3onedata
Reliable Connections




# SW4485I

## DIN-Rail Mounting

## 4-port RS-485 HUB with Isolation

- Support 1 RS-232/485 upper computer port, and 4 RS-485 lower computer port
- Each lower computer port can connect to 32 standard RS-485 devices(nodes)
- Support cascading of multiple SW4485I, up to 256 RS-485 buses
- Automatic serial port signal rate detection, support 300bps~115200bps serial port baud rate, zero-delay conversion
- Serial port provides 15kV electrostatic protection and 2kVAC isolation protection
- Unique automatic detection and alarm of RS-485 signal reverse connection

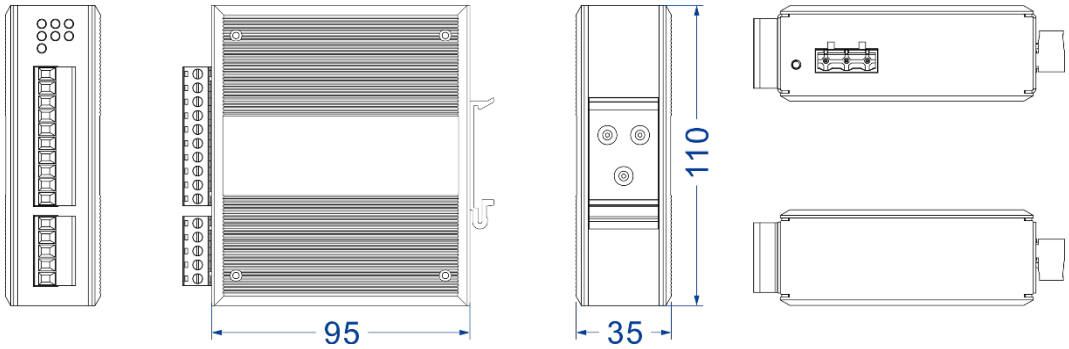
# Introduction

SW4485I is a RS-485 bus split HUB designed for addressing RS-485 large scale system needs in complex electromagnetic field. It supports up to 115.2kbps transmission rate and adopts bidirectional transparent transmission that could split 1 RS-485 bus into 4 RS-485 buses or transparently transmit any RS-485 signal to the RS-485 bus or RS-232 of the upper computer. Each RS-485 port of this product's lower computer is equipped with reverse connection fault alarm and protection function, which has improved the reliability of current RS-485 network remarkably and shortened the time of maintaining network effectively. In order to ensure the safety and reliability of data communication, RS-485 ports of this product are all provided with 2kVAC isolation voltage protection, level-4 electrostatic protection and level-2 radiated immunity protection which could prevent lightning strike, electrostatic and radiated interference. It's safe and reliable, and appropriate for outdoor engineering application.

SW4485I also provides RS-485 bus star connection. User could easily improve RS-485 bus structure and split network segment. Reasonable utilization of SW485I enables you to design a unique and reliable RS-485 system. SW4485I adopts EMC protection and supports Din-Rail mounting and -40℃~75℃ wide operating temperature range, which can meet the requirement of different scenes.

# Dimension

Unit:mm




# Specification

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|---|---|
| Serial Port | Standard: EIA RS-232C, RS-485<br>Serial port quantity: upper computer port, 1 RS-232/485 serial port;<br>lower computer port, 4 RS-485 serial ports<br>RS-232 signal: TXD, RXD, GND |

| | |
|---|---|
| | RS-485 signal: D+, D-, GND<br>Baud rate: 300bps~115200bps<br>Data bit: 5bit, 6bit, 7bit, 8bit<br>Stop bit: 1bit, 1.5bit, 2bit<br>Check bit: None, Odd, Even, Mask, Space<br>Interface form: upper computer port (RS-232/485), adopts 5-pin 5.08mm pitch terminal blocks; lower computer port(RS-485), adopts 10-pin 5.08mm pitch terminal blocks<br>Transmission distance: RS-232 serial port, 15m; RS-485 serial port, 1200m<br>Direction control: RS-485 adopts automatic data flow control technology, which could detect and control the direction of data flow<br>Load capacity: RS-485 supports 32-point polling environment<br>Interface protection: 15kV electrostatic protection, 2kVAC isolation protection |
| LED Indicator | Power Supply Indicator, serial port data sending/receiving indicator, lower computer serial port indicator |
| Power Requirement | 12~48VDC, 3-pin 7.62mm pitch terminal blocks;<br>Power supply supports non-polarity |
| Power Consumption | No-load: 0.696W@24VDC<br>Full-load: 0.696W@24VDC |
| Environmental Limit | Operating temperature: -40~75℃<br>Storage temperature: -40~85℃<br>Relative humidity: 5%~95% (no condensation) |
| Physical Characteristic | Housing: metal, IP40 protection<br>Installation: DIN-Rail mounting<br>Dimension (W x H x D): 35mm×110mm×95mm<br>weight: 384.8g |
| Industrial Standard | IEC 61000-4-2 (ESD, electrostatic discharge), Level 4<br>● Air discharge: ±15kV<br>● Contact discharge: ±8kV<br><br>IEC 61000-4-3 (RS, radiofrequency electromagnetic radiated immunity), Level 2<br>● Test level: 3V/m<br>● Frequency range: 80MHz-1GHz |

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|---|---|
| | Shock: IEC 60068-2-27<br>Free fall: IEC 60068-2-32<br>Vibration: IEC 60068-2-6 |
| Certification | CE, FCC, RoHS |
| Warranty | 3 years |

# Ordering Information

| Available Models | RS-232/485 (upper computer) | RS-485 (lower computer) | Power Supply |
|---|---|---|---|
| SW4485I | 1 | 4 | 12~48VDC |

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