

## USB to Serial Device



# TRP-C08H USB to 2 RS232 and 2 RS422/485 Isolated Converter

## Specifications

- Input: USB 2.0 protocol.
- RS232 output: Standard 9 pin DTE full-duplex.
- RS422 output: Differential 4 full-duplex wires (TX+, RX+, TX-, RX-)
- RS485 output: 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
- Stop bits: 1, 1.5, 2.
- Cable: USB 2.0 type A to type B cable.
- Communication speed: form 300bps to 256Kbps.
- RS-422/485 line protection: Against surge, short circuit, +/- 15KV ESD and voltage peak.
- RS-232 line protection: +/- 15KV ESD.
- Distance: RS-422/485 Up to 4000ft (1250M).
- Connection type: Screw terminal for maximum AWG #12~30 wire.
- DIN rail and panel mount support.
- Power consumption: 260mA by USB power.
- RS422/485 Optical Isolation: 3000V DC.
- Operating environment: 0 to 65°C.
- Storage temperature: -20 to 65°C.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 395g.
- Humidity: 10-90% non-condensing.

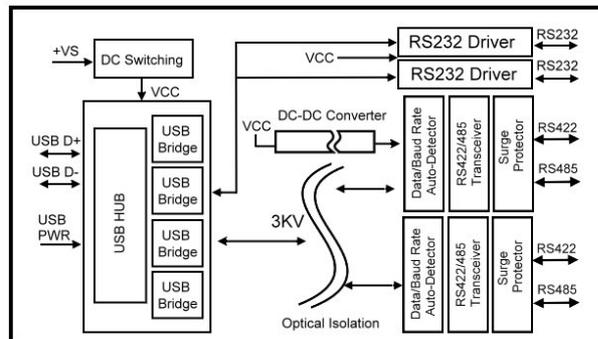
## Introduction

The TRP-C08H allows you to simultaneously connect 2 RS-232 and 2 RS-422/485 serial devices to system by using a USB interface. The RS232 interface support all common PC DTE connection type. For RS-422/485 data lines TRP-C08H provides auto-detecting function in data format, baud rate and data direction flow control, it may automatically configure RS-422/485 signals and baud rate without external switch setting. TRP-C08H is equipped with 3000V DC of isolation and internal surge protection to protect the host computer and converter against high voltage spikes, as well as ground potential differences. TRP-C08H features a high-speed 256KB transmission rate, and supports various O.S. The industry standard DIN rail design enables users 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.
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- System gets four serial port when the converter plug in.
- Auto switching RS422/485 detecting.
- Auto direction flow control on RS485.
- Auto baud rate switching from 300bps to 256 Kbps.
- Direct power from USB port , no need external power supply.
- 3000 VDC isolation protection on RS422/485.
- Surge protection on RS422/485 data line.
- Power and TXA/RXA/TXB/RXB communication LED indicator
- Din-Rail (option) or panel mount Driver support:
- Vista64/32, Windows 98/ME/2000/XP/WIN 7/CE3.0, and Linux, and Mac OS

## Block Diagram



## Application Note

