

# IT-SC485-TLC-25

## Port-powered RS-232 to RS-422 Converter

### Features

1. Port-powered from RS232 port (TXD, RTS, DTR): no external power is necessary
2. Convert RS-232(TXD, RXD signal) to RS-485 signal
3. Plug-and-Play (hot-pluggable, Data format Auto-sensing & Self-adjusting)
4. Data direction auto-turnaround, no flow control is required
5. Point to multi point, support 128 nodes loopback



### Introduction

The IT-SC485-TLC-25 is a bi-directional port-powered RS232 to RS485 converter. It can convert any standard full duplex RS232C port to any two-wire balanced half-duplex RS485 port. In simple terms, it will convert any RS232 signal to a RS485 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 driver when data is present on the RS232 side making the device plug-and-play, requiring no software drivers.

### Specification

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

RS-232 signal: TX, RX, GND

RS-422 signal: D+, D-, GND

Working mode: Asynchronism, point to point, 4 wire full-duplex

Transfer 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

Max number of drops: 128 nodes

Transfer distance: RS-485 side: 1.2Km

RS-232 side: no less than 5m

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

Connector: RS-232 side DB25 female

RS-485 side DB25M

#### Power

Power input: No power supply need, powered from RS-232 port TXD, RTS, DTR

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

#### Environment

Operating temperature: -10°C to 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95% (no condensation)

#### Appearance

Dimensions: 65.0mm×55.0mm×16.5mm (DB25)

Material: Plastic (shell)

Weight: 40g

**Warranty: 3 years**

**Approvals: FCC, CE, RoHS approvals**

### Packing List

- 1 IT-SC485-TLC-25×1
2. User manual ×1

