

RS-232 to RS-485/422 Isolated Converter

User's Manual



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Introduction

Thank you for purchasing the RS-232 to RS-485/422 converter. This converter allows RS-232 line signal to bi-directionally convert to and from RS-422 or RS-485 standard. Featuring data format Auto switching and baud rate (from 110 bps to 115.2K bps). Users just need to plug the unit without software setup or complicated hardware setting. The RS-485 control is completely transparent to the users and software for Half-Duplex RS-232 works without any modification.

Package Content

- RS-232 to RS-485/422 isolated converter * 1
- Power adapter (DC9V) * 1
- Documentation

NOTE: Notify your sales representative if any of the above items is missing or damaged.

Features

- Easy installation
- Baud rate up to 115.2 Kbps.
- Power 3000V DC isolation protection
- RS-232 Signal optical isolation protection
- Over current protection
- All RS-485/422 signal with surge protection
- Auto Switching between RS-485 and RS-422
- Sys / TX / RX mode Led indicator
- Support screw terminal and standard external DC power adaptor
- Wide range power input voltage from DC 5V to 24V

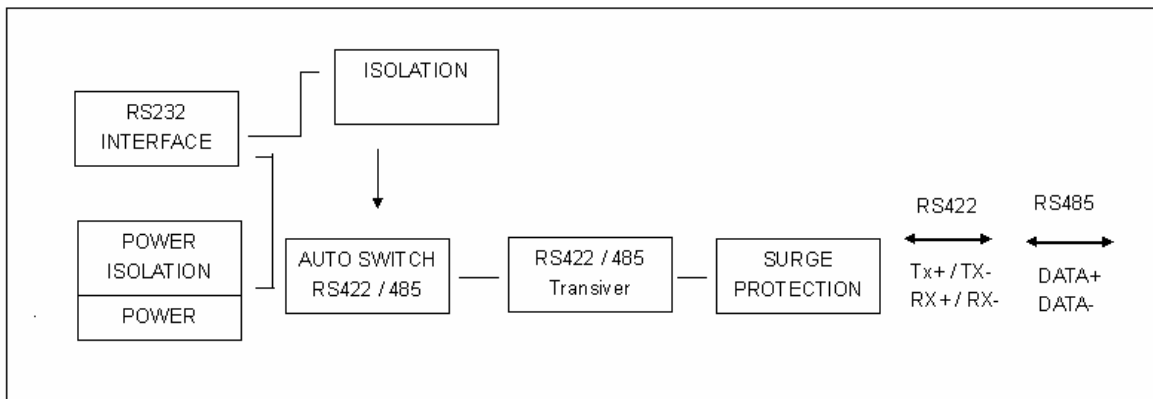
Product Specification

- Serial port
 - Port: RS-485/422 * 1 port
 - Speed: 110 bps ~ 115.2K bps
 - Parity/data bit /stop bit Auto Detect
 - RS-232 pins: TX, RX, GND (RTS & CTS shorted, DTR & DSR shorted)
 - RS-422: Tx+, Tx-, Rx+, Rx- (Surge protect)
 - RS-485: D+, D- (Surge protect)
 - Built in Terminal 100 Ohm Terminal resistor SW selection ON/OFF
 - 15KV ESD for all signal
- Power input voltage: DC 9V~24V 100mA
- Host connection: Standard D-Sub 9 pin Female connector
- Electromagnetic Compatibility: CE, FCC
- Distance: up to 4,000 ft (1,250 M)
- Connection type: Screw terminal for maximum AWG 12 wire.
- Signal LED: SYS TX, RX.
- Power supply: standard DC adapter.
- Power consumption: < 5W
- Operating environment: 0°C to 70°C
- Storage temperature: -10°C to 80°C
- Dimension: 88 x 91 x 27 mm
- Weight: 94 g
- Humidity: 5-95% non-condensing

Panel layout

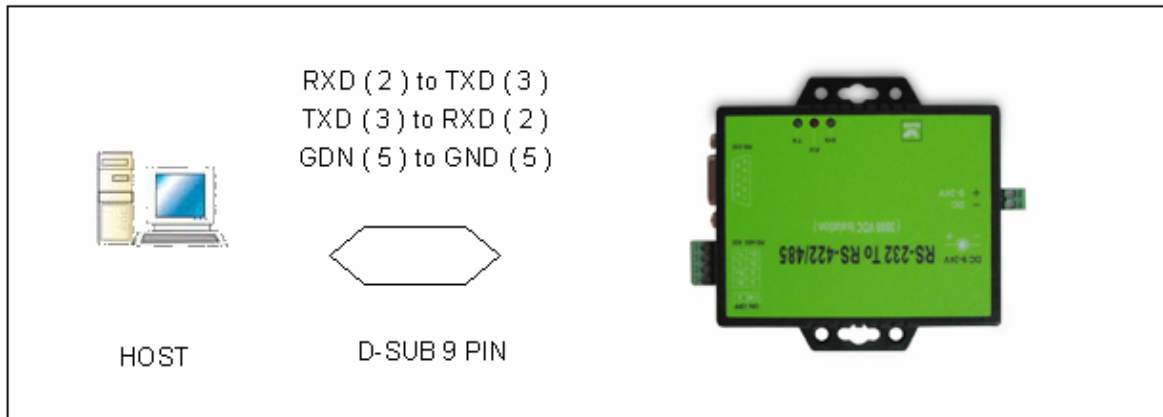


Hardware structure



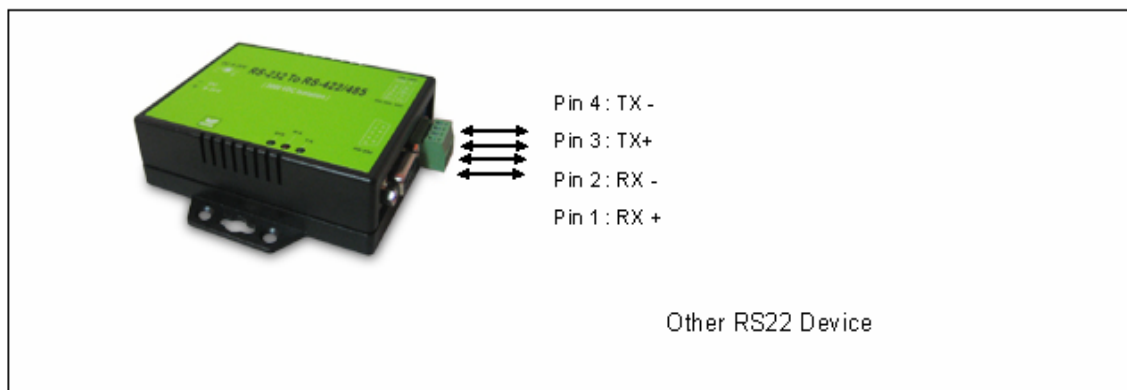
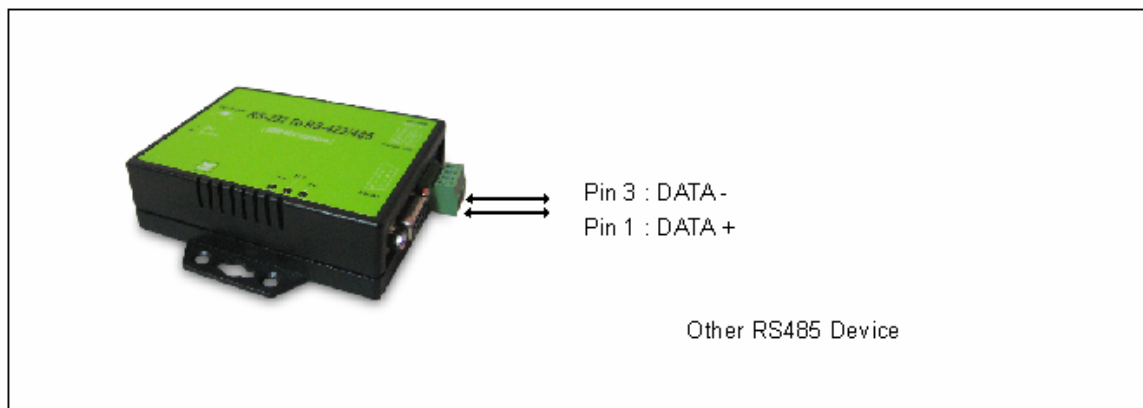
Installation

Connect this converter to Host PC



Connect power source

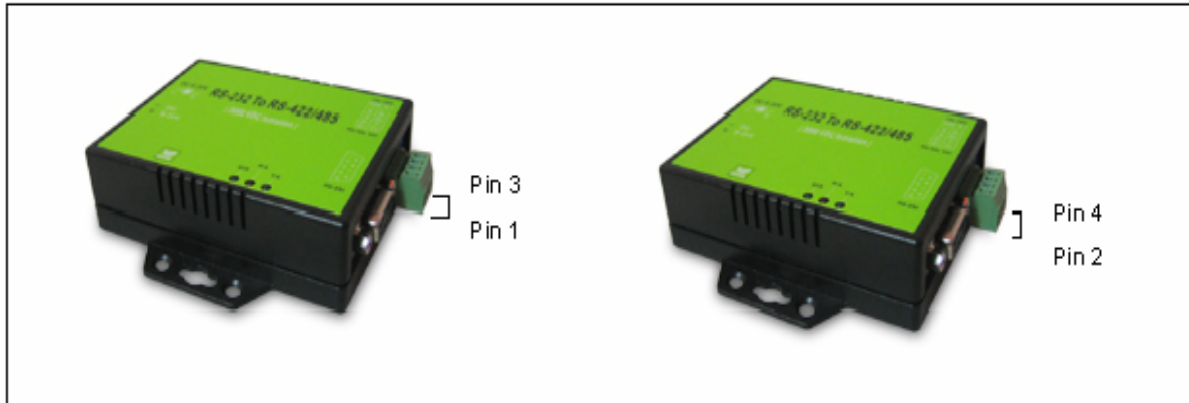
Connect this converter with RS-422 or RS-422/485 serial device.



Loop back test

RS-422

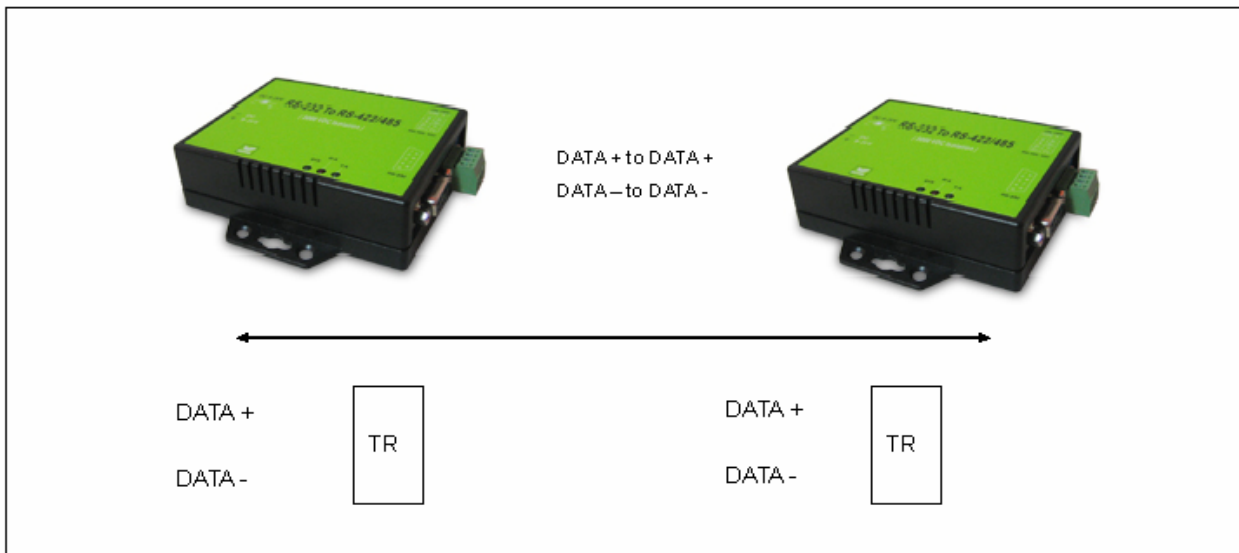
Terminal Resistor Connection



This converter has built-in terminal 100ohm resistor, user may add external terminal resistor by following connection.

RS-485

Terminal Resistor specification

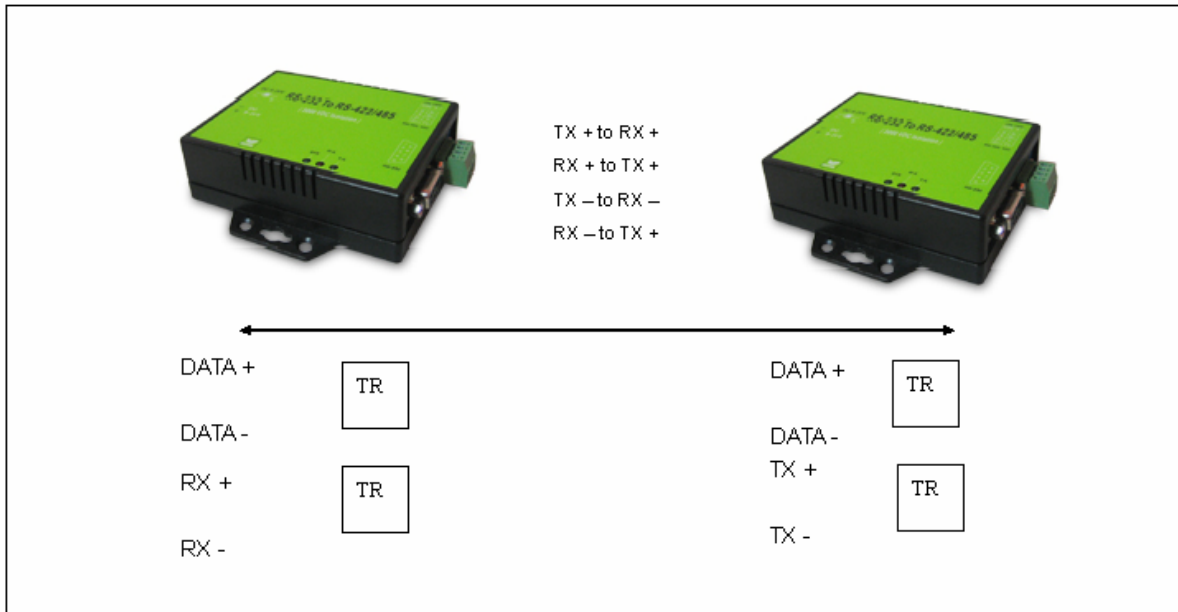


110 ohm: If distance between both ends of RS485 devices in 1.2KM

220 ohm: If distance between both end of RS485 devices in 600M

330 ohm: If distance between both ends of RS485 devices in 300M

RS-422



Terminal Resistor specification

110 ohm: If distance between both ends of RS422 devices in 1.2KM

220 ohm: If distance between both ends of RS422 devices in 600M

330 ohm: If distance between both ends of RS422 devices in 300M