TRP-C08
USB to RS232/422/485 Isolated Converter

Introduction

The TRP-C08 allows you to connect your serial devices to systems by using a USB interface. With auto configuration in data format, baud rate and RS-485 data flow direction control. TRP-C08 is able to automatically configure RS-232, RS-422 or RS-485 signals to baud rate without external switch setting. TRP-C08 is equipped with 3000V DC of isolation and internal surge-protection on each data lines to protect the host computer and converter against high voltage spikes, as well as ground potential difference. TRP-C08 also features a high-speed 256 Kb/s transmission rate, and supports various O.S. The industry DIN rail and panel mounting design enable user a fast and professional installation.
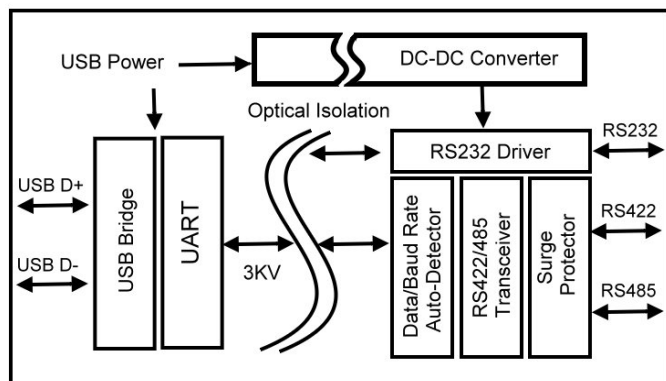
Features

■Full compliance with the USB V1.0 and 2.0 specification.
■System gets 1 COM port when the converter is connected.
■Auto data format detecting.
■Auto direction flow control on RS-485.
■Programmable baud rate from 75 bps to 6 Mbps.
■RS232/422/485 Support 3KV isolation
■256 byte buffer for upstream and downstream data flow.
■Direct power from USB port , no external power necessary.
■3000V DC isolated protection.
■Surge protection on RS422/485 data lines.
■Power/TX/RX mode LED indicator.
■DIN rail or panel mount support.
■Driver support: Android/ WIN10/8/8.1/798/ME/2000/XP/CE3.0, and Linux, and Mac OS.

Specifications

■USB interface: Fully compliant with V1.0, 2.0 specification.
■USB to serial bridge controller; Prolific PL2303TA(Version:2.1).
■RS-232 signal: 5 full-duplex (TXD, RXD, CTS, RTS, GND).
■RS-422 signal: Differential 4 full-duplex wires (TX+, RX+, TX-, RX-).
■RS-485 signal: Differential 2 half-duplex wires (D+, D-).
■Data Format: Asynchronous data with all common combination of bits, parity, stop.
■Parity type: None, odd, even mark, space.
■Data bit: 5, 6, 7, 8 or 16.
■Stop bits: 1, 1.5, 2.
■Cable: USB type A to type B.
■Communication speed: 75~6M bps.
■RS-422/485 line protection: Against surge, short circuit, and voltage peak.
■Transmission distance: RS-422/485 Up to 4000ft (1200M).
■Connection type: Screw terminal accepts AWG #12~30 wires.
■Signal LED: Power on, TX, RX.
■Direct power from USB port.
■Power consumption: 1.2W.
■Isolation voltage: 3000V DC.
■Operating environment: -10 to 50℃ .
■Storage temperature: -20 to 70℃ .
■Humidity: 10-90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
■Weight: 375g .

Block Diagram

Application Note