

#### 4-Channel RS-485 to TCP/IP Server



- 4\*10/100BASE-T(X) RJ45 ports, support Auto-Negotiation technology, and duplex mode (half duplex/ full duplex), MDI/MDI-X Adaptive;
- 4\*RS-485 ports, 110~115200bps line speed non-blocking communication;
- $0\sim2*100$ Base optical port;
- Support 4 serial isolation function, isolated voltage 500V AC;
- Serial port communicate on Ethernet, support TCP Server, TCP Client, UDP mode:
- High strength IP40 shell and industrial-grade EMC design;
- Support 12~48VDC power input;
- Support DIN-Rail Mounting and Wall Mounting supported;
- $\blacksquare$  Operating temperature range: -40~85  $^{\circ}\mathrm{C}$  , suitable for industrial environment applications.

## Product Overview

The 4-channel RS-485 serial server adopts high-strength IP40 protective casing, industrial-grade EMC design, support Auto-Negotiation Adaptive Technology, provide a comprehensive LED status indicator, support voltage 12~48V DC power input to increase the reliability of the communication network. Provide 4\*10/100Base-T (x) RJ45 port ,4-channel RS-485 serial port and 0~2\*100Base optical port, can disperse the serial equipment, the host and so on through the network simple, convenient centralized management, the communication rate support 110~115200bps optional. Based on industrial installation requirements, the installation mode of DIN35 guideway is provided. This product adopts the industry's excellent network program, -40~85 °C working temperature range, can satisfy all kinds of industrial site requirements, provide convenient serial port communication solutions.

## Features

- Conform to IEEE802.3/802.3u standard, store and forward Exchange Mode;
- Provide 0~2\*100Base optical port;
- Provide 4\*10/100Base-T (x) RJ45 Ethernet interface, support Auto-Negotiation technology, automatic negotiation work rate (10M/100M) and duplex mode (half duplex/ full duplex), MDI/MDI-X Adaptive;
- Provide 4 channel RS-485 serial port, provide TCP server, TCP client, UDP three serial transmission mode, 110~115200bps line speed non-blocking communication;
- Support 4 serial isolation function, isolated voltage 500V AC;

- Conforms to TCP, IP, UDP, ARP, ICMP, HTTP, and TFTP client protocols;
- Support Web management;
- Support serial port settings, can be connected through the network two serial devices for serial data transmission;
- Supports gateway, cross-routing communication;
- low-power consumption design;
- Metal housing with IP40 and high level EMC protection
- Support wide range voltage 12~48V DC power input and over-current protection function;
- Work in -40~85 °C wide temperature.



### **Specification**

#### **Technical Standard**

Protocol: IEEE802.3,IEEE802.3u

#### **Interfaces**

- RJ45 port: 10/100BASE-T(X) auto-Negotiation speed, auto duplex mode and MDI/MDI-X connection;
- Optical port: 100Base-FX full duplex, SC interface by default, optional FC, ST, furthest to travel 120 km; single fiber wavelength: wavelength for A machine to send
- single-mode 1310nm, receive single mode 1550nm, wavelength for B machine send single-mode 1550nm, receive single mode 1310nm;
- Serial port: RS-485 supports A and B half-duplex working mode,communication rate support 110~115200bps optional, isolated voltage 500V AC.

#### **Exchange Property**

Ten trillion forwarding speed: 14881pps;



- Fast forwarding speed: 148810pps;
- Transmission way: store-and-forward;
- Switching bandwidth: 1.2Gbps;
- Buffer memory size:1Mbits;
- MAC address table:1K.

#### **Serial Port Attribute**

- Standard: RS-485;
- RS-485 signal: D+, D-, GND;
- Check digit: None, Even, ODD;
- Data bits: 5bit, 6bit, 7bit, 8bit;
- Stop bit: 1bit, 2bit;
- Baud rate: 110~115200bps;
- Directional control: RS-485 adopts data flow control technology;
- Load capacity: RS-485 side supports 32 point polling environment (customizable 128 points);
- Interface form: RS-485 and adopts 5-bit 5.08mm spacing terminal:
- Interface protection: 4000V surge protection.

#### **Indicator Lamp**

Power indicator: PWR;

- System running indicator: SYS;
- Fiber indicator: FX;
- Serial port data status indicator: COM.

#### **Power Supply**

- Input: The redundant wide DC power input 12~48VDC (12V/24V/48V typical) with 4-bit 7.62mm industrial power terminal:
- No-load Consumption: < 3.12W (@24VDC);
- Full-load Consumption: < 3.84W (@24VDC).

#### **Mechanical Properties**

- Dimension(W×H×D): 60.2mm×138.5mm×109mm;
- Net weight: 600g;
- Housing: Metal, IP40 protection;
- Installation: Wall mounting or DIN rail mounting.

#### **Operating Environment**

- Working temperature:-40°C~85°C;
- Storage temperature:  $-40^{\circ}$ C ~  $85^{\circ}$ C;
- Relative humidity: 5% ~ 95% (no condensing).

#### Warranty

Warranty: 5 years.

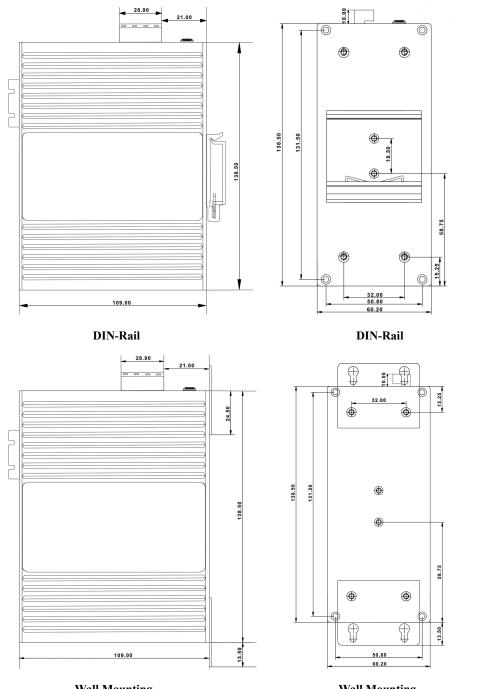
## **Standards and Certifications**

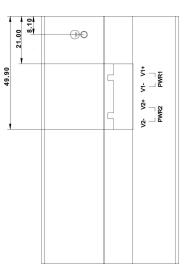
- IEC61000-4-2(ESD):±8KV Contact, ±15KV Air
- IEC61000-4-3(RS):10V/M(80-1000MHZ)
- IEC61000-4-4(EFT):Power ±4KV, Ethernet&Serial Data Cable ±2KV
- IEC61000-4-5(Surge):Power ±4KV CM/ ±2KV DM, Ethernet&Serial Data Cable±4KV CM
- IEC61000-4-6(CS):3V (10KHZ-150KHZ), 10V

- (150KHZ-80MHZ)
- IEC61000-4-16(MS):30V COUNT 300V, 1S
- IEC60068-2-6(Vibration)
- IEC60068-2-27(Shock)
- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standard)



# Dimensions(mm)





Wall Mounting

Wall Mounting





Model	Description
SE5044	4-channel RS-485 serial port server,4*10/100Base-T(X) RJ45 port, 4-channel RS-485 serial port,-40°C~85°C.
SE5144	4-channel RS-485 serial port server,4*10/100Base-T(X) RJ45 port,1*100Base optical port, 4-channel RS-485 serial port,-40°C~85°C.
SE5244	4-channel RS-485 serial port server,4*10/100Base-T(X) RJ45 port,2*100Base optical port, 4-channel RS-485 serial port,-40°C~85°C.

# Package List

- 4-channel RS-485 to TCP/IP Server
- Product Manual
- Product Warranty