

# IT-SC4485I-PSW

Industrial Isolation RS-232/485 to 4 port RS-485 HUB

## Features

1. Support two host computer RS-232 and RS-485 ports and four slave computer RS-485 ports
2. Support transmission rate 300~115200bps
3. Support multiple IT-SC4485I-PSW (12/48VDC) cascade connection as many as 256-way RS-485 bus
4. Each slave computer port can connect 32 standard RS-485 devices (nodes)
5. Special automatic reverse connection alarm
6. Zero-delay automatic send/receive conversion function
7. Port is provided with 2KVAC isolation protection, Level-4 electrostatic protection and level-2 radiated susceptibility
8. Industrial design, IP40 protection
9. Support DIN-rail installation
10. Working temperature -40~75°C



## Introduction

IT-SC4485I-PSW (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.

IT-SC4485I-PSW (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 IT-SC4485I-PSW (12/48VDC) can help design a unique and reliable RS-485 system. IT-SC4485I-PSW (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~75°C.

## 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: Host computer serial port data sending status indicator

RXD: Host computer serial port data receiving status indicator

1~4: Slave computer RS-485 port status indicator

**Power**

Input voltage: 12-48VDC

Load power: 0.7W@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: -40~75°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

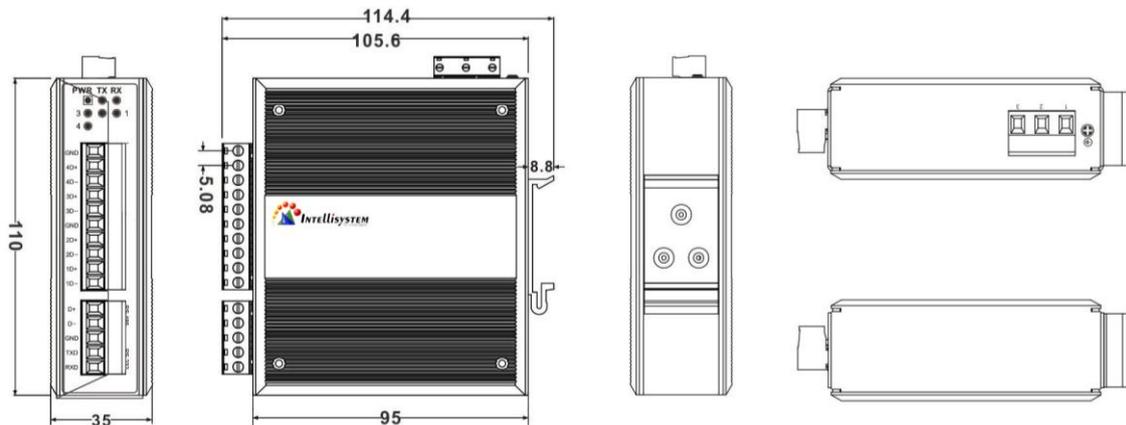
Vibration test : IEC 60068-2-6

Warranty period : 3 years

**Certification :**

CE, FCC, RoHS, UL508 (pending)

**For latest information on product certification, please visit Intellisystem website.**

**Dimension**
**Unit (mm)**

**Packing List**

1. IT-SC4485I-PSW (12~48VDC) (plus terminal block) ×1
2. User manual × 1
3. Certificate of quality × 1
4. Warranty card × 1