**Features**

- Support two host computer RS-232 and RS-485 ports and four slave computer RS-485 ports
- Support transmission rate 300~115200bps
- Support multiple SW4485I-P(12/48VDC) cascade connection as many as 256-way RS-485 bus
- Each slave computer port can connect 32 standard RS-485 devices (nodes)
- Special automatic reverse connection alarm
- Zero-delay automatic send/receive conversion function
- Port is provided with 2KVAC isolation protection, Level-4 electrostatic protection and level-2 radiated susceptibility
- Industrial design, IP40 protection
- Support DIN-rail installation
- Working temperature -40~85°C

**Introduction**

SW4485I-P(12/48VDC) is RS-485 HUB is designed for RS-485 system in complicated electromagnetic environment. It supports a transmission rate up to 115.2KBPS, and adopts two-way transparent transmission, which allows one RS-485 bus or one RS-232 bus to be divided into 4 RS-485 buses, or any divided RS-485 signal to be transparently transmitted to host computer RS-485 or RS-232 hub. Each RS-485 port of slave computer is provided with reverse connection alarm and protection function, with which the reliability of existing RS-485 network is greatly improved, effectively reducing the network maintenance time. To ensure the security and reliability of data communication, the RS-485 ports are provided with 2KVAC isolation protection, level-4 electrostatic protection and level-2 radiated susceptibility, effectively preventing surge current, common ground and radiated interference, making the hub safe and reliable and suitable for outdoor application.

SW4485I-P(12/48VDC) also comes with RS-485 bus star connection. Users can easily improve RS-485 bus structure and divide the network segment. Proper utilization of SW4485I-P(12/48VDC) can help design a unique and reliable RS-485 system. SW4485I-P(12/48VDC) adopts EMC protection and supports DIN-rail installation, allowing it to be used reliably in severe environment at a temperature of -40°C~85°C.

**Dimension**

Unit: mm
Specification

**Communication Parameters**

- Interface Protocol: compliant with EIA RS-232/485
- Serial port number: 1 host computer RS-232 port, 1 host computer RS-485 port, 4 slave computer RS-485 ports
- RS-232 signal: TxD, RxD, GND
- RS-485 signal: D+, D-, GND
- Parity bit: None, Even, Odd, Space, Mark
- Data bit: 5bit, 6bit, 7bit, 8bit
- Stop bit: 1bit, 1.5bit, 2bit
- Baud rate: 300bps~115200bps
- Direction control: RS-485 adopts ADDC technology
- Transmission media: CAT.5E shielded twisted pair or dedicated line for RS-485
- Load capacity: support 32 nodes (customizable to 128 nodes) polling
- Port protection: 2KVAC isolation protection, level-4 electrostatic protection, level-2 radiated susceptibility

**Transmission distance:** RS-485 1200m, RS-232 is less than 15m

**Connector**

- Host computer RS-232/485: 5PIN terminal blocks
- Slave computer RS-485: 10PIN terminal blocks

**Indicator**

- PWR: power indicator
- TXD: data sending status indicator
- RXD: data receiving status indicator
- E1–E4: slave computer RS-485 port status indicator

**Power**

- Input voltage: 12-48VDC
- No-load power: 0.696W@24VDC
- Full-load power: 0.696W@24VDC

**Mechanical structure**

- Shell: IP40 protection, high-strength metal shell
- Installation: DIN-rail installation
Weight: 384.8g

Dimension (L*W*H): 110mm*95mm*35mm

**Working environment**

Working temperature: -40~85 °C
Storage temperature: -40~85 °C
Humidity: 5%~95% (no condensation)

**Industry standard**

EMI: FCC Part 15, CISPR (EN55022) class A
EMS: EN61000-4-2 (ESD), Level 4

EN61000-4-3 (RS), Level 2
Shock: IEC 60068-2-27
Free fall: IEC 60068-2-32
Vibration test: IEC 60068-2-6
Warranty period: 5 years

**Certification:**

CE, FCC, RoHS, UL508 (pending)

For latest information on product certification, please visit 3onedata website.