000 | MM | LC | 550 M | 850 nm | $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C}$ |  |
| SFP-31FC(MM-02)-D | 1000 | MM | LC | 2 KM | 1310 nm | $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C}$ |  |
| SFP-31FC(SM-10/20)-D | 1000 | SM | LC | $10 / 20 \mathrm{KM}$ | $1310 / 1310 \mathrm{~nm}$ | $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C}$ |  |
| SFP-31W2A(SM-10/20)-D | 1000 | WDM | LC | $10 / 20 \mathrm{KM}$ | TX: $1310 / 1310 \mathrm{~nm}$ |  |  |
| SFP-31W2B(SM-10/20)-D | 1000 | WDM | LC | $10 / 20 \mathrm{KM}$ | TX: $1550 / 1550 \mathrm{~nm}$ |  |  |

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 |

Power Supply

| Model | Output Voltage Range | Maximum Output Watt | Operating Temperature |
| :---: | :---: | :---: | :---: |
| SDR-480-48 | $48 \sim 55 \mathrm{~V}$ | 480 W | $-25^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| SDR-240-48 | $48 \sim 55 \mathrm{~V}$ | 240 W | $-25^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| SDR-120-48 | $48 \sim 55 \mathrm{~V}$ | 120 W | $-25^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| SDR-75-48 | $48 \sim 55 \mathrm{~V}$ | 75 W | $-25^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| NDR-480-48 | $48 \sim 55 \mathrm{~V}$ | -280 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| NDR-240-48 | $48 \sim 55 \mathrm{~V}$ | 240 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| NDR-120-48 | $48 \sim 55 \mathrm{~V}$ | 120 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| NDR-75-48 | $48 \sim 55 \mathrm{~V}$ | 75 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| MDR-60-48 | $48 \sim 56 \mathrm{~V}$ | 60 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |
| MDR-20-12 | $10.8 \sim 13.2 \mathrm{~V}$ | 20 W | $-20^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ |

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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