#### > > RS232/RS485/422 Converters

# SW44851

# Industrial Isolation RS-232/485 to 4 port RS485

# **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)
- O 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
- O Industrial design, IP40 protection
- O Support DIN-rail installation
- $\odot$  Working temperature -40 $\sim$ 85 $^{\circ}$ C











## Introduction

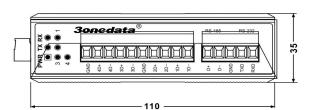
SW4485I-P(12/48VDC) is RS-485 HUB is designed for RS-485 system in complicated electromagnetic environment. It supports a transmission rate up to 115.2KBPS, and adopts two-way transparent transmission, which allows one RS-485 bus or one RS-232 bus to be divided into 4 RS-485 buses, or any divided RS-485 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

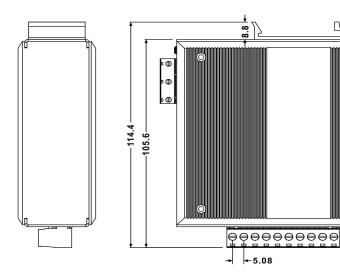
provided with 2KVAC isolation protection, level-4 electrostatic protection and level-2 radiated susceptibility, effectively preventing surge current, common ground and radiated interference, making the hub safe and reliable and suitable for outdoor application.

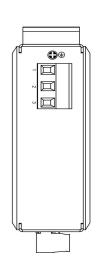
SW4485I-P(12/48VDC) also comes with RS-485 bus star connection. Users can easily improve RS-485 bus structure and divide the network segment. Proper utilization of SW4485I-P(12/48VDC) can help design a unique and reliable RS-485 system. SW4485I-P(12/48VDC) adopts EMC protection and supports DIN-rail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

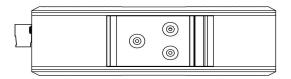
#### Dimension

Unit: mm









# **Specification**

#### **Communication Parameters**

Interface Protocol: compliant with EIARS-232/48 5

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

0000

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

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Weight: 384.8g

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

Working environment

Working temperature: -40 $\sim$ 85  $^{\circ}$ C

Storage temperature: -40~85℃

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.