

IT-SC485-SW

Port-powered RS-232 to RS-485/422 Converter

Features

1. Plug-and-Play, small volume, easy installation
2. Port-powered, high efficiency obtain electricity, can also worked on 3 lines
3. RS-232 to RS-485 or RS-232 to RS-422
4. Lowest consumption
5. Automatic send data control, auto distinguish and sense direction adopt data transfer
6. Auto sense serial signal rate, zero delay automatic transmit



Introduction

The IT-SC485C-SW is an industrial grade bi-directional port-powered RS232 to RS485 or RS422 converter in a 9 pin format. It can convert any standard full duplex RS232C port to any two-wire balanced half duplex RS485 port or four-wire balanced full duplex RS485 or RS422 port. In simple terms, it will convert any RS232 signal to a RS485 or RS422 signal and vice versa. The unit is powered from the RS232 data lines. It also supports data direction

auto-turnaround. Therefore, no external power or flow control is required. The data direction auto-turnaround automatically enables the RS485/RS422 driver when data is present on the RS232 side making the device plug-and-play, requiring no software drivers. The IT-SC485C-SW has a DB9 female connector on the RS232 side and either a DB9 male connector or 5 bit terminal block on the RS485/RS422 side.

Specification

Standards: EIA RS-232C, RS-485, RS-422 standard

RS-232 signal: TX, RX, GND

RS-422 signal: T+, T-, R+, R-, GND

RS-485 signal: D+, D-, GND

Working mode: Asynchronism, point to point or multi point, 2 wire half-duplex, 4 wire full duplex

Baud rate: 300~115200bps, auto test serial signal rate detect signal speed automatically, zero delay time

Flow control: Data direction auto-turnaround, no flow control is required

Transfer distance: RS-485/422 side: 1.2Km, 115200bps

RS-232 side: no less than 5m

Max number of drops: 128 nodes

Optical isolation: 2500V

Port protect: 1500W surge protection, 15KV ESD protection

Connector: RS-232 side DB9 female

RS-485/422 side DB9M(DB9F to 5 bit terminal block)

Power

Power input: No power supply need, powered from TXD, RTS, DTR

Consumption: Static less than 10mA, dynamic less than 40mA

Environment

Operating temperature: -40°C to 80°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95%(no condensation)

Appearance

Dimensions: 95.0mm×33.0mm×16.5mm

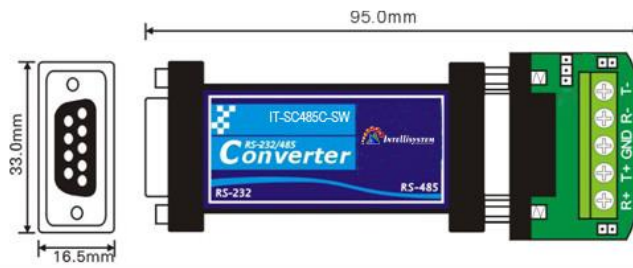
Material: Plastic(shell)

Weight: 50g

Warranty: 3 years

Approvals: FCC, CE, RoHS approvals

Dimension



Applications

1. RS232 to RS485 mode option:

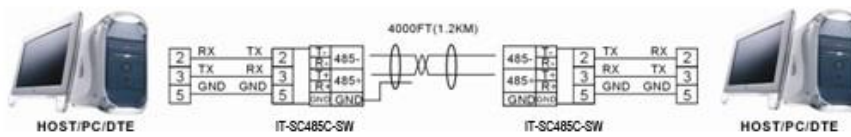


Figure 1: Extending the RS232 data distance in RS485 mode

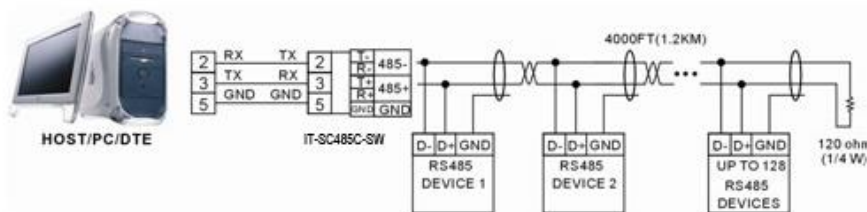


Figure 2: Master/Slave multi-drop configuration in RS485 mode

2. RS232 to RS422 mode option:

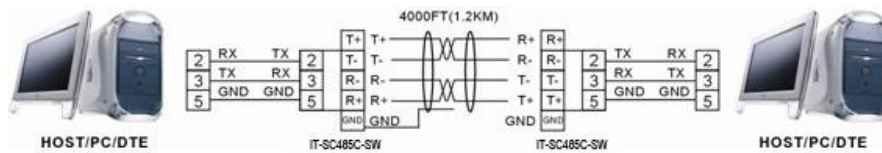


Figure 3: Extending the RS232 data distance in RS422 mode

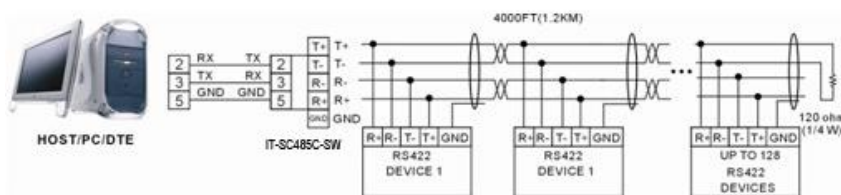


Figure 4: Master/Slave multi-drop configuration in RS422 mode

Packing List

1. IT-SC485C-SW×1
2. Separate terminal block(DB9F to 5 bit) ×1
3. User manual ×1

