# COMMUNICATION CONVERTER

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

## Specifications

◆ USB interface: Fully compliant with V1.0, V2.0 specification.
◆ USB to serial bridge controller: Prolific PL2303HX.
◆ RS232 signal: 5 full-duplex (TXD, RXD, CTS, RTS, GND).
◆ RS422 signal: Differential 4 full-duplex wires (TX+, RX+, TX-, RX-).
◆ RS485 signal: Differential 2 half-duplex wires (D+, D-).
◆ 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.
◆ Cable: USB type A to type B.
◆ Communication speed: form 300bps to 256Kbps.
◆ RS422/485 line protection: Against surge, short circuit, and voltage peak.
◆ Transmission distance: RS422/485 up to 4000ft (1200M).
◆ Connection type: Screw terminal accepts AWG #12~30 wire.
◆ Signal LED: Power on, TX, RX.
◆ Direct Power from USB port.
◆ Power consumption: 1.2W.
◆ Isolation Voltage: 3000V DC.
◆ Operating environment: -20 to 65℃.
◆ Storage temperature: -20 to 65℃.
◆ Humidity: 10-90% Non-condensing.
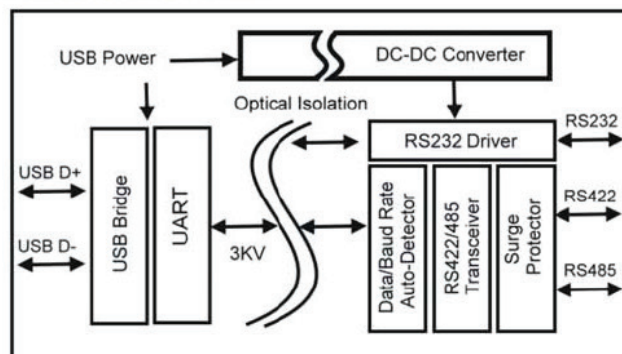◆ Dimension: 151mm X 75mm X 26mm.
◆ Weight: 375g.

## 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 RS485 data flow direction control, TRP-C08 is able to automatically configure RS232, RS422 or RS485 signals and 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 differences. TRP-C08 also features a high-speed 256KB 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 RS485.
◆ Auto baud rate switching from 300bps to 256Kbps.
◆ 256 bytes 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: Windows 98/ME/2000/XP/CE, Linux and Mac OS.

## Block Diagram



## Application Note