Datasheet

TLC485

Port-powered RS-232 to RS-485 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 TLC485 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-485 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 DB9 female

RS-485 side DB9M(DB9F to 3 bit terminal block)

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

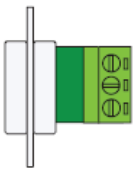
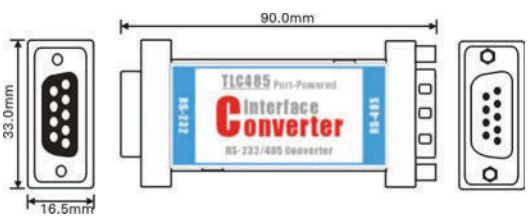
Dimensions: 90.0mm×33.0mm×16.5mm(DB9)

Material: Plastic (shell)

Weight: 40g

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

Packing List

1. TLC485 ×1
2. Separate terminal block(DB9F to 3 bit) ×1
3. User manual ×1