

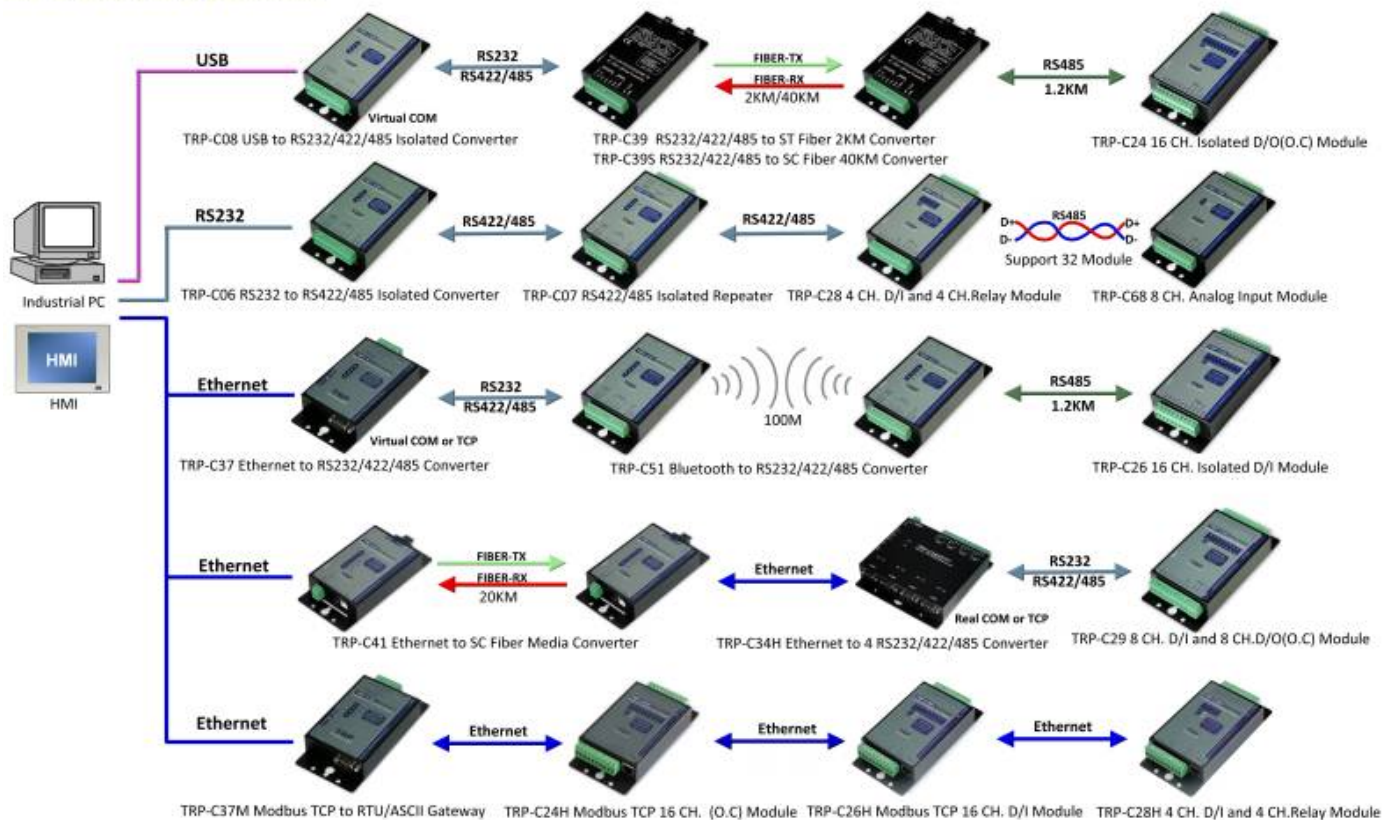
TRP-SERIES

RS232/422/485 BEST SOLUTION



OCT 19 2022

TRP-Serial Application



Trycom Technology Co. Ltd has founded in 2002 and extensively sold products more than 40 countries worldwide. We are one of the major suppliers of Industrial communication converter and digital Input/ Output and analog Input RS-485 modules products in Taiwan. Our customers are professional in many fields of leading Industrial automation, networking and system control project.

The company employees have many years' experience within the industry and automation and have been responsible for the scope of design, project management, supply, manufacture and assembly of industrial computer systems. We believe employees are the most valuable resource and hence always have people in mind when making plans. Trycom is very proud of its creative and dynamic employees as well as its management team. This is our assurance of commitment to quality and customer service.

Our missions have been simple and clear. Customers must be provided with quality solutions. Meanwhile the velocity of designing and the manufacturing capability must be ensured in order to improve the time needed to reach the marketplace. Moreover, strictly quality assurance in every area of the management system must be maintained and be exercised to guarantee low total delivery cost.

With unwavering principles and steady management, we are pursuing our goal of eternal progress. We will continue to strengthen our competitiveness and offer customers the best products and services.

Our promise:

- Have stock on hand & logistics support to reduce your overall logistics costs.
- Have sold more than 40 countries. With many years' versatile experience in customer support, rich problem-solving skills to grow your company together.
- Have excellent CP value to enhance your products the overall competitiveness.
- Have strongly R & D team with unique firmware and global integrated technology to support OEM & ODM to shorten your company new products introductions and insure the quality.
- Be stick to strictly quality control, product quality to have worry-free products.

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Introduction

The TRP-C06 allows RS-232 line signal to be bi-directionally converted to RS-422 or RS-485 standard and transmit data up to 1.2KM . Featuring automatic data format and baud rate detect function user just need to plug in the unit and go without extra configuration efforts. TRP-C06 is equipped with 3000V DC of isolation and internal surge protection on data lines to protect the host computer and converter against high voltage spikes, as well as ground potential differences. The industry standard DIN rail and panel mounting design enable user a fast and professional installation.

Features

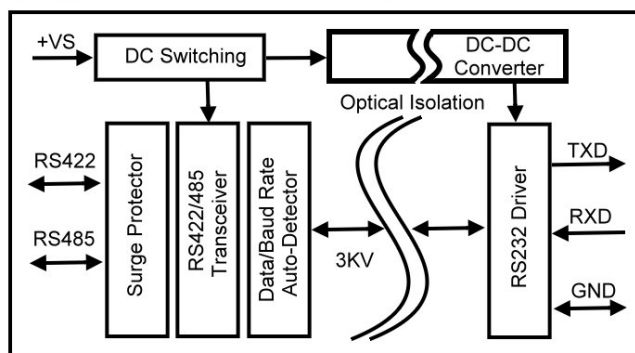
- Wide range input DC power supply.
- Automatic data format configuration.
- Auto direction flow control on RS-485.
- Auto baud rate switching from 300bps to 115.2Kbps.
- 3000V DC isolated protection.
- Surge protection on RS-422/485 data lines.
- Power/TX/RX mode LED indicator.
- Support screw terminal and external DC power adaptor.
- Din rail or panel mounts support.

TRP-C06 RS232 to RS422/485 Isolated Converter

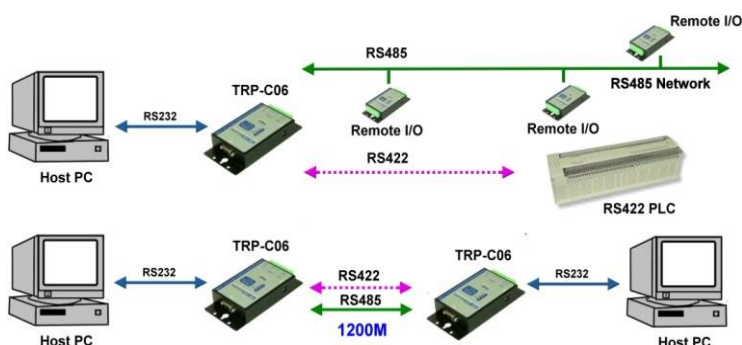
Specifications

- Power input voltage: DC +10V to +30V.
- Host connection: Standard D-Sub 9 pin female connectors.
- RS-232 interface: Standard D-Sub 9 pin female connector
- RS-232 signal: TXD, RXD, and GND.
- RS-422/485 interface: Industrial plug-in screw terminal.
- RS-485 signal: differential 2 half-duplex wires (DATA+, DATA-).
- RS-422 signal: differential 4 full-duplex wires. (TX+, RX+, TX-, RX-)
- Plug-in screw terminal wiring: Accepts AWG #12 ~30 wires.
- Transmission distance: RS-422/485 up to 4000ft (1200M).
- Communication speed: from 300bps to 115.2Kbps.
- Isolation voltage: 3000V DC.
- Serial data format: Asynchronous data with all common combination of bits, parity, stop.
- Signal LED: Power on, TX, and RX.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption: 1.2 watt.
- Operating Temperature : -10 to 50°C .
- Storage Temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm
- Weight: 375g .

Block Diagram



Application Note





Introduction

The TRP-C06H allows 2 RS232 line signal to be bi-directionally converted to RS-422 or RS-485 standard and transmit data up to 1.2KM . Featuring automatic data format and baud rate detect function users just need to plug the unit and go without extra configuration efforts. TRP-C06H 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. The industry standard DIN rail and panel mounting design enable user a fast and professional installation.

Features

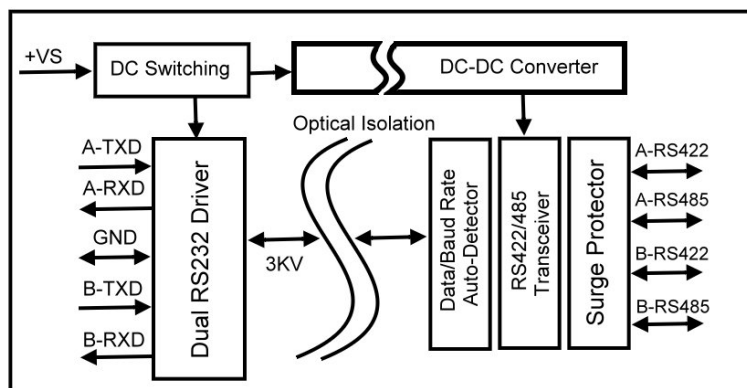
- Wide range input DC power supply.
- Automatic data format configuration.
- Auto direction flow control on RS-485.
- Auto baud rate switching from 300bps to 115.2Kbps.
- 3000V DC isolated protection.
- Surge protection on RS-422/485 data lines.
- Power/TX/RX mode LED indicator.
- Support screw terminal and external DC adaptor.
- DIN rail or panel mounts support.

TRP-C06H Dual Port RS232 to RS422/485 Isolated Converter

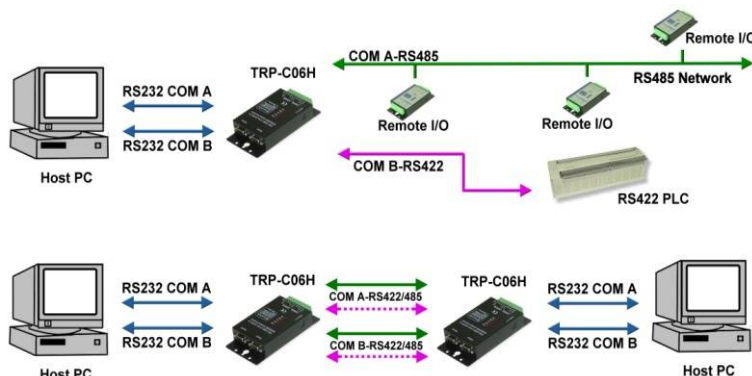
Specifications

- Power input voltage: DC +10V to +30V.
- Host connection: 2 standard D-Sub 9 pin female connectors.
- RS-232 interface: Standard D-Sub 9 pin female connector.
- RS-232 signal: TXD, RXD, GND.
- RS-422/485 interface: Industrial plug-in screw terminal.
- RS-485 signal: Differential 2 half-duplex wires (D+, D-).
- RS-422 signal: Differential 4 full-duplex wires. (TX+, RX+, TX-, RX-).
- Communication speed: Form 300bps to 115.2Kbps auto detecting.
- RS422/485 line protection: Against surge, short circuit, voltage peak.
- Distance: Up to 4000ft (1200M).
- Isolation voltage: 3000V DC.
- Plug-in screw terminal wiring: Accepts AWG #12 ~ 30 wires.
- Signal LED: Power on, TXA, RXA, TXB, RXB.
- Power supply: Screw terminal, or external DC adaptor.
- Power consumption: 1.3W.
- Operating environment: -10 to 50°C .
- Storage temperature: -20 to 70°C .
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 375g .

Block Diagram



Application Note



RS422/485 Repeater



Introduction

TRP-C07 is designed to extend the RS-422 and RS-485 signals to another 4000ft (1200m) distance and increase the maximum number of connected nodes up to 32 sets. Aside from extension function TRP-C07 provides with auto configuration features in data format detecting, baud rate setting and RS-485 data direction flow control. TRP-C07 is equipped with photo-couplers and internal surge protection to protect the module and all data lines against high voltage spikes, as well as ground potential differences. The industry standard DIN rail and panel mounting design enable user a fast and professional installation. TRP-C07 is the ideal solution for the user who wants to automate their application quickly, safely and cost-effectively.

Features

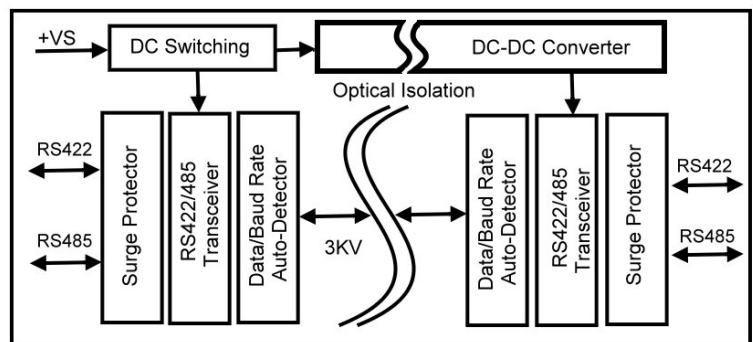
- Wide input range DC power supply.
- Automatic data format configuration.
- Auto direction flow control on RS-485.
- Auto baud rate switching from 300bps to 115.2Kbps.
- RS485 bi-directionally communication.
- 3000 DC isolated protection.
- Surge protection on RS-422/485 data lines.
- Power/TX/RX mode LED indicator.
- Support screw terminal and external DC adapter.
- DIN rail or panel mount support.

TRP-C07 RS422/485 Isolated Repeater

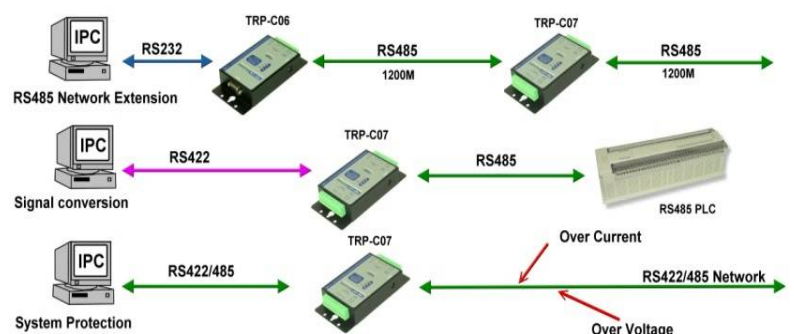
Specifications

- Power input voltage: DC +10V to +30V.
- Power input type: Support screw terminal or external DC adaptor.
- Interface: Industrial plug-in screw terminal.
- RS-485 signal: differential 2 half-duplex wires. (D+,D-).
- RS-422 signal: differential 4 full-duplex wires. (TX+,RX+, TX-,RX-).
- Plug-in screw terminal wiring: Accepts AWG -#12~30 wire.
- Distance: extend RS-422/485 signal up to 4000ft (1200M).
- Isolation voltage: 3000V DC.
- LED indicator: Power, TX, and RX.
- Power consumption: 1.2 watt.
- Operating Temperature : -10 to 50°C .
- Storage Temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 380g.

Block Diagram



Application Note





■ Introduction

TRP-C08 can be stable running in the industrial environment.

It provides USB port protection when it detected unusual currents.

TRP-C08 provides RS422/485 line surge protection and RS232/422/485 with a photo couple between USB ports.

TRP-C08 can be easy to use, users have no worries about setting the serial data format and RS485 flow control, and how to wire RS422/485, everything is auto-detectable.

■ 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/ WIN11/10/8/8.1/798/ME/2000/XP/CE3.0, and Linux, and Mac OS.

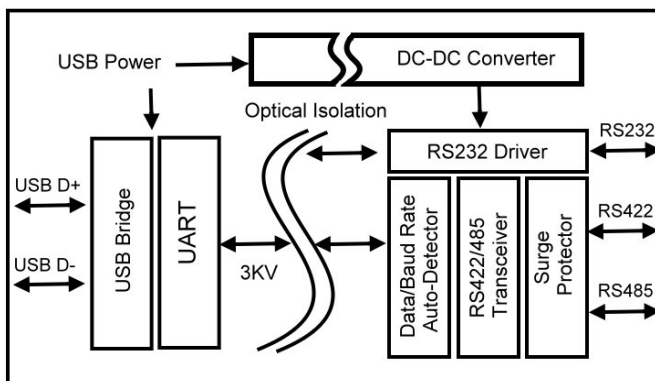
TRP-C08 Ver:3.0

USB to RS232/422/485 Isolated Converter

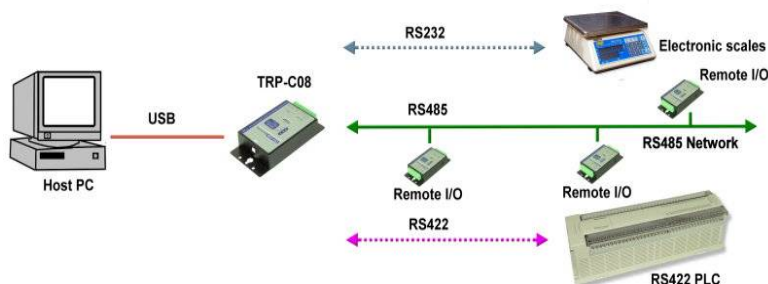
■ Specifications

- USB interface: Fully compliant with V1.0, 2.0 specification.
- USB to serial bridge controller; Prolific PL2303GC(Version:3.0).
- 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°C .
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 375g .

■ Block Diagram



■ Application Note





Introduction

TRP-C08D can be stable running in the industrial environment.

It provides USB port protection when it detected unusual currents.

TRP-C08D provides RS422/485 line surge protection.

TRP-C08D can be easy to use, users have no worries about setting the serial data format and RS485 flow control, and how to wire RS422/485, everything is auto-detectable.

Features

- Full compliance with the USB V1.0 and 2.0 specification.
- Fixed com port function no matter which USB port plug
- USB port protection when detecting unusual currents.
- Auto UART data format detecting.
- Auto direction flow control on RS-485.
- Programmable baud rate from 75 bps to 6 Mbps
- 256 byte buffer for upstream and downstream data flow.
- Direct power from USB port , no external power necessary.
- Surge protection on RS422/485 data lines.
- Power/TX/RX mode LED indicator.
- DIN rail or panel mount support.
- Windows 11, 10, 8, 7 (Microsoft Certified WHQL Drivers)
- Windows Server 2008 R2, 2012, 2016, 2019, 2022
- Mac OS X, Linux OS, Android 3.2 and above

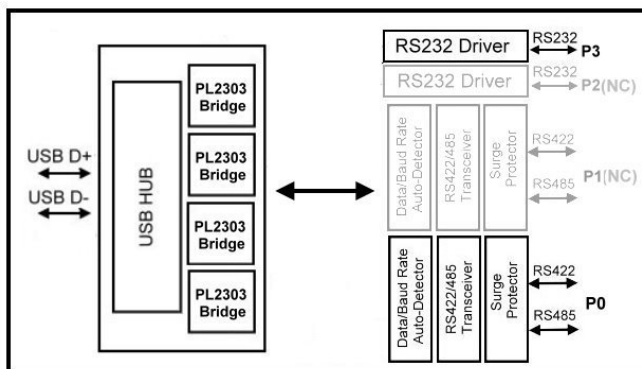
TRP-C08D

USB to 1 RS232 and 1 RS422/485 Industrial Converter

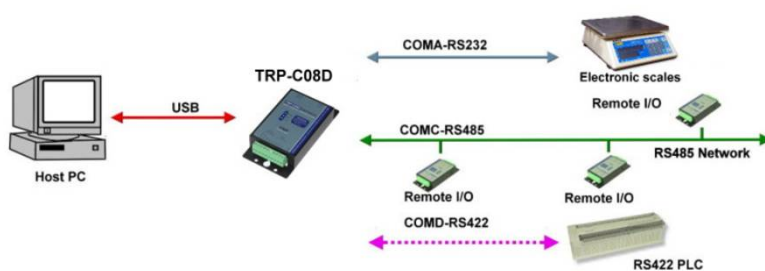
Specifications

- 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: 160mA by USB power.
- 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.
- Input: USB 2.0.

Block Diagram



Application Note





Introduction

TRP-C08E can be stable running in the industrial environment.

It provides USB port protection when it detected unusual currents.

TRP-C08E provides RS422/485 line surge protection.

TRP-C08E can be easy to use, users have no worries about setting the serial data format and RS485 flow control, and how to wire RS422/485, everything is auto-detectable.

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.
- Surge protection on RS422/485 data line.
- Power and TXA/RXA/TXB/RXB communication LED indicator
- Din-Rail (option) or panel mount Driver support:
- Driver Support: Android, Windows 2000/WIN 7/WIN10/WIN11 , and Linux 4.1 and Embedded Linux 5.5.

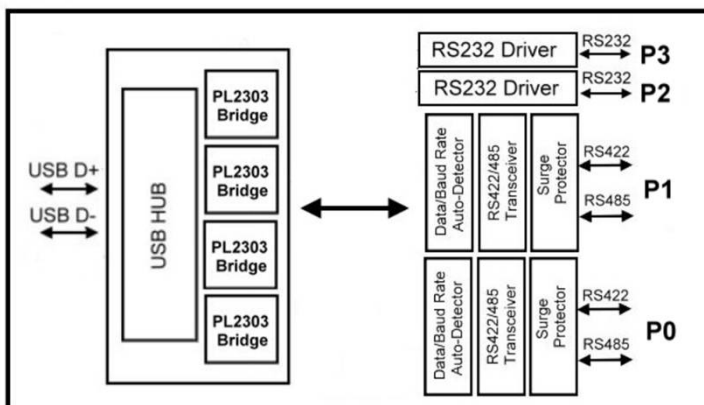
TRP-C08E

USB to 2 RS232 and 2 RS422/485 Industrial Converter

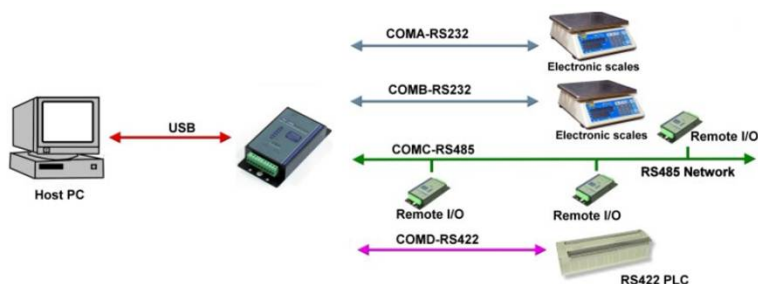
Specifications

- 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.
- Two power input: USB power.
- Power consumption: 260mA by USB power.
- 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. .

Block Diagram



Application Note





Introduction

The TRP-C08U allows you to simultaneously connect 4 RS-232 serial devices to system by using a USB interface. Each one can be independent setting different serial data format and baud-rate. The user may also aim at the special BAUD-RATE demand to set up by separately.

The RS232 interface offer TXD, RXD, GND signal connection type. TRP-C08U is equipped with 3000V DC of isolation and +/-15KV ESD, as well as ground potential differences. TRP-C08U 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

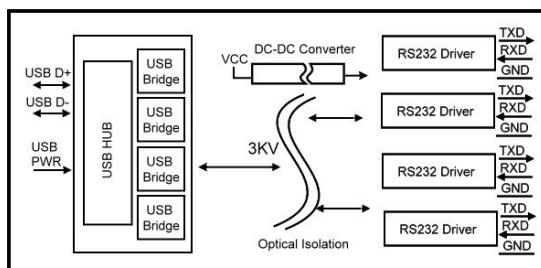
- USB-2.0 device controller.
- Allow user custom adjust baud-rates.
- Each Port can impendent set up the baud-rate and data format.
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- System gets four serial port when the converter plug in.
- Direct power from USB port , no need external power supply.
- 3000 VDC isolation protection on RS232.
- Power and TXA/RXA/TXB/RXB/TXC/RXC/TXD/RXD communication LED indicator
- Din-Rail (option) or panel mount Driver support:
- Driver support: WIN10, Vista64/32, Windows 8/8.1/98/ME/2000/XP/WIN7/CE3.0, and Linux, and Mac OS.

TRP-C08U USB to 4 RS232 Isolated Converter

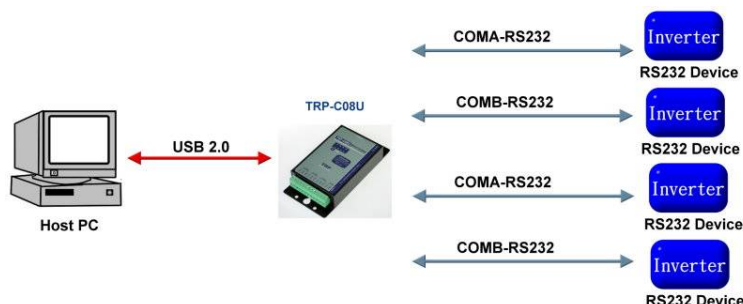
Specifications

- Input: USB 2.0 protocol.
- RS232 output: TXD, RXD, GND.
- 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-232 line protection: +/- 15KV ESD.
- Connection type: Screw terminal for maximum AWG #12~30 wire.
- DIN rail and panel mount support.
- Power consumption: 70mA by USB power.
- 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. .

Block Diagram



Application Note





Introduction

The TRP-C08X is USB 2.0 to Serials converter that has four DB-9 RS232 male connectors and Four 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. The RS422/485 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-C08X 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

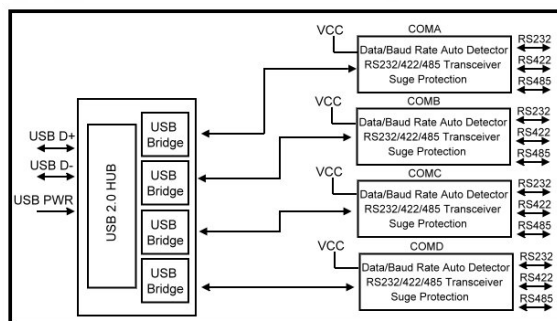
- USB-2.0 Device Controller.
- Customer-specified Baud rates are also supported.
- Each Port can independent set up the baud-rate and data format.
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- Fully PLC support such as Mitsubishi Q,FX and FATEK serial....
- Auto 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.
- Surge protection on RS422/485 data lines.
- Power and TX/RX communication LED indicator.
- DIN rail or panel mount support.
- Driver support: WIN10,Vista64/32,Windows 8/8.1/98/ME/2000/XP/WIN7/CE3.0, and Linux, and Mac OS.

TRP-C08X USB to 4 RS232/422/485 Converter

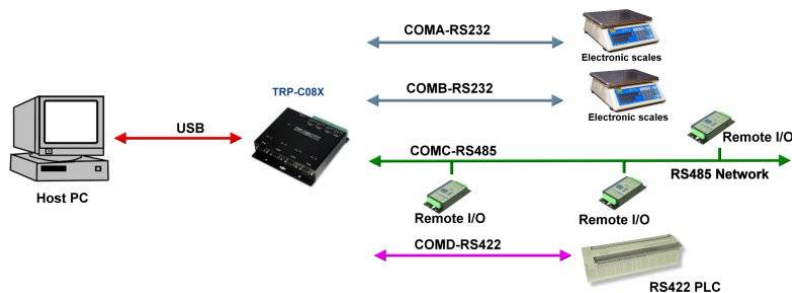
Specifications

- Input: USB 2.0.
- RS232 signal: 4 Pair 16c450/16c550 compatible UARTS.
- RS422 signal: 4 Pair Differential 4 full-duplex wires (TX+, TX-, RX-, RX-)
- RS485 signal: 4 Pair 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.
- Flow Control: Xon/Xoff, Hardware, None
- Cable: USB 2.0 type A to type B cable.
- Communication speed: 75~921Kbps.
- 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 wires.
- Din-Rail mountable: Option.
- Power consumption: 190mA by USB power.
- Operating environment: -10 to 60°C.
- Storage temperature: -20 to 65°C.
- Dimension: 151mm X 111mm X 26mm.
- Weight: 691(W/Packing) .
- Humidity: 10-90% non-condensing.

Block Diagram



Application Note





Introduction

TRP-C08M is a USB to RS232/422/485 Isolated Converter support 3KV isolation, built-in RS422/485 interface Surge Protection to ensure the stability of the transmitted data, suitable for applications in harsh industrial Environments. TRP-C08M bridge using the latest USB chip that can set up a separate data format baud-rate and other self-defined baud-rate for each COM port it has the ability to automatically select RS232/422/485 Signal Through a simple wiring. TRP-C08M Support two power input, USB Power or external input POWER SUPPLY, two types are available over-voltage protection.

Features

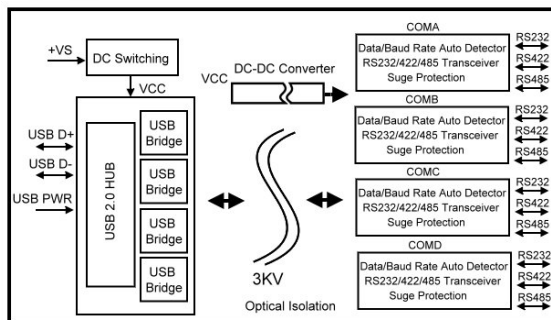
- USB-2.0 Device Controller.
- Support 3KV isolation in RS232/RS422/485 interface.
- Customer-specified Baud rates are also supported.
- Each Port cans impendent set up the baud-rate and data format.
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- Fully PLC support 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.
- Auto switching RS232/422/485 interface.
- 256 byte buffer for upstream and downstream data flow.
- Direct power from USB port or external power.
- Surge protection on RS422/485 data lines.
- Power and TX/RX communication LED indicator.
- DIN rail or panel mount support.
- Driver support: WIN10,Vista64/32,Windows 8/8.1/98/ME/2000/XP/WIN7/CE3.0, and Linux, and Mac OS.

TRP-C08M USB to 4 RS232/422/485 Isolated Converter

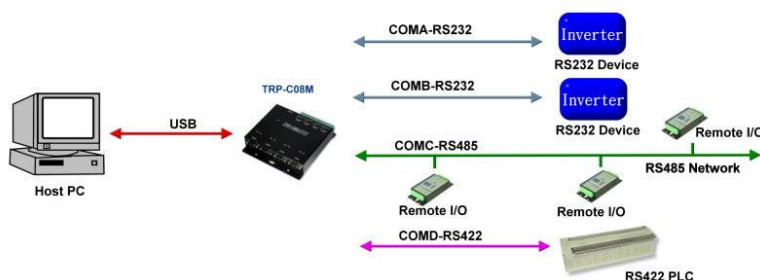
Specifications

- Input: USB 2.0.
- RS232 signal: isolated 3KV 4 Pair16c450/16c550 compatible (TXD, RXD, RTS, CTS, ISO. GND)
- RS422 signal: isolated 3KV 4 Pair Differential 4 full-duplex wires (TX+, RX+, TX-, RX-)
- RS485 signal: isolated 3KV 4 Pair 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.
- Flow Control: Xon/Xoff, Hardware, None
- Cable: USB 2.0 type A to type B cable.
- Communication speed: 75~921Kbps.
- 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 wires.
- Din-Rail mountable: Option.
- Power consumption: 190mA by USB power.
- Operating environment: -10 to 60°C.
- Storage temperature: -20 to 65°C.
- Dimension: 151mm X 111mm X 26mm.
- Weight: 691(W/Packing) .
- Humidity: 10-90% non-condensing.

Block Diagram



Application Note





Introduction

TRP-C29U is USB to serial interface that provides with 8 optical isolated digital input channels and 8-channel digital output open collector. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. Input channels are equipped with 3750Vrms DC isolation. For easy user access, TRP-C29U can enter configuration mode and self-test mode with outer dip-switch. TRP-C29U support both ASCII and Modbus protocol, with a full set of command, dual watchdog, and auto reset function. the module can be bi-directionally remote controlled by PC in ASCII or Modbus RTU protocol.

Features

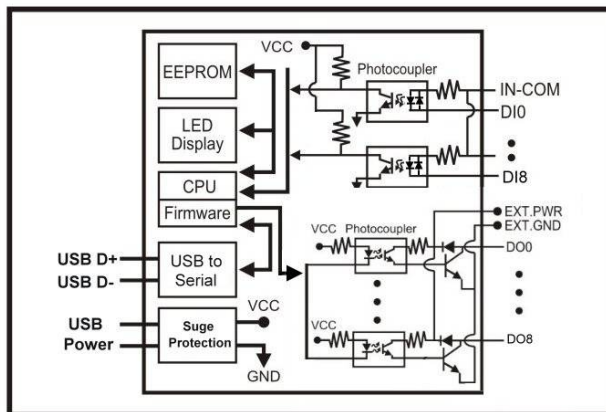
- USB directly power supply input.
- System get a serial com port when USB plug in.
- Support ASCII and Modbus RTU protocol.
- Supports baud rates from 1.2Kbps to 115.2 Kbps.
- All 8 channels digital input can be used as counter.
- Digital input signal with 3750Vrms isolation protection.
- Dual watchdog: Module's firmware, host computer traffic.
- LED for each channels working status.
- DIN rail and panel mount support.
- Configured and self-test by outer dip-switch.
- Support screw terminal.
- Driver support: WIN10, Vista64/32, Windows 8/8.1/98/ME/2000/XP/VIN7/CE3.0, and Linux, and Mac OS.

TRP-C29U Isolated 8 CH. DI and 8 CH O.C USB Module

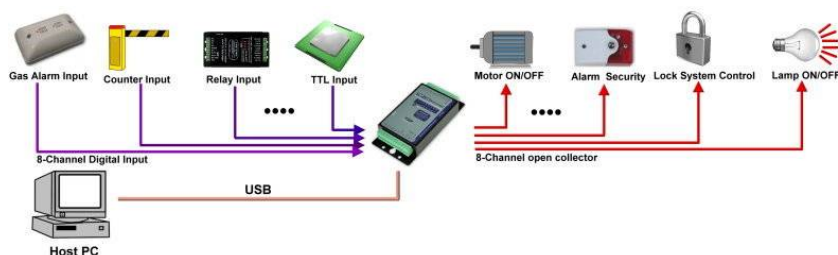
Specifications

- Built-in USB 2.0 to serial bridge.
- Input channel: 8 digital input channels.
- Input optical isolation: 3750 Vrms.
- Input logical level 0 $\pm 1V$ (max).
- Input logical level 1 $\pm 4.0V \sim \pm 30V$.
- Digital Input can be used as counter channel:8
- Input counter :Dec 0~65535(max) or Hex 0000~FFFF(max).
- Input impedance: 3Kohm.
- Input Counter frequency: 100Hz.
- Input distance: 500M (max).
- Output Maximum voltage: $\pm 30V$.
- Output Maximum current: 100 mA.
- Digital output isolation: 3750Vrms.
- Communication interface: USB.
- Communication speed: Baud rate from 1.2kbps to 115.2Kbps.
- Dual watchdog: Hardware reset circuit, module and host operating status.
- Signal LED: Power on, all channels.
- Power supply: Directly input from USB.
- Connection type: Screw terminal, accepts AWG #12~32 wires
- Power consumption: 1.2W.
- Operating environment: -10 to $50^{\circ}C$.
- Storage temperature: -20 to $70^{\circ}C$.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 400g.

Block Diagram



Application Note





Introduction

TRP-C41 is a device for Ethernet extension over fiber, it supports point-to-point and networked systems. The high fiber bandwidth connections solve problems with electrical noise and different ground potentials over long transmission lines. TRP-C41 supports 10/100Base-TX transmissions up to 100 meters and 100Base-FX transmissions up to 20KM . It is the perfect solution for wide distance connections with high immunity to electrical noise.

Features

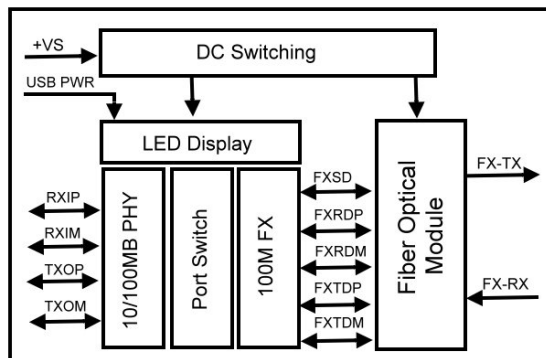
- Wide input range DC power supply.
- Plug-and-Play design for the installation within seconds.
- Compact and Rugged Metal case capable of withstanding harsh environment.
- Data rate: 10/100Mbps auto-negotiation and half-/Full-duplex mode on TX port.
- Auto MDI-X/MDI-II for 10/100Base-TX port.
- Provides media conversion from UTP to Fiber Optic media types
- Supports link fault pass through function.
- Supports far end fault function.
- LED display to indicate the whole working status.
- 3 power input types: Direct USB power, external DC adapter and screw terminal.
- Support IEEE Standard: 802.3u 100BaseTX & 100BaseFX.

TRP-C41 Ethernet to Fiber media Converter ,SC/20KM

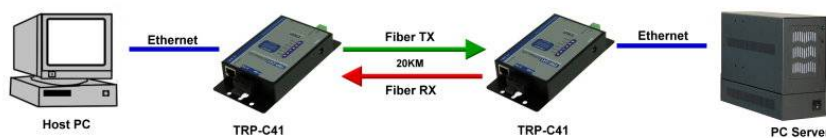
Specifications

- Cable: Fiber cable (9/125um).
- One 10/100Base-TX auto-negotiation Ethernet RJ-45 port.
- One 100Mbps fiber port with Single-mode SC connector.
- Built in 128Kb RAM for data buffer.
- Wavelength: 1310 nM.
- Fiber Power:-15 ~ -8 dBm.
- LED indicator: Power and power and TX and fiber link/activity, full/half, 10/100MB.
- Distance : 20KM can be up to 60KM (option).
- Speed : Auto 10/100MB.
- Power Consumption: 12V/160mA.
- Power requirement: USB port power or DC input or screw terminal from +10 to 30V.
- Operating temperature: -10 to 50°C.
- Storage temperature : -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram



Application Note





■ Introduction

TRP-C41S is a device for Ethernet extension over fiber, it supports point-to-point and networked systems. The high fiber bandwidth connections solve problems with electrical noise and different ground potentials over long transmission lines. TRP-C41S supports 10/100Base-TX transmissions up to 100 meters and 100Base-FX transmissions up to 40KM . It is the perfect solution for wide distance connections with high immunity to electrical noise.

■ Features

- Wide input range DC power supply.
- Plug-and-Play design for the installation within seconds.
- Compact and Rugged Metal case capable of withstanding harsh environment.
- Data rate: 10/100Mbps auto-negotiation and half-/Full-duplex mode on TX port.
- Auto MDI-X/MDI-II for 10/100Base-TX port.
- Provides media conversion from UTP to Fiber Optic media types
- Supports link fault pass through function.
- Supports far end fault function.
- LED display to indicate the whole working status.
- 3 power input types: Direct USB power, external DC adapter and screw terminal.
- Support IEEE Standard: 802.3u 100BaseTX & 100BaseFX.

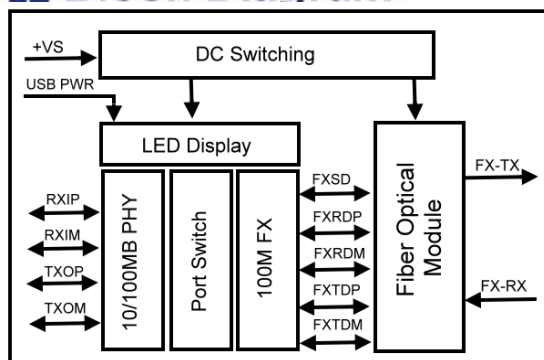
TRP-C41S

Ethernet to Fiber media Converter ,SC/40KM

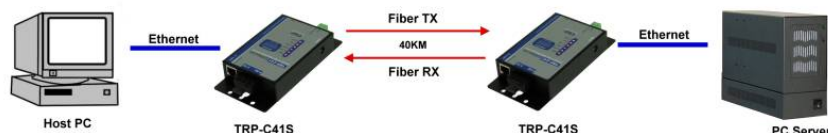
■ Specifications

- Cable: Fiber cable (9/125um).
- One 10/100Base-TX auto-negotiation Ethernet RJ-45 port.
- One 100Mbps fiber port with Single-mode SC connector.
- Built in 128Kb RAM for data buffer.
- Wavelength: 1550 nM.
- Fiber Power:-15 ~ -8 dBm.
- LED indicator: Power and power and TX and fiber link/activity, full/half, 10/100MB.
- Distance : 40KM
- Speed : Auto 10/100MB.
- Power Consumption: 12V/160mA.
- Power requirement: USB port power or DC input or screw terminal from +10 to 30V.
- Operating temperature: -10 to 50°C.
- Storage temperature : -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

■ Block Diagram



■ Application Note





Introduction

The TRP-C39 fiber converter allows RS-232/422/485 signals to be bi-directionally converted to fiber optic and extend the distance up to 2KM over multi-mode. By using fiber optic transmission technology TRP-C39 secures a stable and error free data transmission over the industrial environments present electrical noise and ground differential challenges, especially over long distances. TRP-C39 support data format, baud rate and data direction auto configuration, it also provides with 3000V DC isolation and internal surge protection. The industry DIN rail and panel mounting design enable user a fast and professional installation.

Features

- Wide range power input voltage.
- ST Multi-mode fiber port.
- Auto direction flow control on RS-485.
- Automatically switch signal RS-232, RS-422 and RS-485.
- Support 3000V DC isolation protection.
- All RS-422/485 signals provide surge and over current protection.
- Power/TX/RX mode LED indicator.
- Fiber transmission distance up to 2KM .
- Auto baud rate switching from 300bps to 115.2Kbps.
- Support Din-Rail and panel mount.

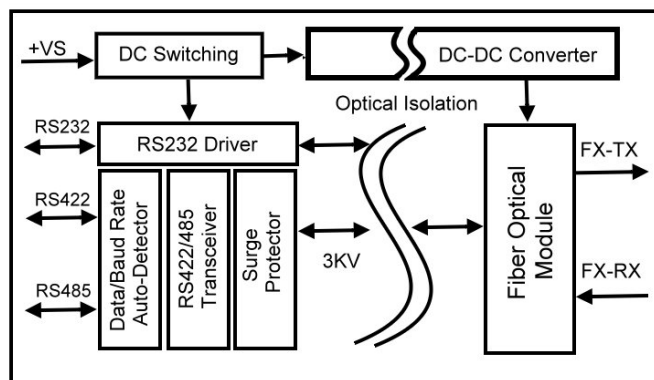
TRP-C39

Fiber TO RS232/422/485 Isolated Converter, ST 2KM

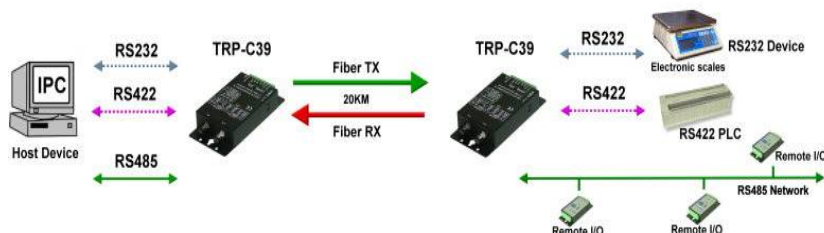
Specifications

- Power Input Voltage: DC +10V to +30V.
- Interface: RS-232/422/485 auto switching to Fiber (Multi-mode).
- RS-232: 3 full-duplex (TXD, RXD, GND).
- RS-422: Differential 4 full-duplex wires (TX+ , RX+ , TX- , and RX-).
- RS-485: Differential 2 half-duplex wires (D+ , D-).
- Cable: Fiber ST Cable (62.5/125um).
- Wavelength: 820 nM.
- Distance: RS-422/485 up to 4000ft . (1250M), and Fiber up to 2 KM .
- Baud Rate: From 300bps to 115.2kbps (maximum).
- Connection type: Screw terminal for maximum AWG 12 wire.
- Signal LED: Power on, TX, RX.
- Power supply: Screw terminal, or standard external DC adapter.
- Power consumption: 1.6W.
- Isolation Voltage: 3000V DC.
- Operating temperature: -10 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% non-condensing.
- Dimension: 151 mm X 75mm X 26mm .
- Weight: 375g .

Block Diagram



Application Note



Fiber Serial Device



Introduction

The TRP-C39S fiber converter allows RS-232/422/485 signals to be bi-directionally converted to fiber optic and extended the line signal distance up to 40KM over single mode. By using fiber optic transmission technology TRP-C39S secures a stable and error free data transmission over the industrial environments. The high bandwidth fiber connections solve problems with electrical noise and different ground potentials over long transmission. TRP-C39S support auto configuration in data format, baud rate and RS-485 data direction flow control, it also provides with 3000V DC isolation and internal surge protection. The industry DIN rail and panel mounting design enable user a fast and professional installation.

Features

- Wide input range DC power supply.
- SC single mode fiber port.
- Auto direction flow control on RS-485.
- Auto RS-232/422/485 signals switching.
- Auto data format detecting.
- Auto baud rate switching from 300bps to 115.2Kbps.
- Support 3000V DC isolation protection.
- Support surge protection on RS-422/485 data lines.
- Power/TX/RX mode LED indicator.
- Fiber transmission distance up to 40KM .
- DIN rail or panel mount support.

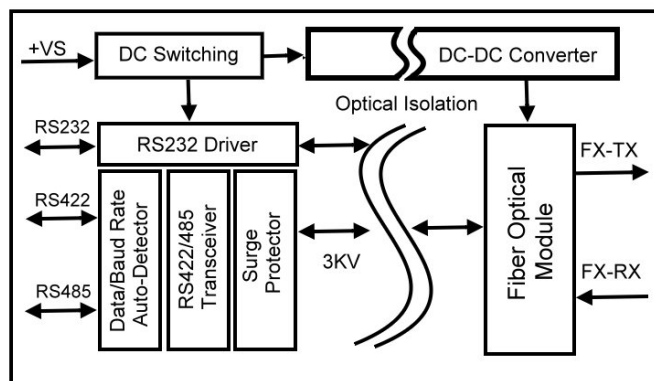
TRP-C39S

Fiber TO RS232/422/485 Isolated Converter, SC 40KM

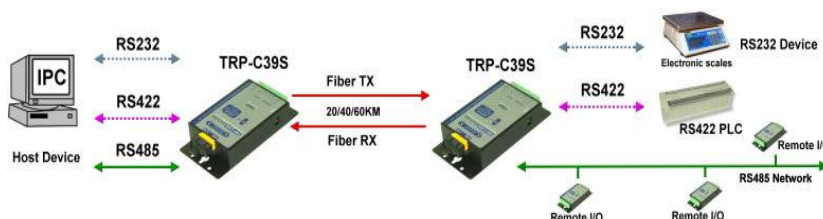
Specifications

- Power Input Voltage: DC +10V to +30V.
- Interface: RS-232/422/485 auto switching.
- RS-232: 3 full-duplex (TXD, RXD, GND).
- RS-422: Differential 4 full-duplex wires (TX+ , RX+ , TX- , and RX-).
- RS-485: Differential 2 half-duplex wires (D+ , D-).
- Cable: Fiber cable (9/125um).
- Wavelength: 1310(FPLD) nM.
- Distance: Fiber up to 40KM and RS-422/485 up to 4000ft (1200M).
- RS-422/485 line protection: Against surge, short circuit, voltage peak.
- Connection type: Screw terminal for maximum AWG #12~30 wires.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption: 110mA/12V
- Isolation Voltage: 3000V DC.
- Operating environment: -10 to 50°C .
- Storage temperature: -20 to 70°C.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 388g .

Block Diagram



Application Note





Introduction

Based on Bluetooth technology TRP-C51 allows you to wirelessly connect your RS-232/422/485 devices to systems within the range up to 100M, if using the outdoor direction antenna can up to 1KM (option) , TRP-C51 features wide range power input, auto RS-232/422/485 signal switching and internal surge protection on RS-422/485 lines. It also supports all common data format and baud rate which can be configured by the bundled TRP-BT utility from Windows system. TRP-C51 can operate in “Direct link mode” and “Paired mode” When in paired mode, the user just need to power two devices, and they will automatically connect without software and hardware changes on your systems that will replace your serial wire with a completed transparent wireless connection. It can be used for wide range of applications for wireless operation and monitoring process.

Features

- Bluetooth V1.2 Class 1 compliance. (2.5mW/4dBm)
- Bluetooth interface compatible with PDA and PC-Base system.
- Transmission range open filed 100M .
- Using the outdoor direction antenna can up to 1KM .
- Bi-directionally RS-485 signals communication.
- Support all common baud rate from 1.2K to 921600Kbps.
- Comfortable TRP-BT configuration software .
- LED indicators for Power/Link/TX/RX.
- Surge protection on RS-422/RS485.
- RS232/422/485 +/- 15KV ESD protection.
- Power input Screw terminal, or external DC adapter.
- Wide input range power supply.
- DIN rail and panel mount support.

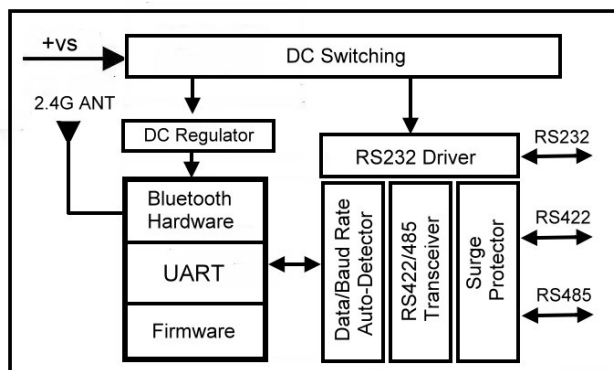
TRP-C51

Bluetooth to RS232/422/485 Converter

Specifications

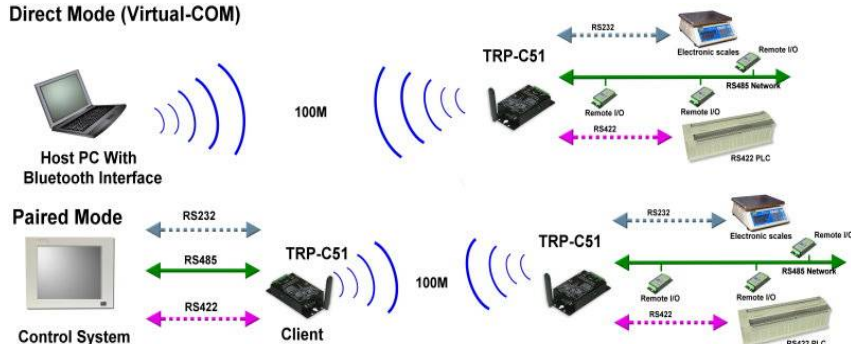
- Power requirement: DC voltage input from +10V to +30V.
- RS-232 signal: TXD, RXD, GND, RTS, CTS.
- RS-422/485 connection: industrial plug-in screw terminal.
- RS-485 signal: differential 2 half-duplex wires. (Data+, Data-) .
- RS-422 signal: differential 4 full-duplex wires (TX+, TX-, RX+, RX-).
- Communication Protocol: ASCII and Modbus ASCII.
- Baud rate; support baud rate from 1.2Kbps to 921600bps.
- Data bit :8 .
- Support Parity check: None, Even, Odd.
- Stop bit: 1, 2 .
- Support RS-232 flow control RTS/CTS: Enable, Disable.
- Host PC to TRP-C51 connection: use null modem female-female cable.
- Plug-in screw terminal wiring: Accepts AWG #12 ~30 wires.
- Wireless transmission distance: Open filed :100M ,Normal:20~30M.
- RS-422/485 distance: up to 4000ft . (1200M) .
- LED indicator: Power, Link TX, and RX.
- Antenna cable length :150cm.
- Power input type: Screw terminal or external DC adaptor (5.5*2.1* 12mm /500mA).
- Power consumption: 1.2 watt.
- Operating temperature:-10 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram



Application Note

Direct Mode (Virtual-COM)





Introduction

The TRP-C24, an isolated output open collector RS-485 module, provides 16 digital outputs channels that allow you output open collector signal (100mA) to driven your devices on RS-485 network. All channels feature screw terminals for convenient connection of field signals as well as LED's to indicate channel working status. All outputs are equipped with photo-couplers to protect the module against high voltage spikes, as well as ground potential differences. For easy user access, TRP-C24 can enter configuration mode and self-test mode with outer dip-switch. TRP-C24 support both ASCII and Modbus protocol, with a full set of command, dual watchdog, and auto reset function the module can be remote controlled by PC in ASCII or Modbus RTU protocol.

Features

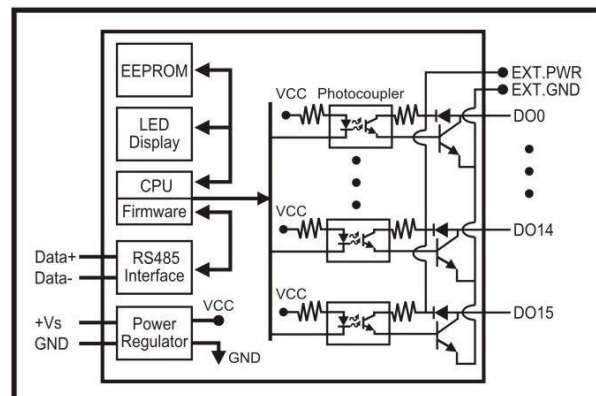
- Wide input range DC power supply..
- Support ASCII and Modbus RTU protocol.
- Supports baud rates from 1.2Kbps to 115.2 Kbps.
- Digital output signal with 3750Vrms isolation protection.
- Dual watchdog: Module's firmware, host computer traffic.
- LED for each channels working status.
- DIN-Rail and panel mount support.
- Configured and self-test by external dip-switch.
- Support screw terminal and external DC power adaptor.

TRP-C24 Isolated 16 CH. O.C RS485 Module

Specifications

- Power Input Voltage DC +10V to +30V.
- Protocol: ASCII and Modbus RTU.
- Digital output maximum voltage: +30V.
- Digital output maximum current: 100mA.
- Digital output isolation: 3750Vrms.
- Communication interface: RS-485 differential 2 half/duplex wires.
- Communication speed form 1.2Kbps to 115.2Kbps auto-switching.
- Data format: Data bit: 8, Parity Check: None, Stop Bit: 1.
- Distance: up to 4000ft (1200M).
- Connection type: Screw terminal for maximum AWG 12 wire.
- Signal LED: Power, and all output channels.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption 1.5W.
- Operating environment: 0 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g .

Block Diagram



Application Note





Introduction

TRP-C26 provides 16 optical isolated digital input channels that allow you to input the logic signal from 0 to 30V DC. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. All inputs are equipped with photo-couplers to protect the module against high voltage spikes, as well as ground potential differences. For easy user access, TRP-C26 can enter configuration mode and self-test mode with outer dip-switch. TRP-C26 support both ASCII and Modbus protocol, with a full set of command, dual watchdog, and auto reset function the module can be remote controlled by PC in ASCII or Modbus RTU protocol.

Features

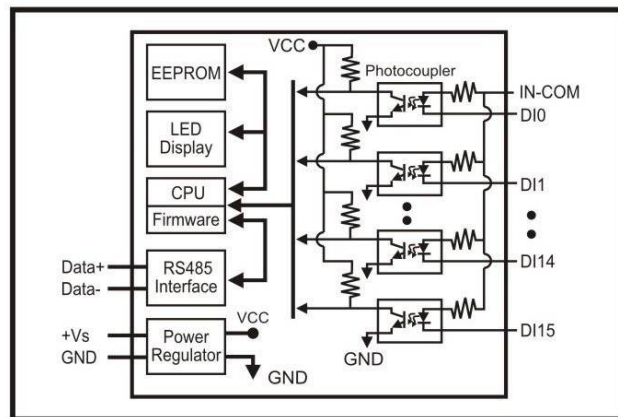
- Wide input range DC power supply..
- Support ASCII and Modbus RTU protocol.
- Supports baud rates from 1.2Kbps to 115.2 Kbps.
- All 16 channels digital input can be used as counter.
- Digital output signal with 3750Vrms isolation protection.
- Dual watchdog: Module's firmware, host computer traffic.
- LED for each channels working status.
- DIN rail and panel mount support.
- Configured and self-test by outer dip-switch.
- Support screw terminal and external DC power adaptor.

TRP-C26 Isolated 16 CH. DI RS485 Module

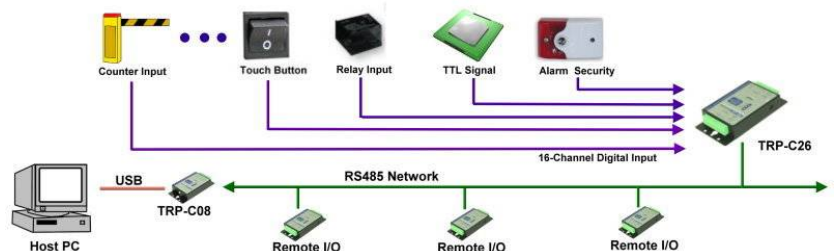
Specifications

- Power Input Voltage: DC +10V to +30V.
- Protocol: ASCII and Modbus RTU.
- Input channel: 16 digital input channels with counter.
- Digital input counter: 0~65535.
- Input optical isolation: 3750 Vrms.
- Input logical level 0 +1V (max).
- Input logical level 1 +4.0V ~ +30V.
- Communication interface: RS-485 differential 2 half duplex wires.
- Communication speed: Baud rate from 1200bps to 115.2Kbps.
- Data format: Data bit: 8, Parity Check: None Stop Bit: 1.
- Input impedance: 3KΩ.
- Inputs can be use as counter channel: 16.
- Counter frequency: 100 Hz.
- Dual watchdog Hardware reset circuit, module and host operating status.
- Signal LED: Power on, all input channels
- Power supply: Screw terminal, or standard external DC adapter
- Power consumption: 1.5W (max)
- Operating environment: -10 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% non-condensing.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 395g.

Block Diagram



Application Note





Introduction

TRP-C28 provides with 4 optical isolated digital input channels and 4 power relays output. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. Input channels are equipped with 3750Vrms DC isolation, and surge protection on RS-485 data lines that protect the module and device against high power voltage input and ground potential differences. For easy user access, TRP-C28 can enter configuration mode and self-test mode with outer dip-switch. TRP-C28 support both ASCII and Modbus protocol, with a full set of command, dual watchdog, and auto reset function the module can be bi-directionally remote controlled by PC in ASCII or Modbus RTU protocol.

Features

- Wide input range DC power supply.
- Support ASCII and Modbus RTU protocol.
- Supports baud rates from 1.2Kbps to 115.2 Kbps.
- All 4 channels digital input can be used as counter.
- Digital input signal with 3750Vrms isolation protection.
- Dual watchdog: Module's firmware, host computer traffic.
- LED for each channels working status.
- DIN rail and panel mount support.
- Configured and self-test by outer dip-switch.
- Support screw terminal and external DC power adaptor.

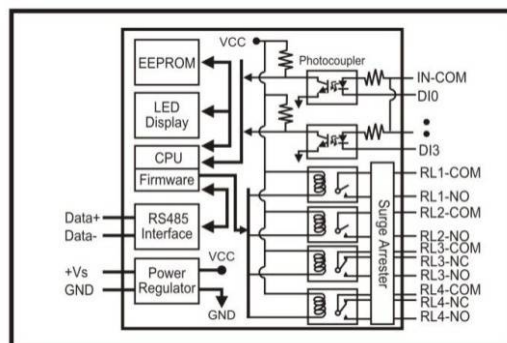
TRP-C28

Isolated 4 CH. DI and 4 CH. AC Relay RS485 Module

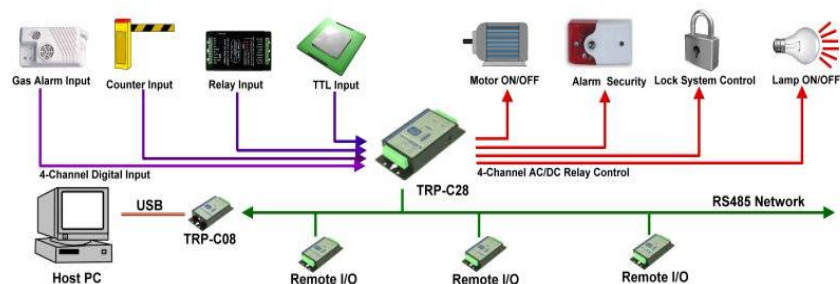
Specifications

- Power Input Voltage: DC +10V to +30V.
- Input channel: 4 digital input channels.
- Input optical isolation: 3750 Vrms.
- Digital input counter: 0~65535.
- Input logical level 0 +1/-V (max).
- Input logical level 1 +/-4.0V ~ +/-30V.
- Digital input Maximum voltage: +/-30V.
- Communication interface: RS-485.
- Communication speed: Baud rate from 1.2kbps to 115.2Kbps.
- Input impedance: 3Kohm.
- Distance: 500M (max).
- Digital Input can be used as counter channel: 4
- Counter frequency: 100Hz.
- Output channel: 4 channel power relay outputs.
- Relay type: 2 Form A (RL1,RL2) , 2 Form C (RL3,RL4).
- Contact rating: 5A /30V DC , 5A /120V AC , 5A /250V AC.
- Relay surge strength: 4000V.
- Relay operating time: 3mS.
- Relay operating life: 2 X 10(7).
- Dual watchdog: Hardware reset circuit, module and host operating status.
- Signal LED: Power on, all channels.
- Power supply: Screw terminal, or external DC adapter.
- Connection type: Screw terminal, accepts AWG #12~30 wires .
- Power consumption: 2.7W.
- Operating environment: -10 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram



Application Note





Introduction

TRP-C29 provides with 8 optical isolated digital input channels and 8-channel digital output open collector. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. Input channels are equipped with 3750Vrms DC isolation, and surge protection on RS485 data lines that protect the module and devices against high power voltage input and ground potential differences. For easy user access, TRP-C29 can enter configuration mode and self-test mode with outer dip-switch. TRP-C29 support both ASCII and Modbus protocol, with a full set of command, dual watch-dog, and auto reset function the module can be bi-directionally remote controlled by PC in ASCII or Modbus RTU protocol.

Features

- Wide input range DC power supply..
- Support ASCII and Modbus RTU protocol.
- Supports baud rates from 1.2Kbps to 115.2 Kbps.
- All 8 channels digital input can be used as counter.
- Digital input signal with 3750Vrms isolation protection.
- Dual watchdog: Module's firmware, host computer traffic.
- LED for each channels working status.
- DIN rail and panel mount support.
- Configured and self-test by outer dip-switch.
- Support screw terminal and external DC power adaptor.

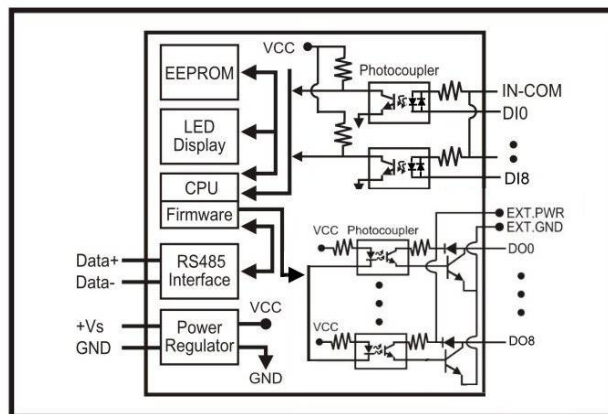
TRP-C29

Isolated 8 CH. DI and 8 CH. O.C RS485 Module

Specifications

- Input channel: 8 digital input channels.
- Input optical isolation: 3750 Vrms.
- Input logical level 0 : +/-1V (max).
- Input logical level 1: +/- 4.0V ~ +/- 30V.
- Digital Input can be used as counter channel:8
- Input counter :Dec 0~65535(max) or Hex 0000~FFFF(max).
- Input impedance: 3Kohm.
- Input Counter frequency: 100Hz.
- Input distance: 500M (max).
- Digital input Maximum voltage: +/-30V.
- Output Maximum current: 100 mA.
- Digital output isolation: 3750Vrms.
- Communication interface: RS-485.
- Communication speed: Baud rate from 1.2kbps to 115.2Kbps.
- Dual watchdog: Hardware reset circuit, module and host operating status.
- Signal LED: Power on, all channels.
- Power supply: Screw terminal, or external DC adapter.
- Connection type: Screw terminal, accepts AWG #12~320 wires
- Power consumption: 1.2W.
- Operating environment: -10 to 50°C.
- Storage temperature: -20 to 70°C.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram



Application Note





■ Introduction

TRP-C68 Ver:2.1, an 8-channel Analog to Digital Converter (ADC), takes an analog input signal and converts the input into a digital output signal. It accepts analog input-a voltage or a current-and supports the sample rate in "Normal" or "Fast" mode. All channels feature screw terminals for convenient connection, All analog inputs are provided with isolation and surge protection to protect the module against high voltage spikes, as well as ground potential differences. TRP-C68 support both ASCII and Modbus protocol, with a full set of command, dual watch-dog, and auto reset function the module can be remote controlled by PC in ASCII or Modbus RTU protocol. TRP-C68 version 2.1 has Built-in resistances to facilitate the user to select current or voltage mode.

■ Features

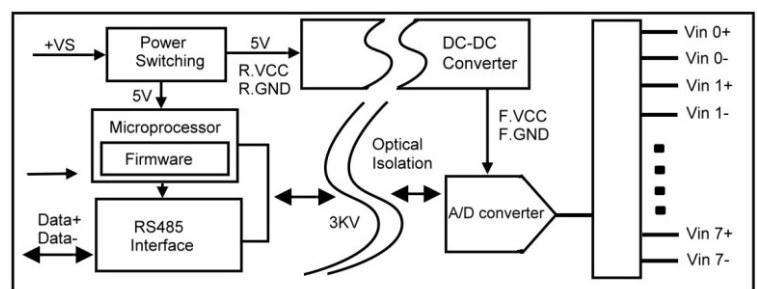
- Support ASCII and Modbus RTU protocol.
- Photo Isolation 3750V between digital and analog.
- All channels can input analog signal by voltage or current.
- Baud rate from 1.2Kbps to 115.2Kbps.
- Surge protection on RS-485 interface.
- LED display to indicate power and communication.
- Dual Watchdog for hardware reset circuit and host operating status.
- External switch for hardware and module's configuration.
- Support screw terminal, or external DC power supply.
- Built-in 125 ohm resistors for each channel can be selected through internal Jumper.
- Wide input range DC power supply.

TRP-C68 Isolated 8 CH. AI RS485 Module

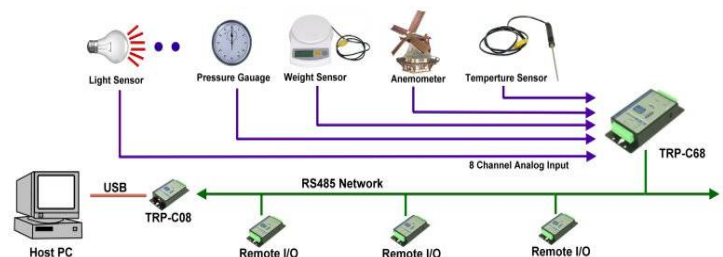
■ Specifications

- Resolution: 16 Bit
- Sample rate:
Normal mode: 10 sample / sec (24 bit).
Fast Mode: 60 sample / sec (16 bit).
- Bandwidth:
Normal Mode: 15.72Hz.
Fast Mode: 78.72Hz...fast.
- Zero drift: 0.03uV/C.
- Span drift: 25 ppm/C.
- Accuracy:
■ Normal 0.1 or better.
■ Fast: 0.5 or better.
- Analog Input range:
Voltage: $\pm 10V, \pm 5V, \pm 2.5V, \pm 1.25V, \pm 650mV$.
Current: $\pm 20 mA$.
- CMRR: 92db min/50/60Hz.
- Analog input over voltage protection: $\pm 48V$.
- RS485 connector: Industrial plug-in screw terminal.
- Communication Interface: RS485, 2 wires.
- LED indicator: Power and communication.
- Transmission distance : 4000ft(1200M).
- Speed: From 1.2K to 115.2Kbps.
- Power consumption: 1.2 Watt.
- Power requirement: DC input from +10 to 30 V.
- Operating Temperature: 0 to 60°C.
- Storage Temperature: -20 to 60°C.
- Humidity: 10-90%, Non-condensing.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 398g.

■ Block Diagram



■ Application Note





■ Introduction

The TRP-C24H is a 16-CH open collect Ethernet I/O module with isolation.

It supports a feature of monostable, and it allows the user to adjust timer value from each channel. These value will be autosave, and it is available from 100ms to 25.5 sec.

There are 3 protocols we supports that, it includes ASCII and Modbus TCP RTU / ASCII.

The watchdog function ensures running stable under harsh environment.

It can allows to connect 1~8 sets of host IP in the network security.

■ Features

- Wide input range DC power supply.
- Automatically determine 3 TRP-ASCII and Modbus RTU/ASCII communication protocol.
- 16 TCP Port can be open at the same time.
- Heart Beat function ensures a reliable communicating connection.
- Maximum 8 sets host IP that limits network access.
- I/O status can be set in the boot.
- WEB PAGE can be directly output and read IO status.
- Easily update the firmware using the Internet.
- Back to factory configuration by external touch Button.
- Auto reconnection when power or Ethernet fail.
- Digital output signal with 3750Vrms isolation protection.
- Built-In watchdog function prevents system boot fail.
- LED for each I/O channels working status.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Power/Link/16 CH DO LED indicator.
- DIN-Rail and panel mount support.
- Dual power input select from screw terminal or DC-Jack.

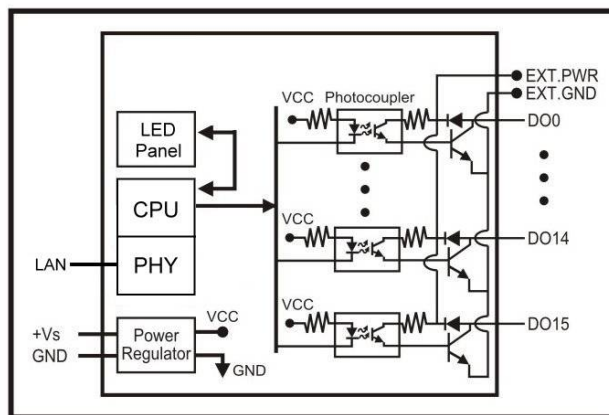
TRP-C24H

Isolated 16-channel Open Collector Modbus TCP Module

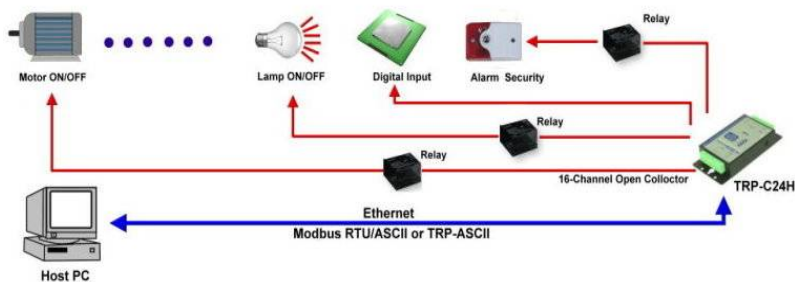
■ Specifications

- Power Input Voltage DC +10V to +30V.
- Protocol: TRP-ASCII and Modbus RTU/ASCII.
- Digital output maximum voltage: +30V.
- Digital output maximum current: 100mA.
- Digital output isolation: 3750Vrms.
- Pulse timer: 1~65535 (100ms/unit).
- Communication interface: Ethernet RJ45.
- Configuration mode: Trycom Device Manager, WEB settings.
- Matching remote control: with TRP-C26H.
- Heart Beat: TCP Port sent string every 5 seconds.
- TCP Maximum Connection: 1~16.
- Module ID : 1~255.
- Connection type: Screw terminal for maximum AWG 12 wire.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption 240mA/12V.
- Operating environment: 0 to 50°C.
- Storage temperature: -10 to 70°C.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g

■ Block Diagram



■ Application Note





■ Introduction

The TRP-C26H is a 16-ch digital Input collect Ethernet I/O module with isolation.

It allows the user to connect 16-ch signals from 4V to 30V,

It have a normal I/O except the counter function.

There are 3 protocols we supports that, it includes ASCII and Modbus TCP RTU / ASCII.

The watchdog function ensures running stable under harsh environment.

It allows to connect 1~8 sets of host IP in the network security.

■ Features

- Wide input range DC power supply.
- Automatically determine 3 TRP-ASCII and Modbus RTU/ASCII communication protocol.
- 16 TCP Port can be open at the same time.
- Heart Beat function ensures a reliable communicating connection.
- Maximum 8 sets host IP that limits network access.
- Support Virtual-COM mode.
- WEB PAGE can be directly read IO status.
- Easily update the firmware using the Internet.
- Back to factory configuration by external touch Button.
- Auto reconnection when power or Ethernet fail.
- Digital input signal from +/- 0 to 30V DC.
- Built-In watchdog function prevents system boot fail.
- LED for each I/O channels working status.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Power/Link/16 CH DI LED indicator.
- DIN-Rail and panel mount support.
- Dual power input select from screw terminal or DC-Jack.

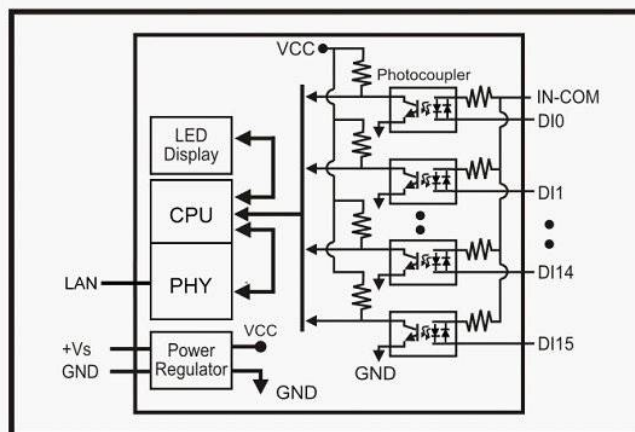
TRP-C26H

Isolated 16-channel Digital Input with counter Modbus TCP Module

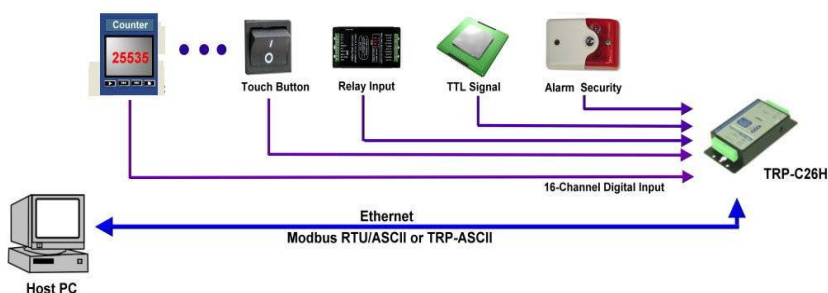
■ Specifications

- Power Input Voltage DC +10V to +30V.
- Protocol: TRP-ASCII and Modbus RTU/ASCII.
- Input channel: 16 digital input channels with counter.
- Input digital input counter: 0~65535.
- Input optical isolation: 3750 Vrms.
- Input logical level 0 +1V (max).
- Input logical level 1 +4.0V ~ +30V.
- Communication interface: Ethernet RJ45.
- Configuration mode: Trycom Device Manager, WEB settings.
- Matching remote control: with TRP-C24H.
- Heart Beat: TCP Port sent string every 5 seconds.
- TCP Maximum Connection: 1~16.
- Module ID : 1~255.
- Connection type: Screw terminal for maximum AWG 12 wire.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption 240mA/12V.
- Operating environment: 0 to 50°C.
- Storage temperature: -10 to 70°C.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g.

■ Block Diagram



■ Application Note





Introduction

The TRP-C28H is a 4-ch digital Input and 4-ch relay Ethernet I/O module with isolation.

It allows the user to connect the signals from 4V to 30V, and the Relay can connect AC voltage directly. Each contact of relays we built-in safety surge protection to prevent a spark.

It has a normal I/O except the counter function.

There are 3 protocols we support that, it includes ASCII and Modbus TCP RTU / ASCII.

The watchdog function ensures running stable under harsh environment.

It allows to connect 1~8 sets of host IP in the network security.

Features

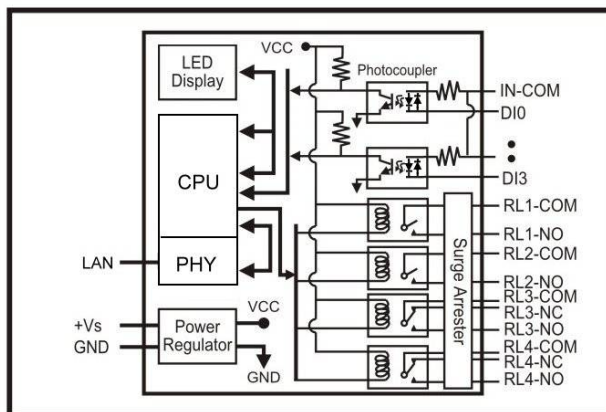
- Wide input range DC power supply.
- Automatically determine 3 TRP-ASCII and Modbus RTU/ASCII communication protocol.
- 16 TCP Port can be open at the same time.
- Heart Beat function ensures a reliable communicating connection.
- Maximum 8 sets host IP that limits network access.
- Support Virtual-COM mode.
- WEB PAGE can be directly read IO status.
- Back to factory configuration by external touch Button.
- Auto reconnection when power or Ethernet fail.
- Digital input signal from +/- 0 to 30V DC.
- Built-in surge absorber in each relay N.C and N.O.
- Built-In watchdog function prevents system boot fail.
- LED for each I/O channels working status.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Power/Link/8 CH D I/O LED indicator.
- Dual power input select from screw terminal or DC-Jack.

TRP-C28H Isolated 4 DI and 4 AC Relay Modbus TCP Module

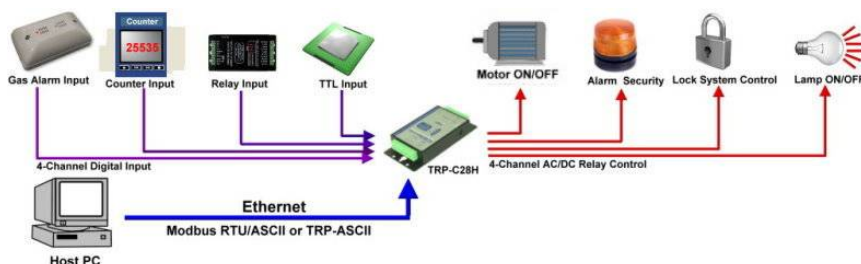
Specifications

- Power Input Voltage DC +10V to +30V.
- Protocol: TRP-ASCII and Modbus RTU/ASCII.
- Input channel: 4 digital input channels with counter.
- Input digital input counter: 0~65535.
- Input optical isolation: 3750 Vrms.
- Input logical level 0 +1V (max).
- Input logical level 1 +4.0V ~ +30V.
- Output channel: 4 channel power relay outputs.
- Relay type: 2 Form A (RL1,RL2) , 2 Form C (RL3,RL4).
- Contact rating: 5A /30V DC , 5A /120V AC , 5A /250V AC.
- Relay surge strength: 4000V.
- Relay operating time: 3mS.
- Relay operating life: 2 X 10⁷.
- Communication interface: Ethernet RJ45.
- Configuration mode: Trycom Device Manager, WEB settings.
- Matching remote control: with another TRP-C28H.
- Heart Beat: TCP Port sent string every 5 seconds.
- TCP Maximum Connection: 1~16.
- Module ID : 1~255.
- Connection type: Screw terminal for maximum AWG 12 wire.
- Power supply: Screw terminal, or external DC adapter.
- Power consumption 320mA/12V.
- Operating environment: 0 to 50°C.
- Storage temperature: -10 to 70°C.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g .

Block Diagram



Application Note





■ Introduction

TRP-C37 is suitable industrial environment Ethernet serial server, wide range power input and serial communicate protection, Built-in surge, over current, over voltage ensure long distance serial quality, the RS485 interface built-in hardware decoder ensure RS485 data without lost and fast direction switching, Specify hardware can keep on line RS485 device working fine; Increase external watchdog function will auto reset when Ethernet serial server or power fail, if careless lost password or IP that can easy to back to factory by external switch. The TRP-C37 operates in "Direct IP Mode", "Virtual COM Mode", and "Paired Mode". It has one DB-9 serial port for RS232 connector and screw terminal block for RS422/485 and power. The Ethernet port support Auto-MDIX and Auto-select 10/100MB. TRP-C37 also offers a Heart Beat feature to ensure a reliable communicating connection. The TRP-C37 support maximum connection 16 host clients to link the one serial server that is easy to operate in Modscan32 and Modbus Poll application uses Virtual-COM mode and Pair Mode. When TRP-C37 working at industrial environment, if the voltage is unstable, The TRP-C37 built-in power detection circuit can prevent the power fail cause of the system boot fail. In network security, the TRP-C37 is able to set up 8 sets host IP, only these host IP can access the TRP-C37.

■ Features

- Wide input range DC power supply.
- Power Input detection circuit.
- External watchdog function prevents system or power fail.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Maximum Connection 16 Client PC at Server Mode.
- Maximum 8 sets host IP that limits network access.
- Surge protection and over current and over voltage on RS-422/485 data lines.
- Support baud rate from 1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7/WIN 8/WIN 8.1/WIN10.
- Virtual Com Support Server, Client, UDP mode.

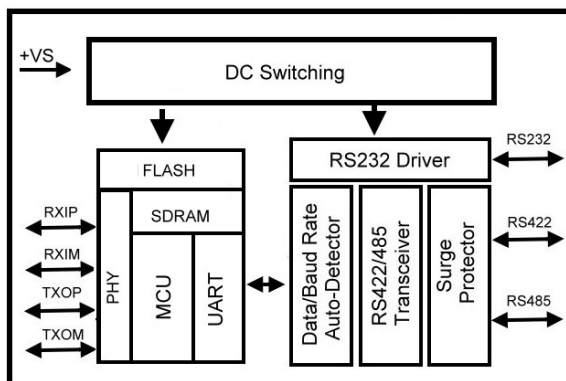
TRP-C37 Ethernet to RS-232/422/485 Converter

- Fully compatible with Ethernet and TCP/IP protocol.
- Supports 10/100 Mbps Ethernet.
- Power/Link/RX/TX mode LED indicator.
- Heart Beat function ensures a reliable communicating connection.
- Auto Pair-mode when power or Ethernet fails.
- Back to factory by external switch.
- Support configuration by serial console.
- Update the firmware from Lan.
- Dual power input select from screw terminal or DC-jack.

■ Specifications

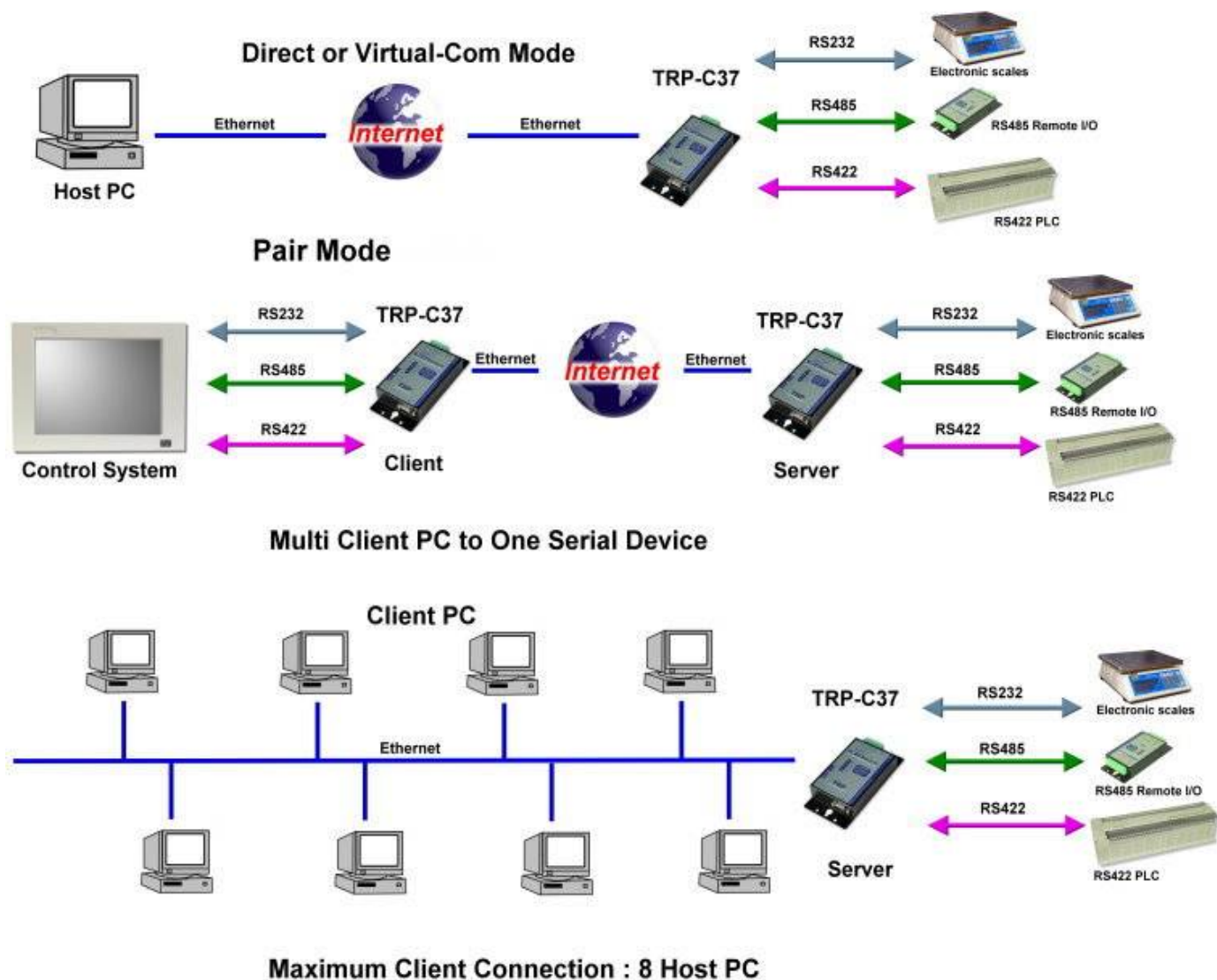
- Power Input Voltage: DC +10V to +30V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, RTS, CTS, DTR, DSR, DCD, GND.
- RS485 signal: differential 2 half-duplex wires (DATA+, DATA-).
- RS422 signal: differential 4 full-duplex wires (TX+, RX+, TX-, RX-).
- Data Rate: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 921600 K bps.
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 1.5 or 2.
- Protocol: TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP
- External switch 1,2: OFF/OFF : TCP and VSP mode.
ON/OFF : Option.
OFF/ON : Option.
ON/ON : Back to Factory.
- Virtual-Com RS232 TXD, RXD, GND.
RS422 TX+, TX-, RX+, RX-.
RS485 DATA+, DATA-.
- Heartbeat function: TCP 5300 port send a strings per 5 seconds.
- Maximum TCP connections at the same time: 16.
- Power supply: Screw terminal or DC jack.
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- Power consumption: 12V/140mA.
- Operating Temperature: -10 to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 151(L)*75(W)*26(H) mm.
- Weight: 305g with packing.

■ Block Diagram



TRP-C37 Ethernet to RS-232/422/485 Converter

■ Application Note





■ Introduction

In addition to serial server function, The TRP-C37A is able to remote monitoring serial device.

There are 2 models to choose from:

Automatic monitoring mode:

The Serial device must be sends a single pulse to TRP-C37A continually per 30 seconds.

If serial device do not send a single pulse over 30 seconds ,the TRP-C37A will be actives the relay.

Manual mode:

If the serial device need to restart, user can feel free to set the relay enable through the TRP-C37 A web configuration.

■ Features

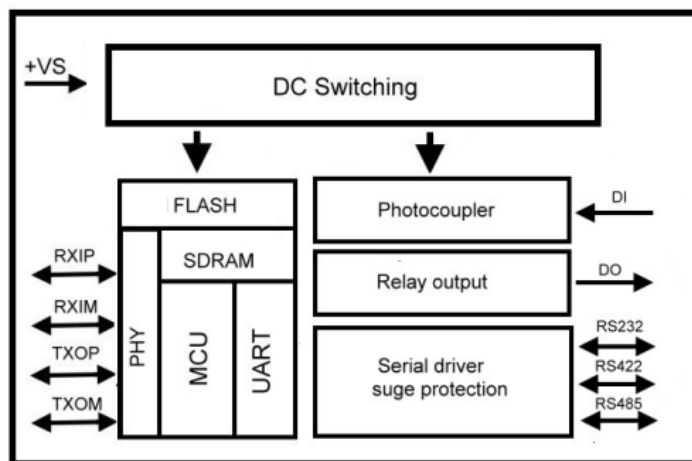
- Automatic remote monitoring serial device.
- Automatic restart the serial device.
- Direct active the relay by web page.
- Read the counter value and DI status from web page.
- Adjustable relay latch time from web page.
- Wide input range DC power supply.
- Power Input detection circuit.
- External watchdog function prevents system or power fail.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Maximum Connection 16 Client PC at Server Mode.
- Maximum 8 sets host IP that limits network access.
- Surge protection and over current and over voltage on RS-422/485 data lines.
- Support baud rate form 1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7/WIN 8/WIN 8.1/WIN10.
- Virtual Com Support Server, Client, UDP mode.
- Fully compatible with Ethernet and TCP/IP protocol.
- Supports 10/100 Mbps Ethernet.
- Power/Link/RX/TX mode LED indicator.
- Heart Beat function ensures a reliable communicating connection.
- Auto Pair-mode when power or Ethernet fails.
- Back to factory by external switch.
- Support configuration by serial console.
- Update the firmware from LAN.
- Dual power input select from screw terminal or DC-jack

TRP-C37A RS232/422/485 Serial Device Server with Remote Monitoring

■ Specifications

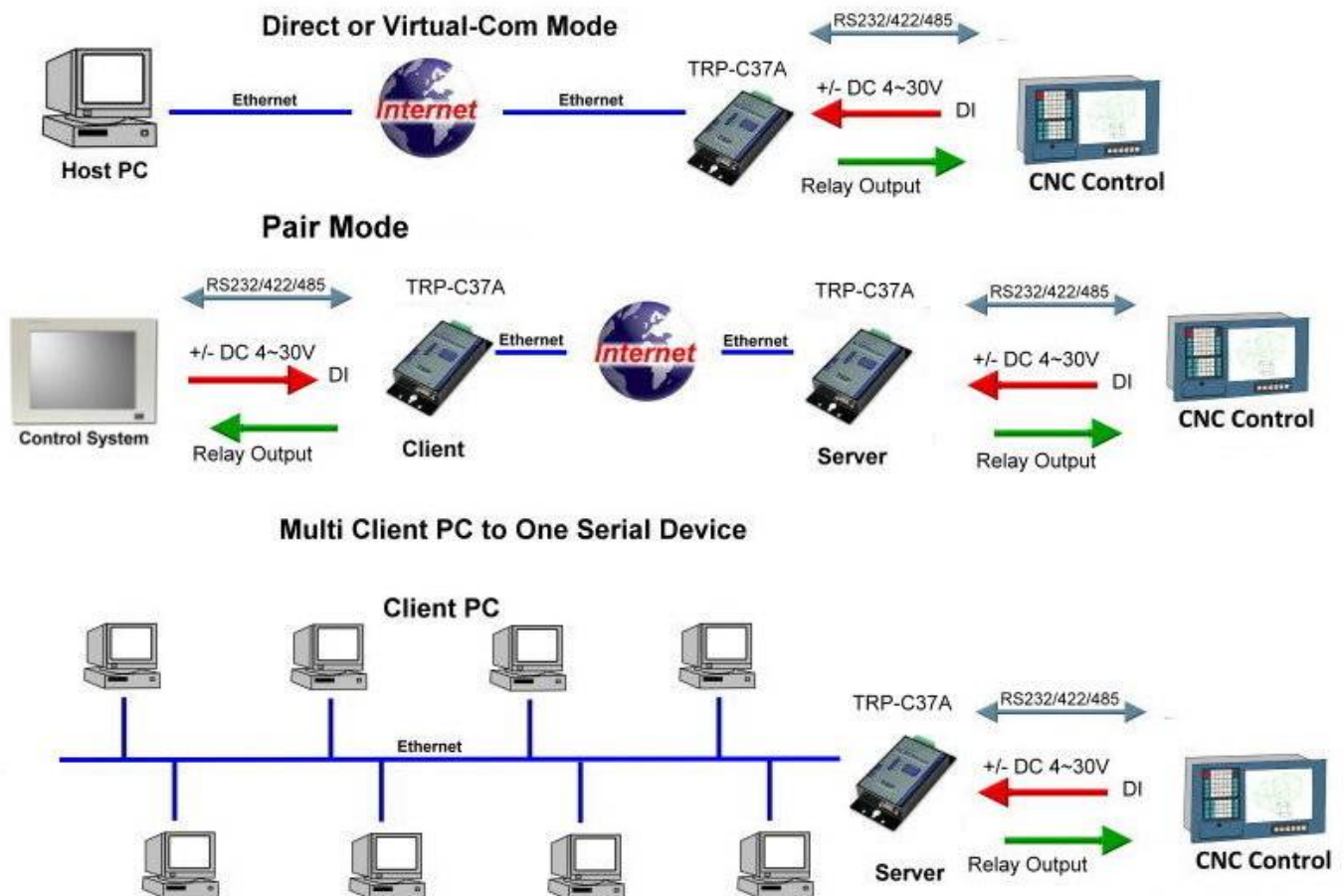
- Power Input Voltage: DC +10V to +30V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, RTS, CTS, DTR, DSR, DCD, GND.
- RS485 signal: differential 2 half-duplex wires (DATA+, DATA-).
- RS422 signal: differential 4 full-duplex wires(TX+,RX+,TX-,RX-).
- Data Rate: 1200,2400,4800,9600,19200,38400,57600,115200,921600 K bps .
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 1.5 or 2.
- Protocol: TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP
- External switch 1,2:OFF/OFF :TCP and VSP mode.
 - ON/ OFF : Option .
 - OFF/ON :Option.
 - ON/ON :Back to Factory.
- Virtual-Com RS232 TXD,RXD,GND.
- RS422 TX+,TX-,RX+,RX-.
- RS485 DATA+,DATA-.
- Heartbeat function: TCP 5300 port send a strings per 5 seconds.
- Maximum TCP connections at the same time: 16.
- Digital I / O connector: D-type 9PIN female.
- Digital input an effective voltage: DC +/- 4 ~ 30V.
- Digital Input count : 0~65535.
- Relay setting start to closing time: 1 ~ 255 (ms / unit).
- Relay specifications: two independent NC, COM, NO.
- Relay contact capacity: AC 125V / 0.5A, DC 30V / 2A, DC110V / 0.3A.
- Power supply: Screw terminal or DC jack .
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- Power consumption: 12V/150mA.
- Operating Temperature:-10 to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 151(L)*75(W)*26(H) mm.
- Weight: 410g with packing.

■ Block Diagram

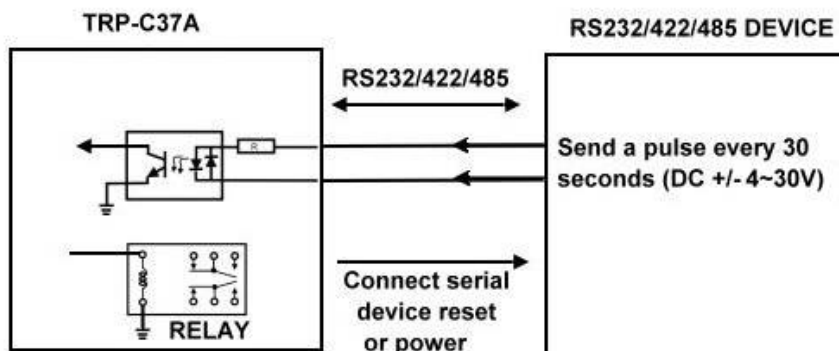


TRP-C37A RS232/422/485 Serial Device Server with Remote Monitoring

Application Note



Remote automatic monitoring



It will be causes the relay active when the TRP-C37A does not receives a pulse over 30 sec.
The relay actuation time is adjustable by the TRP-C37A WEB interface.



■ Introduction

TRP-C37M is an industrial environmental Ethernet serial server with wide range power inputs and serial communication protection, built-in surge and over current protection ensuring long distance serial quality. The RS485 interface built-in hardware decoder ensures RS485 data without loss and fast direction switching. The hardware keeps on line RS485 device working fine; Built-In watchdog function will auto reset when system fail or power fails. External switch ensures loss of password or IP that can be easily reset back to factory settings. The TRP-C37M operates in "Direct IP Mode", "Virtual COM Mode", and "Paired Mode", The Ethernet port supports Auto-MDIX and Auto-select 10/100MB. TRP-C37M also offers a Heart Beat feature to ensure a reliable communicating connection.

TRP-C37M also offers the maximum connection 16 host client to link the one serial server that is easy to operate in Modscan32, Modbus Poll, CAS Modbus Scanner and SCADA application uses TCP mode, Virtual-COM mode and Pair Mode. In network security, the TRP-C37M is able to set up 8 sets host IP, only these host IP can access the TRP-C37M.

When the TRP-C37M MCU stop working correctly, the watchdog timer waits for a preset period of time, and the performs a hardware reset.

When TRP-C37M working at industrial environment, if the voltage is unstable, The TRP-C37M built-in power detection circuit can prevent the power fail cause of the system boot fail.

■ Features

- Wide input range DC power supply.
- Power Input detection circuit.
- External watchdog function prevents system or power fail.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Maximum Connection 16 Client PC at Server Mode.
- Compatible with Modscan32, Modbus Poll, CAS Modbus Scanner and SCADA .. application.
- Maximum 8 sets host IP that limits network access.

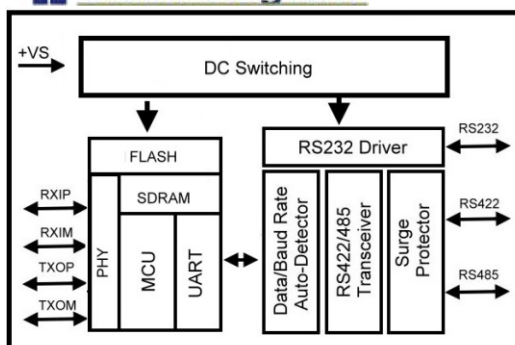
TRP-C37M Modbus TCP to RTU/ASCII Gateway

- Surge protection and over current and over voltage on RS-422/485 data lines.
- Support baud rate from 1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7/WIN 8/WIN 8.1/WIN 10.
- Virtual Com Support Server, Client, UDP mode.
- Virtual Com Support Modscan32 or Modbus Poll utility.
- Fully compatible with Ethernet and TCP/IP protocol.
- Supports 10/100 Mbps Ethernet.
- Power/Link/UART RX/UART TX mode LED indicator.
- Heart Beat function ensures a reliable communicating connection.
- Auto reconnection when power or Ethernet fail.
- Back to factory configuration by external switch.
- Update the firmware from LAN.
- Dual power input select from screw terminal or DC-Jack.

■ Specifications

- Power Input Voltage: DC +10V to +30V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, RTS, CTS, DTR, DSR, DCD, GND.
- RS485 signal: differential 2 half-duplex wires (DATA+, DATA-).
- RS422 signal: differential 4 full-duplex wires.(TX+,RX+,TX-,RX-)
- Baud Rate: 1200,2400,4800,9600,19200,38400,57600,115200,921600 K bps.
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 1.5 or 2.
- Protocol: TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP.
- Modbus TCP Type: TCP Master to Serial Slave, TCP Slave to Serial Master.
- TCP Slave to Serial Master Mode: Maximum 8 TCP Port. UID Range:00~FF.
- External switch: OFF OFF : Directly IP mode, RTU protocol. .
- ON OFF: Virtual-Com and Paired mode .
- OFF ON: Directly IP mode, ASCII protocol
- ON ON: Back to Factory.
- Virtual-Com mode support RS232 TXD,RXD,GND.
- RS422 TX+,TX-,RX+,RX-.
- RS485 D+,D-.
- Power supply: Screw terminal, or DC jack.
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- RS422/485 interface: Industrial plug-in screw terminal.
- Plug-in screw terminal wiring: Accepts AWG #12 ~30 wires.
- Power consumption: 12V/140mA.
- Operating Temperature: -10 to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 151(L)*75(W)*26(H) mm.
- Weight: 395g with packing.

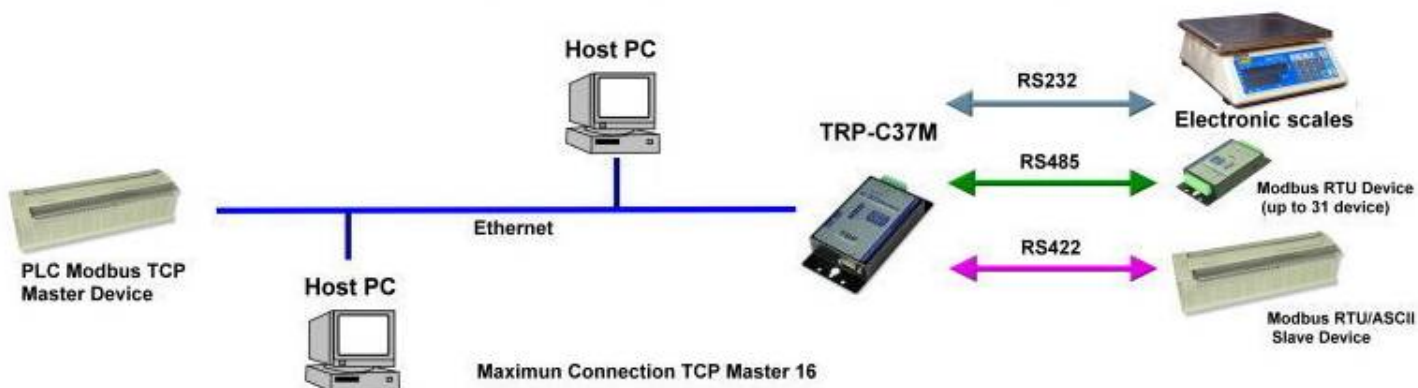
■ Block Diagram



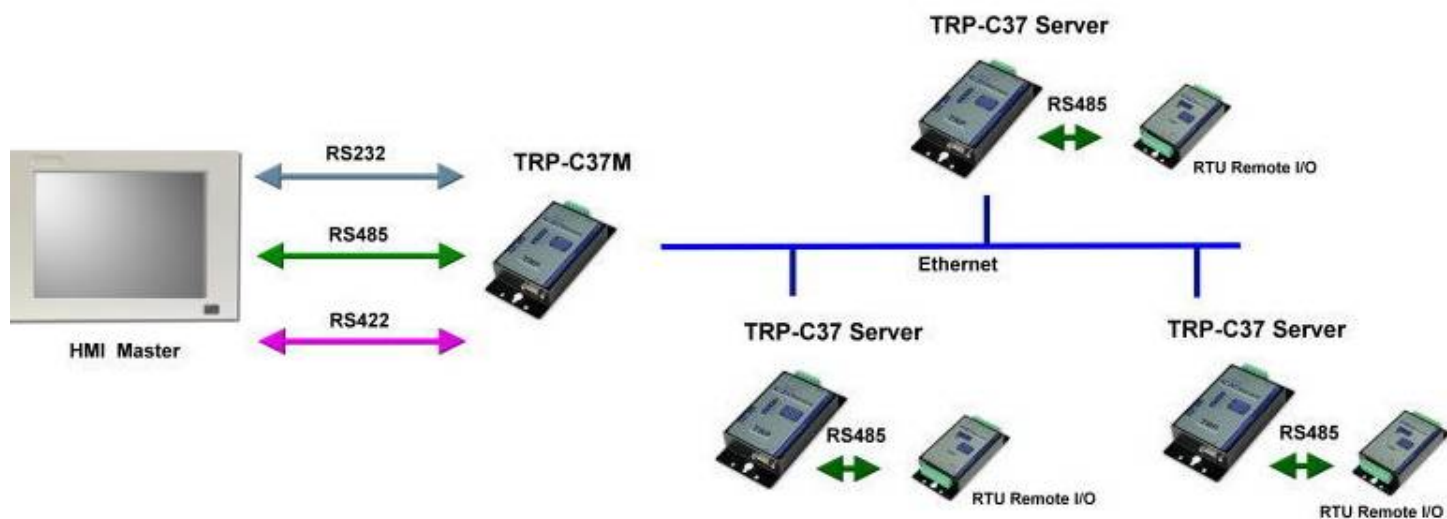
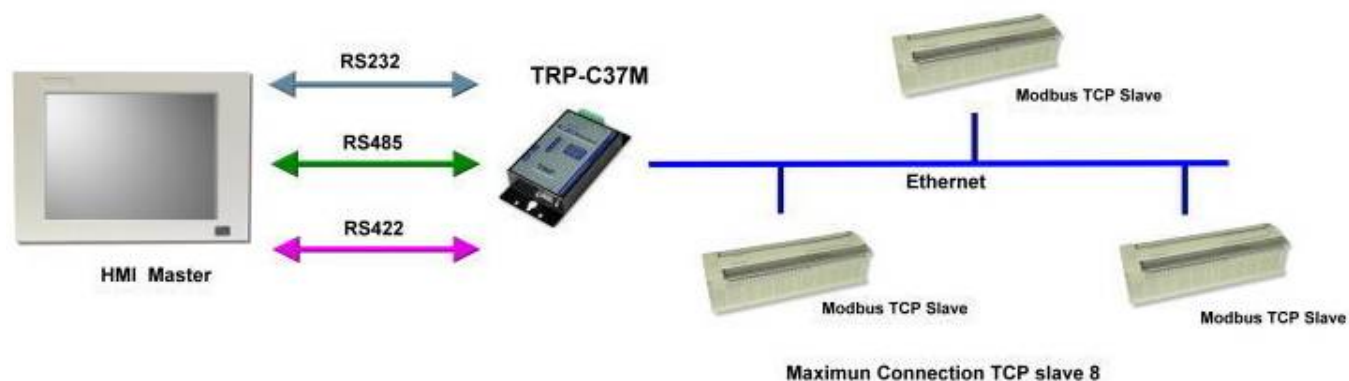
Application Note

TRP-C37M Modbus TCP to RTU/ASCII Gateway

Modbus TCP Master to Serial Slave Mode

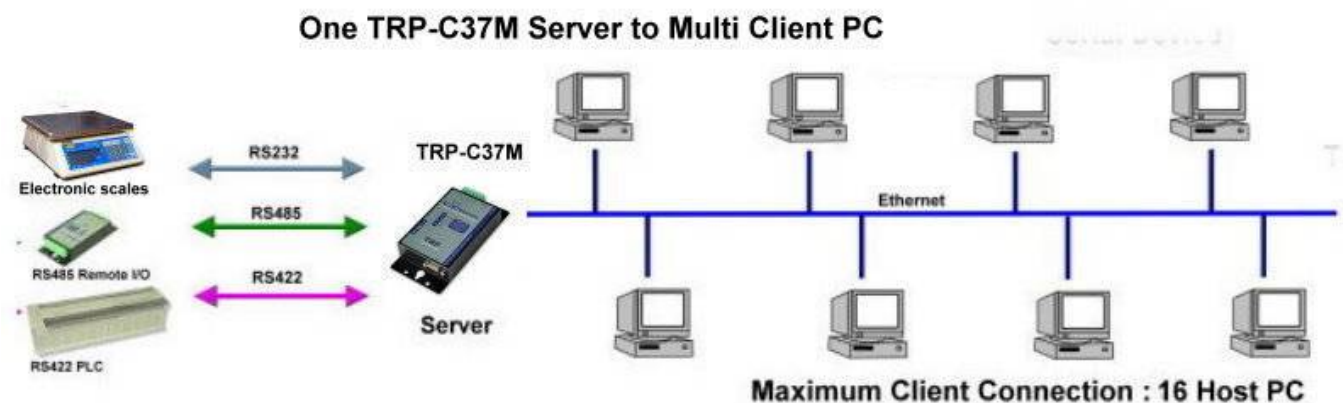
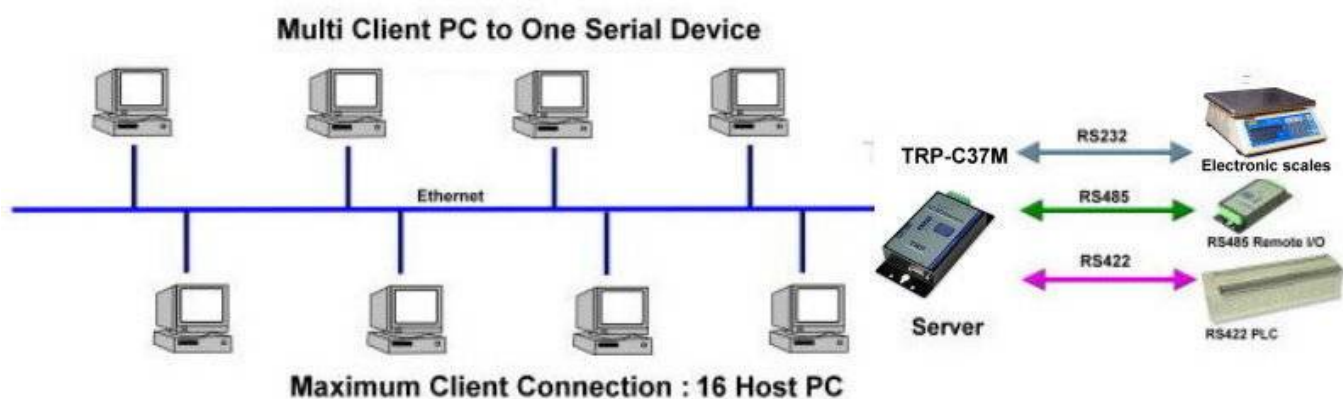
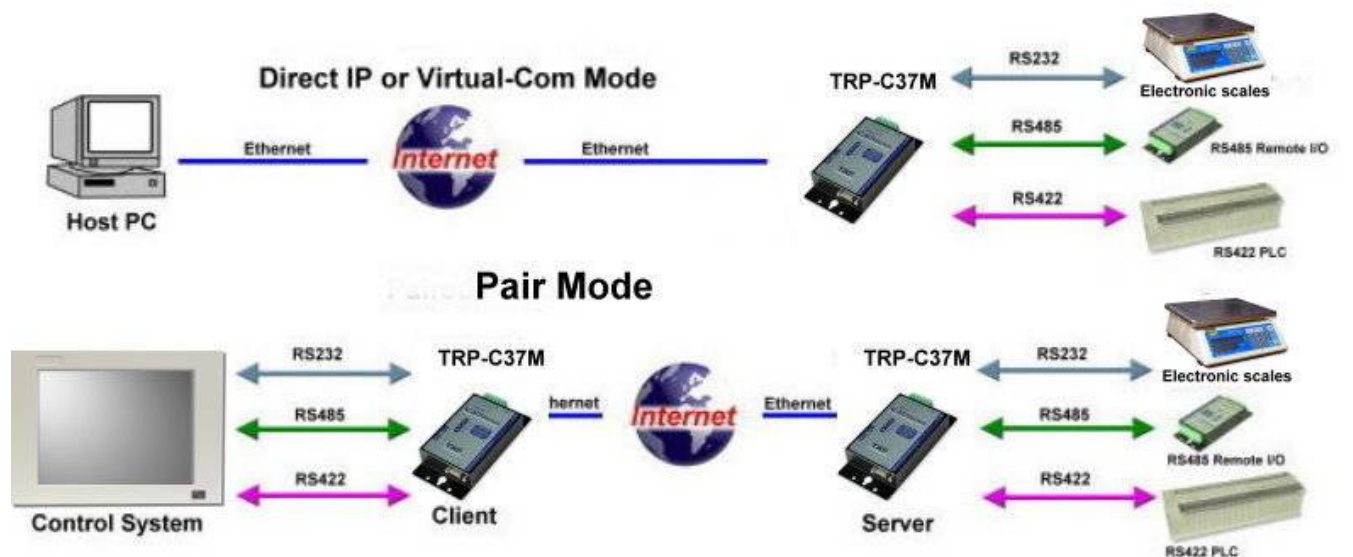


Modbus TCP Slave to Serial Master Mode



TRP-C37M Modbus TCP to RTU/ASCII Gateway

Bridge Mode Dip switch 1,2 ON,OFF





Introduction

In addition to Modbus TCP to RTU/ASCII function, The TRP-C37MA is able to remote monitoring serial device.

There are 2 models to choose from:

Automatic monitoring mode:

The Serial device must be sends a single pulse to TRP-C37MA continually per 30 seconds.

If serial device do not send a single pulse over 30 seconds ,the TRP-C37MA will be actives the relay.

Manual mode:

If the serial device need to restart, user can feel free to set the relay enable through the TRP-C37MA web configuration.

Features

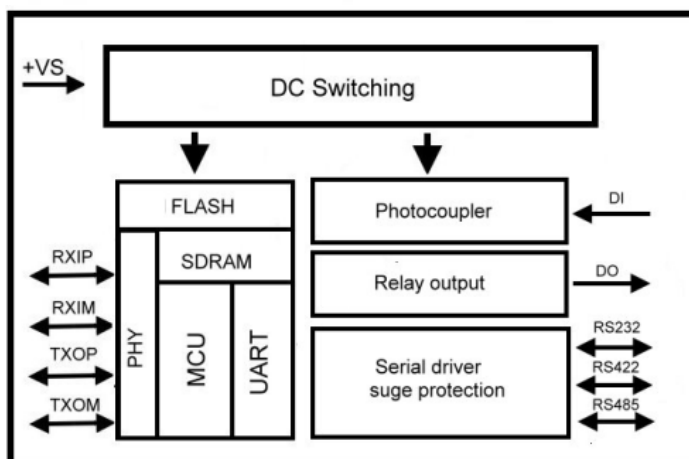
- Automatic remote monitoring serial device.
- Automatic restart the serial device.
- Direct active the relay by web page.
- Read the counter value and DI status from web page.
- Adjustable relay latch time from web page.
- Wide input range DC power supply.
- Power Input detection circuit.
- External watchdog function prevents system or power fail.
- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.
- Maximum Connection 16 Client PC at Server Mode.
- Compatible with Modscan32 ,Modbus Poll,CAS Modbus Scanner and SCADA .. application.
- Maximum 8 sets host IP that limits network access.
- Surge protection and over current and over voltage on RS-422/485 data lines.
- Support baud rate from 1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7/WIN 8/WIN 8.1/WIN10.
- Virtual Com Support Server, Client, UDP mode.
- Virtual Com Support Modscan32 or Modbus Poll utility.
- Fully compatible with Ethernet and TCP/IP protocol.
- Supports 10/100 Mbps Ethernet.
- Power/Link/UART RX/UART TX mode LED indicator.
- Heart Beat function ensures a reliable communicating connection.
- Auto reconnection when power or Ethernet fail.
- Back to factory configuration by external switch.
- Update the firmware from LAN.
- Dual power input select from screw terminal or DC-Jack.

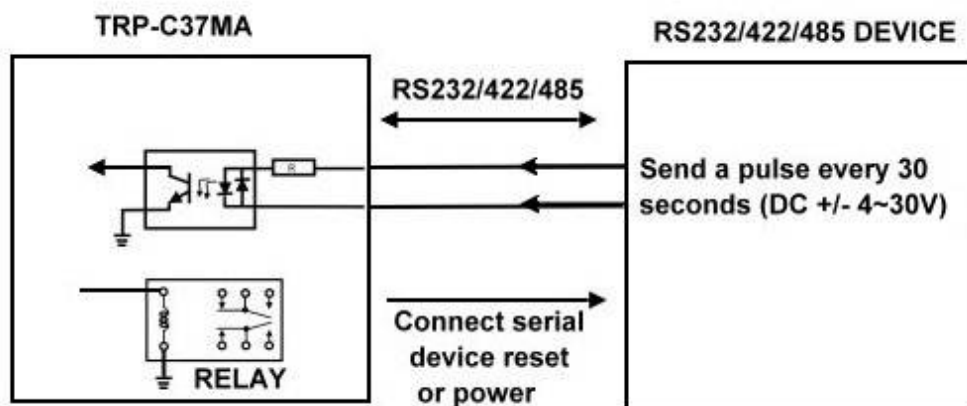
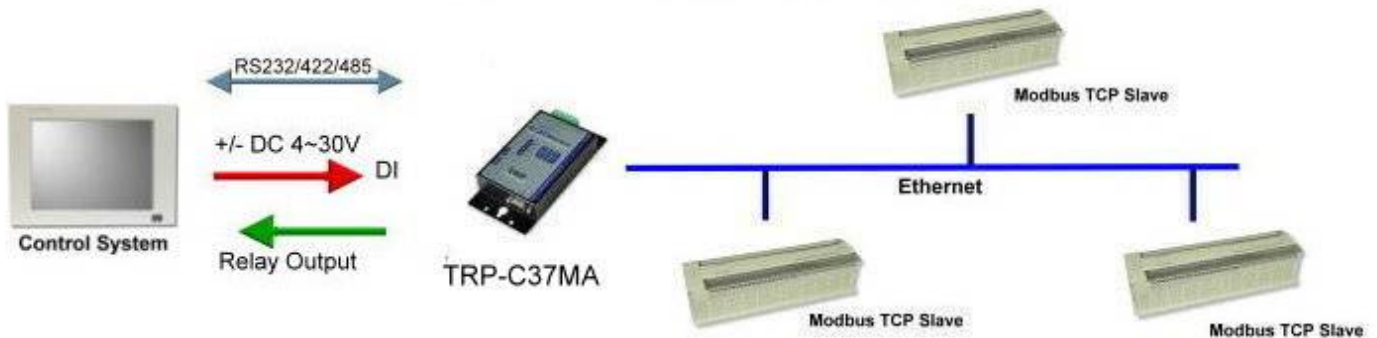
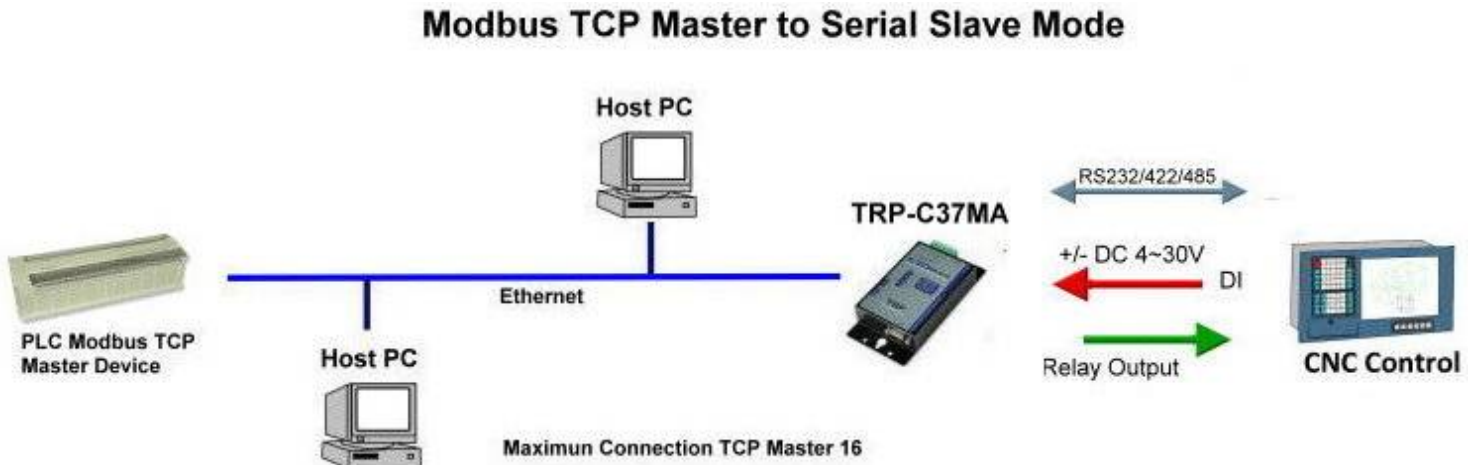
TRP-C37MA Modbus TCP to RTU/ASCII Gateway with Remote Monitoring

Specifications

- Power Input Voltage: DC +10V to +30V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, RTS, CTS, DTR, DSR, DCD, GND.
- RS485 signal: differential 2 half-duplex wires (DATA+, DATA-).
- RS422 signal: differential 4 full-duplex wires.(TX+,RX+,TX-,RX-)
- Baud Rate: 1200,2400,4800,9600,19200,38400,57600,115200,921600 K bps.
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 1.5 or 2.
- Protocol: TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP.
- Modbus TCP Type: TCP Master to Serial Slave, TCP Slave to Serial Master.
- TCP Slave to Serial Master Mode: Maximum 8 TCP Port. UID Range:00~FF.
- External switch: OFF OFF : Directly IP mode, RTU protocol. .
- ON OFF: Virtual-Com and Paired mode .
- OFF ON: Directly IP mode, ASCII protocol
- ON ON: Back to Factory.
- Virtual-Com mode support RS232 TXD,RXD,GND.
- RS422 TX+,TX-,RX+,RX-.
- RS485 D+,D-.
- Heartbeat function: TCP 5300 port send a strings per 5 seconds.
- Maximum TCP connections at the same time: 16.
- Digital I / O connector: D-type 9PIN female.
- Digital input an effective voltage: DC +/- 4 ~ 30V.
- Digital Input count : 0~65535.
- Relay setting start to closing time: 1 ~ 255 (ms / unit).
- Relay specifications: two independent NC, COM, NO.
- Relay contact capacity: AC 125V / 0.5A, DC 30V / 2A, DC110V / 0.3A.
- Power supply: Screw terminal, or DC jack.
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- RS422/485 interface: Industrial plug-in screw terminal.
- Plug-in screw terminal wiring: Accepts AWG #12~30 wires.
- Power consumption: 12V/140mA.
- Operating Temperature: -10 to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 151(L)*75(W)*26(H) mm.
- Weight: 395g with packing.

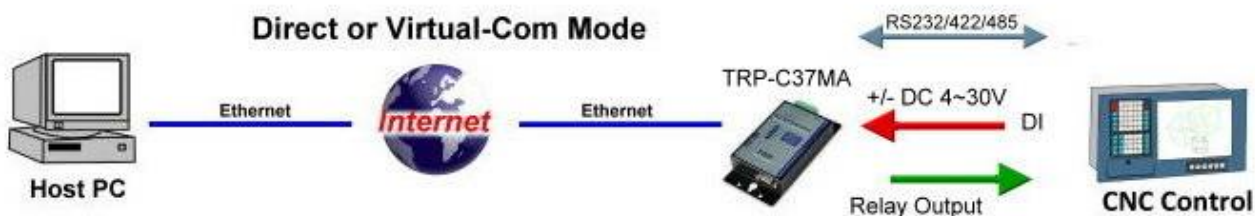
Block Diagram



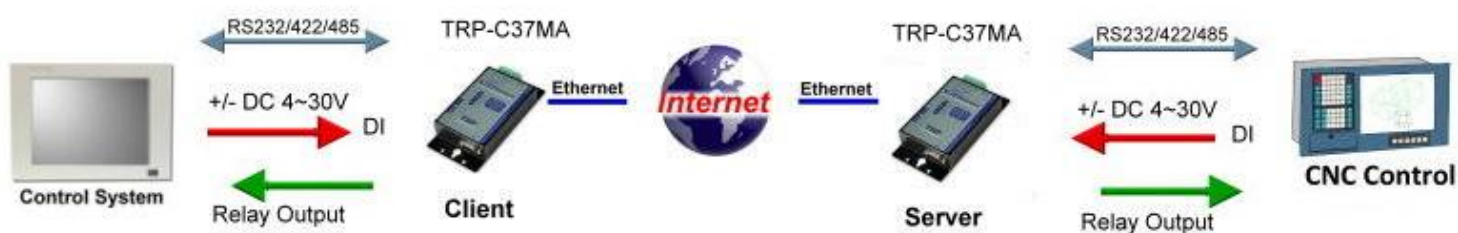


TRP-C37MA Modbus TCP to RTU/ASCII Gateway with Remote Monitoring

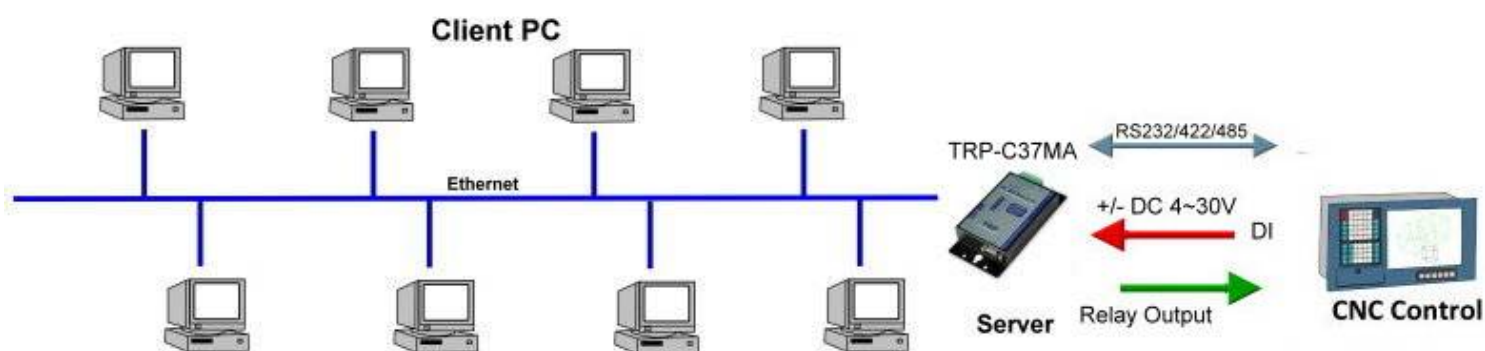
Direct or Virtual-Com Mode



Pair Mode



Multi Client PC to One Serial Device



Maximum Client Connection : 8 Host PC



■ Introduction

TRP-C34R 4 RS232/422/485 Serial Server provides a transparent way of connecting Serial devices over Ethernet. It can transmit data between the Serial and Ethernet interfaces bi-directionally. To establish automatic or remote data acquisition.

By specifying the IP address and the TCP Port number, a host computer can access different Serial Devices such as Serial Modems, Serial Thermometers, Magnetic Card Readers, Barcode Scanners, Data Acquisition Systems, POS Terminals, Industrial PCs etc., over the Network. By using TRP-C34R Serial Server, you can centralize Serial Device management and distribute the management to different hosts at the same time. TRP-C34R Serial Server makes possible to access distant Serial Devices over Network as if they were directly connected to the COM Port of a Personal Computer.

TRP-C34R Serial Server supports 4 Serial Ports and allows you to control that much number of RS-232/RS-422/RS-485 Serial devices over Ethernet.

TRP-C34R Serial Server supports different modes of operation allowing user to operate the system in different environments.

Real COM Mode/ TCP Server Mode / TCP Client Mode/ UDP Mode.

TRP-C34R hardware support wide range power input, the 4 RS422/485 interface with surge, over current, over voltage protection, the RS485 interface built-in hardware decoder ensure RS485 data without lost, Specify hardware can ensure on line RS485 device working fine. The TRP-C34R has four synchronous DB-9 serial port for RS232 connection and 4 screw terminal block for RS422/485 and power connection. The Ethernet port support Auto-MDIX and auto-select 10/100MB.

TRP-C34R 4 RS232/422/485 Serial 3KV Isolated Server with Watchdog

■ Features

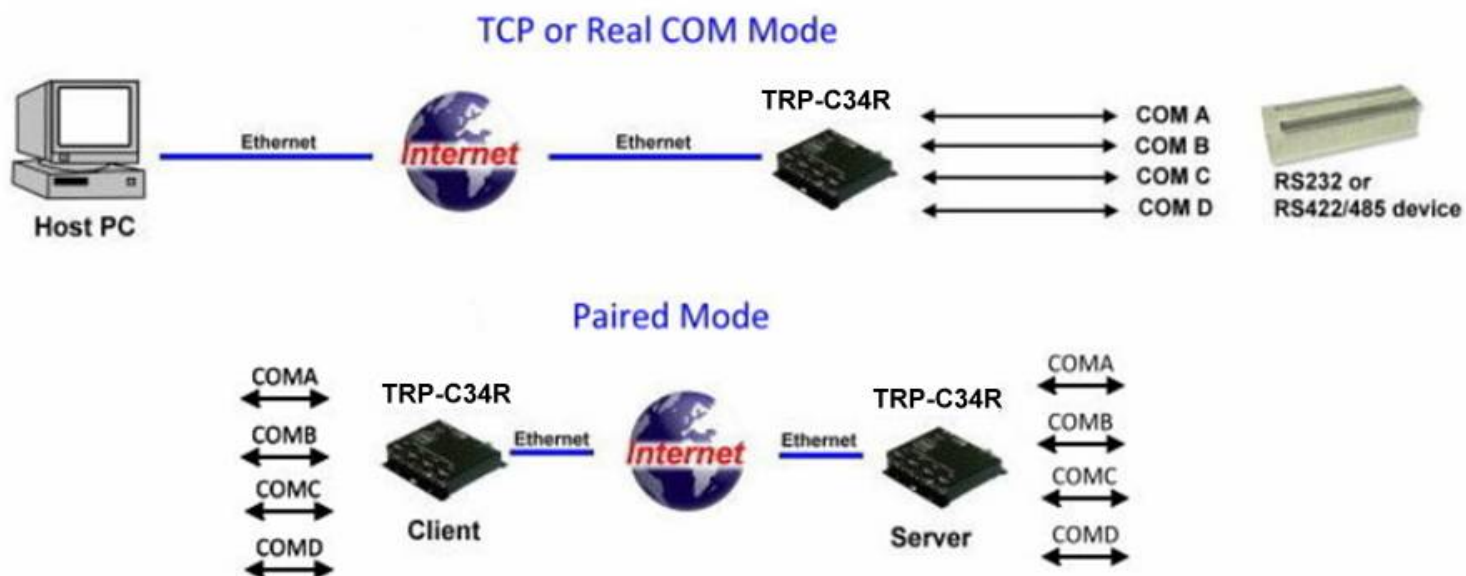
- Wide input range DC power supply.
- Supports Socket operation modes like TCP Server, TCP Client, and UDP using TCP/IP and UDP protocols.
- Support Auto-MDIX twisted pair crossover detection and auto-correction.
- Each Port maximum connection 4 host PC at TCP Server and TCP Client Mode.
- Maximum allowed bandwidth is 230.4 Kbps per Serial Port.
- Supports Web Console, Telnet Console.
- Runs in Stand Alone Mode.
- Built in Restore Factory default push button.
- Features Accessible Imps List to add or remove "legal" remote host IP Addresses to prevent unauthorized access to Serial Server.
- Features Auto IP Address Report to periodically report the IP Address of Serial Server to the assigned Host on Network.
- Auto direction RS485 flow control by hardware.
- Surge protection and over current and over voltage on RS-422/485 data lines.
- Virtual COM drivers for WIN 32bit XP /Vista/2003Server/2008 Server (32-bit & 64-bit), 2000 Server OS, Win 7 (32-bit & 64-bit), Win 8/8.1 (32-bit & 64-bit).
- Fully compatible with Ethernet and TCP/IP protocol.
- Supports 10/100 Mbps Ethernet.
- Power/Link and 4 pair Serial RX/TX mode LED indicator.
- Support screw terminal and standard external DC power adaptor.
- panel mounts support.

■ Specifications

- CPU: 32 bit 580MHZ with MMU.
- Power Input Voltage: DC +9V to +24V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, GND.
- RS-422: TX+, TX-, RX+, RX-.
- RS-485: Data +, Data -.
- Data Rate: 75~230.4Kbps.
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 2.
- Configuration through Windows Admin Utility / Web Console / Telnet Console.
- Protocol: ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, PPPoE, DDNS, NTP, FTP, Telnet.
- Power supply: Screw terminal, or standard external DC adapter.
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- Serial terminal and Ethernet with 3KV Optical Isolation.
- Power consumption: 12V/400 mA.
- Operating Temperature: -20 °C to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 180(L)*110(W)*30(H)/mm.
- Weight: 400g (W/Packing).

TRP-C34R 4 RS232/422/485 Serial 3KV Isolated Server with Watchdog

■ Application Note





■ Introduction

TRP-C34M are able to convert between Modbus TCP and Modbus RTU/ASCII protocols, 4 ports RS232/422/485 ports can choose connect the Modbus RTU/ASCII slave serial devices up to 31 Device independent.

The TRP-C34M can run at industrial environment Ethernet serial server, wide range power input and serial communicate 3KV isolated protection; a pinhole reset button is used to reset TRP-C34M to the factory default setting.

The Cviotfinder Search Utility allows you to locate the TRP-C34M and change parameters on the network.

The TRP-C34M provides a watchdog timer function that allows the system to automatically recover from a system crash. When the TRP-C34M microprocessor stop working correctly, the watchdog timer waits for a preset period of time and performs a hardware reset.

TRP-C34M 4-Port Modbus TCP to RTU /ASCII 3KV Isolated Gateway with Watchdog

■ Features

- Wide input range DC power supply.
- Provide 3KV optical isolation protection.
- Supports Ethernet Mode like TCP Server, TCP Client, and UDP.
- Support Auto-MDIX twisted pair crossover detection and auto-correction.
- Maximum allowed bandwidth is 460 Kbps per Serial Port.
- Supports PPPoE, DDNS, NTP, FTP, Telnet.
- Runs in Stand Alone Mode.
- Built in Restore Factory default push button.
- Auto direction RS485 flow control by hardware.
- Virtual COM drivers for WIN XP /Vista/2003Server/2008 Server (32-bit & 64-bit), 2000 Server OS, Win 7 (32-bit & 64-bit), WIN8/8.1(32 bit&64bit).
- Power/Link and 4 pairs serial RX/TX mode LED indicator.
- Support screw terminal and standard external DC power adaptor.
- Panel mounts support.

■ Specifications

- CPU: 32 bit 580MHZ with MMU.
- Power Input Voltage: DC +9V to +24V.
- LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
- RS-232: TX, RX, GND.
- RS-422: TX+, TX-, RX+, RX-.
- RS-485: Data +, Data -.
- Data Rate: 75~230.4Kbps.
- Parity: none, even, odd.
- Data Bits: 5, 6, 7 or 8.
- Stop Bits: 1, 2.
- Configuration through Windows Admin Utility / Web Console / Telnet Console.
- Protocol: ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, PPPoE, DDNS, NTP, FTP, Telnet.
- Power supply: Screw terminal, or standard external DC adapter.
- Serial interface: +/-15 KV ESD.
- RS422/485 interface: Surge, over current, over voltage protection.
- Serial terminal and Ethernet with 3KV Optical Isolation.
- Power consumption: 12V/400 mA.
- Operating Temperature: -20 °C to 65 °C.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 180(L)*110(W)*30(H)/mm.
- Weight: 400g (W/Packing).

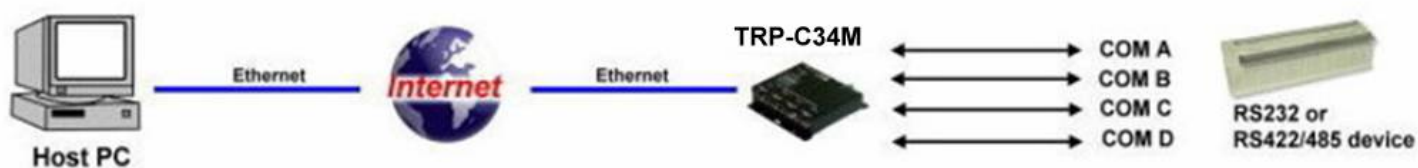
TRP-C34M

4-Port Modbus TCP to RTU /ASCII 3KV Isolated Gateway with Watchdog

■ Application Note

Modbus TCP Protocol

Modbus RTU/ASCII Protocol



Paired Mode



Accessories

PWR-AD12V-Auto AC(100~240V)-DC(12V/1A) Auto Switching Adaptor



Specifications

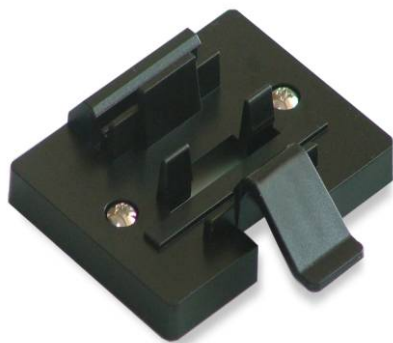
Input Specifications:

- Power Input Voltage: 100VAC~240VAC.
- Power Input frequency:47Hz~63Hz.
- Power Input current:310mA at 100VAC,160mA at 240VAC.
- Hi Pot Tests: Primary to secondary 3KV AC for 3sec.
- Efficiency: 75% typ. while measuring is at nominal line and rated load.
- Input current:40A Maximum at 240Vac input all phase.
30A Maximum at 100Vac input all phase.

Output Specifications:

- Output DC:12V +/-5% 1000mA.
- Full loading Range:11.4V ~12.6V at 100% rated load.
- Open circuit protection.
- Over voltage protection (auto recover).
- Output over/undershoot on turn-on.
- Over current (OC) Protection.
- Operating temperature:0 °C ~40 °C.
- Storage temperature:-20 °C ~70 °C.

DIN-RAIL-R Din-Rail Mounting Adaptor



Specifications

- Support TRP-Series full range of modules.
- Simple and easy assembly and remove it.
- ABS fireproof material.

LI-232-9M9F PC to TRP-C06/C06H 9M9F Parallel 1.8M Cable



Specifications

- Support TRP- C06 and C06H Converter to PC.
- Simple and easy assembly and remove it.

Accessories

LI-232- 9F9F **RS232 Null Modem 1.8M Cable**



Specifications

- Support TRP- C51B to PC configuration cable.
- Support TRP-C3X Series to PC communication cable.

LI-USB-2.0AB **USB 2.0 A to B 1.8M Cable**



Specifications

- Support TRP USB Series full range of modules.

ANT-2.4GB-9DB **Directional outdoor antenna** **for TRP-C51 (1KM)**



Specifications

- Support TRP-C51B outdoor antenna.
- Maximum transmission distance of 1000 meters.