



# TRP-C08S USB to 1 RS232 and 1 RS422/485 Isolated Converter

## Specifications

- Input: USB 2.0.
- Output: RS232 signal: Standard 9 pin DTE full-duplex.
- RS422 signal: Differential 4 full-duplex wires (TX+, RX+, TX-, RX-)
- RS485 signal: Differential 2 half-duplex wires (D+, D-).
- Optical Isolation: RS422/485 3KV.
- Data Format: Asynchronous data with any combination of bits, parity, stop
- Parity type: None, odd, even mark, space.
- Data bit: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2.
- Flow Control: Xon/Xoff, Hardware, None
- Cable: USB 2.0 type A to type B cable.
- Communication speed: 75~256Kbps.
- RS422/485 line protection: Against surge, short circuit, +/- 15KV ESD and voltage peak.
- RS232 line protection: +/- 15KV ESD.
- Distance: RS422/485 Up to 4000ft (1250M).
- Connection type: Screw terminal for maximum AWG #12~30 wire.
- Din-Rail mountable: Option.
- Power consumption: 130mA by USB power.
- RS422/485 Optical Isolation: 3000V DC.
- Operating environment: -10 to 50°C.
- Storage temperature: -20 to 65°C.
- Dimension: 151mm X 111mm X 26mm.
- Weight: 375g.
- Humidity: 10-90% non-condensing.

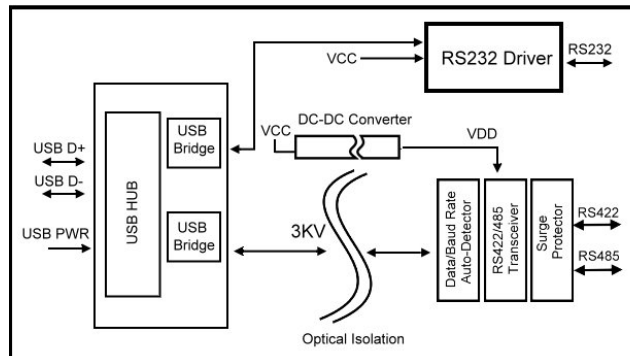
## Introduction

The TRP-C08S is one standard USB 2.0 to Serials Bridge that has one DB-9 RS232 male connectors and 4 PIN screw terminal for RS422/485. The DB-9 pin serial port is configured as a DTE (data terminal equipment) device which is same as all PC COM ports. The RS422/485 with auto configuration in data format, baud rate and RS485 data flow direction control. RS422/485 equips with 3000VDC of isolation and internal surge-protection on each data line, it gives the host computer and module itself entirely protection from destructive voltage spikes and danger of unregulated voltages input. TRP-C08S also features a high-speed 921.6 K bps transmission rate, and supports various O.S. The industry DIN rail and panel mounting design enable user a fast and professional installation.

## Features

- USB-2.0 Device Controller
- Allow user custom adjust baud-rates.
- Each Port can impendent set up the baud-rate and data format.
- OS. system get dual port UART serial (1\*RS232 and 1\*RS422/485).
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- Fully PLC support such as Mitsubishi Q,FX and FATEK serial....
- Auto direction flow control on RS-485.
- Auto baud rate switching from 75bps to 921.6 Kbps.
- 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 and TXA/RXA/TXB/RXB communication LED indicator
- DIN rail or panel mount support.
- Driver support: Vista64/32, Windows 98/ME/2000/XP/WIN7/CE3.0, and Linux, and Mac OS.

## Block Diagram



## Application Note

