TRP-SERIES
RS232/422/485 BEST SOLUTION

TRP-Serial Application

USB — TRP-C08 USB to RS232/422/485 Isolated Converter — Virtual COM

RS232 / RS422/485 — TRP-C39 RS232/422/485 to ST Fiber 2KM Converter / TRP-C39S RS232/422/485 to SC Fiber 40KM Converter

FIBER-TX / FIBER-RX 2KM/40KM

RS485 1.2KM — TRP-C24 16 CH. Isolated D/O(O.C) Module

RS232 — TRP-C06 RS232 to RS422/485 Isolated Converter

RS422/485 — TRP-C07 RS422/485 Isolated Repeater

RS422/485 — TRP-C28 4 CH. D/I and 4 CH.Relay Module

RS485 D+ D- / D+ D- Support 32 Module — TRP-C68 8 CH. Analog Input Module

Industrial PC

HMI

Ethernet — TRP-C37 Ethernet to RS232/422/485 Converter — Virtual COM or TCP

RS232 / RS422/485 — TRP-C51 Bluetooth to RS232/422/485 Converter — 100M

RS485 1.2KM — TRP-C26 16 CH. Isolated D/I Module

Ethernet — TRP-C41 Ethernet to SC Fiber Media Converter

FIBER-TX / FIBER-RX 20KM

Ethernet — TRP-C34H Ethernet to 4 RS232/422/485 Converter — Real COM or TCP

RS232 RS422/485 — TRP-C29 8 CH. D/I and 8 CH.D/O(O.C) Module

Ethernet — TRP-C37M Modbus TCP to RTU/ASCII Gateway

Ethernet — TRP-C24H Modbus TCP 16 CH. (O.C) Module

Ethernet — TRP-C26H Modbus TCP 16 CH. D/I Module

Ethernet — TRP-C28H 4 CH. D/I and 4 CH.Relay Module

Trycom Technology Co., Ltd is 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 design 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.

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TRP-C06
RS232 to RS422/485 Isolated Converter

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.
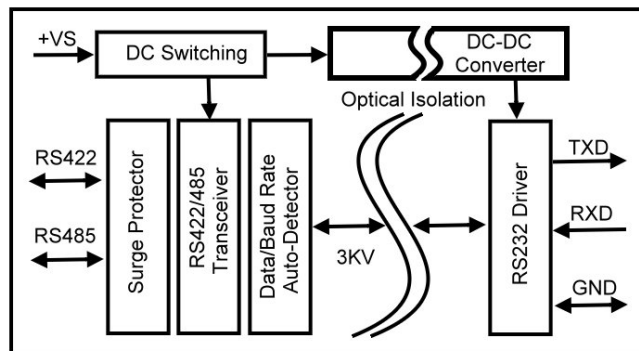
Features

- 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.
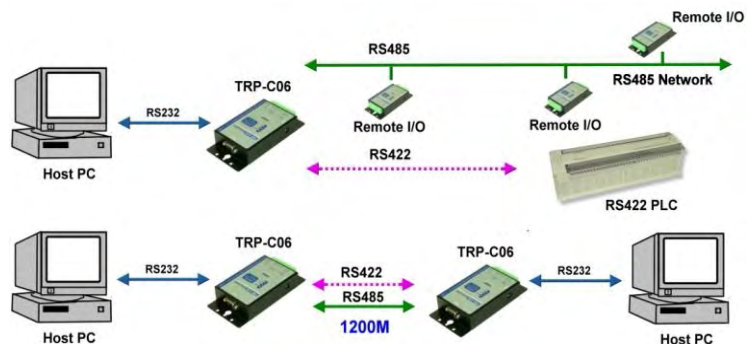- Din rail or panel mounts support.

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℃ .
- Storage Temperature: -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm
- Weight: 375g .

Block Diagram

Application Note

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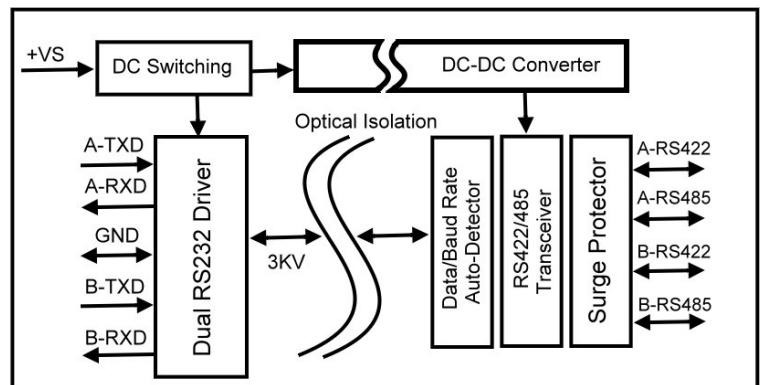# Dual Port RS232 to RS422/485 Isolated Converter

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.

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 adapter.
- Power consumption: 1.3W.
- Operating environment:-10 to 50℃ .
- Storage temperature: -20 to 70℃ .
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 375g .

Block Diagram

Application Note

TRP-C07
RS422/485 Isolated Repater

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 desig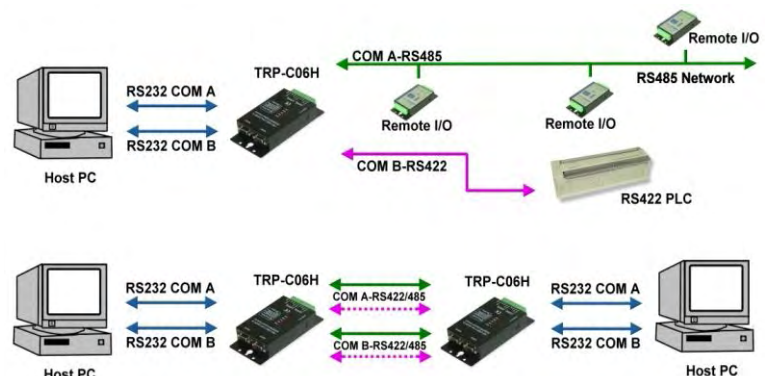n enable user a fast and professional installation. TRP-C07 is the ideal solution for the user who wants to automate their application quickly, safely and cost-effectively.

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.
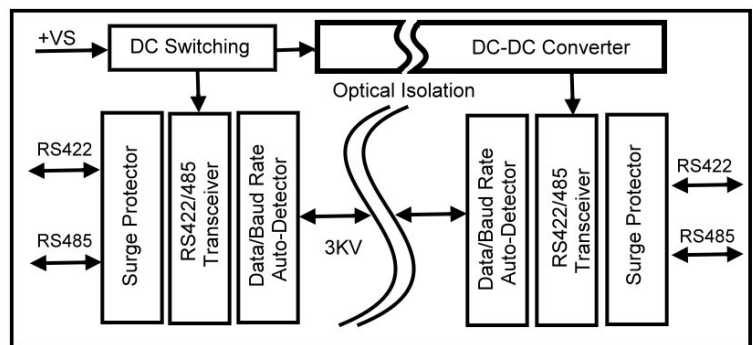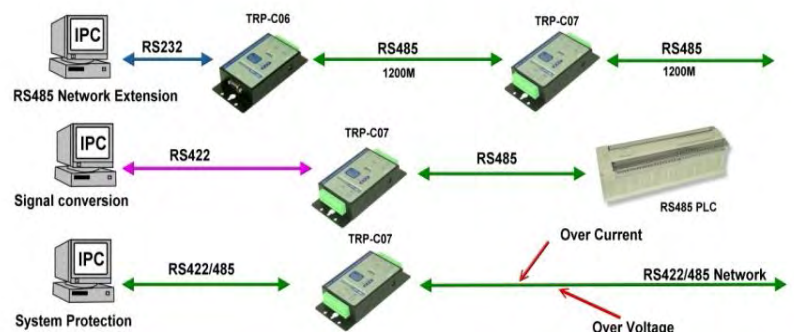
Specifications

- 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℃ .
- Storage Temperature: -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 380g.

Block Diagram

Application Note

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

Introduction

The TRP-C08 allows you to connect your serial devices to systems by using a USB interface. With auto configuration in data format, baud rate and RS-485 data flow direction control. TRP-C08 is able to automatically configure RS-232, RS-422 or RS-485 signals to baud rate without external switch setting. TRP-C08 is equipped with 3000V DC of isolation and internal surge-protection on each data lines to protect the host computer and converter against high voltage spikes, as well as ground potential difference. TRP-C08 also features a high-speed 256 Kb/s transmission rate, and supports various O.S. The industry DIN rail and panel mounting design enable user a fast and professional installation.

Features

■Full compliance with the USB V1.0 and 2.0 specification.
■System gets 1 COM port when the converter is connected.
■Auto data format detecting.
■Auto direction flow control on RS-485.
■Auto baud rate switching from 75bps to 1228800bps.
■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: Windows 98/ME/2000/XP/CE3.0, and Linux, and Mac OS.

Specifications

■USB interface: Fully compliant with V1.0, 2.0 specification.
■USB to serial bridge controller; Prolific PL2303HX.
■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: 75~256KBbps.
■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℃ .
■Storage temperature: -20 to 70℃.
■Humidity: 10-90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
■Weight: 375g .

Block Diagram

Application Note

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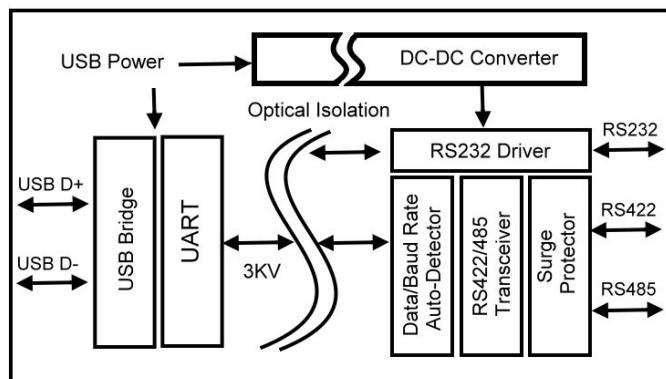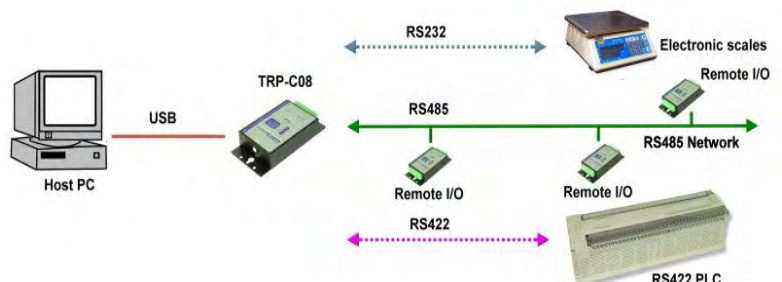
Introduction

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

Features

- USB-2.0 Device Controller
- Allow user custom adjust baud-rates.
- Each Port can impendent set up the baud-rate and data format.
- OS. system get dual port UART serial (1*RS232 and 1*RS422/485).
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- Fully PLC support such as Mitsubishi Q,FX and FATEK serial....
- Auto direction flow control on RS-485.
- Auto baud rate switching from 75bps to 921.6 Kbps.
- 256 byte buffer for upstream and downstream data flow.
- Direct power from USB port , no external power necessary.
- 3000V DC isolated protection.
- Surge protection on RS422/485 data lines.
- Power and TXA/RXA/TXB/RXB communication LED indicator .
- DIN rail or panel mount support.
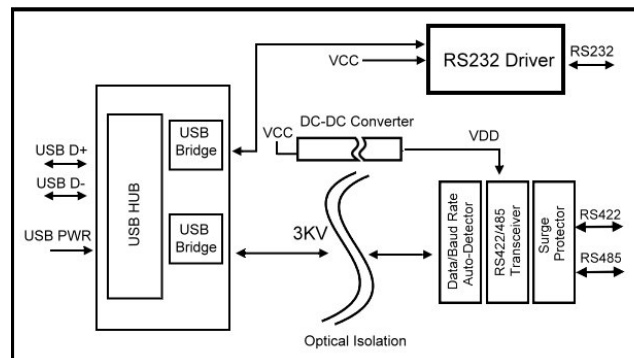- Driver support: Vista64/32,Windows 98/ME/2000/XP/WIN7/CE3.0, and Linux, and Mac OS.

Specifications

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

Block Diagram

Application Note

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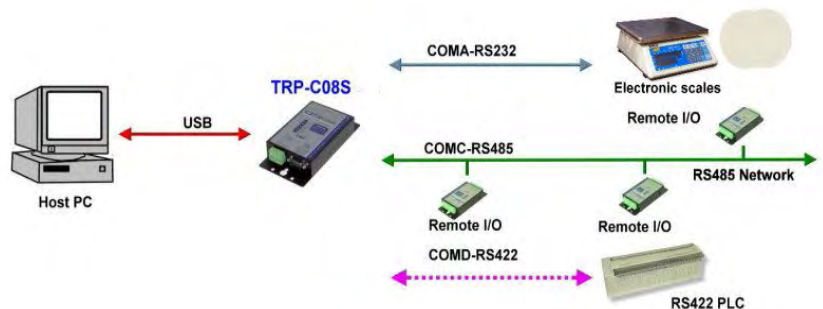## *USB to 2 RS232 and 2 RS422/485 Isolated Converter*

Specifications

- Input: USB 2.0 protocol.
- RS232 output: Standard 9 pin DTE full-duplex.
- RS422 output: Differential 4 full-duplex wires (TX+, RX+, TX-, RX-)
- RS485 output: Differential 2 half-duplex wires (D+, D-).
- Data Format: Asynchronous data with all common combination of bits, parity, stop
- Parity type: None, odd, even mark, space.
- Data bit: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2.
- Cable: USB 2.0 type A to type B cable.
- Communication speed: form 300bps to 256Kbps.
- RS-422/485 line protection: Against surge, short circuit,+/- 15KV ESD and voltage peak.
- RS-232 line protection: +/- 15KV ESD.
- Distance: RS-422/485 Up to 4000ft (1250M).
- Connection type: Screw terminal for maximum AWG #12~30 wire.
- DIN rail and panel mount support.
- Power consumption: 260mA by USB power.
- RS422/485 Optical Isolation: 3000V DC.
- Operating environment: 0 to 65℃.
- Storage temperature: -20 to 65℃.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 395g.
- Humidity: 10-90% non-condensing. .

Introduction

The TRP-C08H allows you to simultaneously connect 2 RS-232 and 2 RS-422/485 serial devices to system by using a USB interface. The RS232 interface support all common PC DTE connection type. For RS-422/485 data lines TRP-C08H provides auto-detecting function in data format, baud rate and data direction flow control, it may automatically configure RS-422/485 signals and baud rate without external switch setting. TRP-C08H is equipped with 3000V DC of isolation and internal surge protection to protect the host computer and converter against high voltage spikes, as well as ground potential differences. TRP-C08H features a high-speed 256KB transmission rate, and supports various O.S. The industry standard DIN rail design enables users a fast and professional installation.
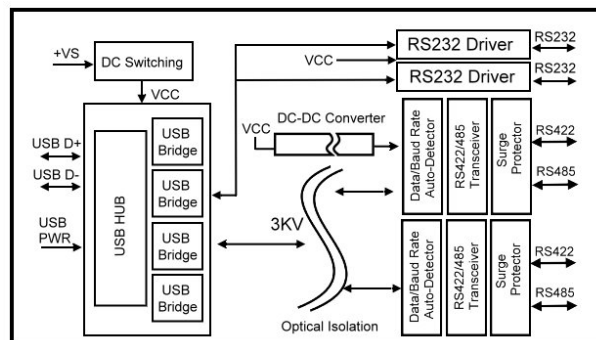
Features

- USB-2.0 device controller.
- Allow user custom adjust baud-rates.
- Each Port can impendent set up the baud-rate and data format.
- On-Chip 512-Byte FIFO for upstream and downstream data transfers for serial Port.
- System gets four serial port when the converter plug in.
- Auto switching RS422/485 detecting.
- Auto direction flow control on RS485.
- Auto baud rate switching from 300bps to 256 Kbps.
- Direct power from USB port , no need external power supply.
- 3000 VDC isolation protection on RS422/485.
- Surge protection on RS422/485 data line.
- Power and TXA/RXA/TXB/RXB communication LED indicator
- Din-Rail (option)or panel mount Driver support:
- Vista64/32,Windows 98/ME/2000/XP/WIN 7/CE3.0, and Linux, and Mac OS

Block Diagram

Application Note

TRP-C08U
USB to 4 RS232 Isolated Converter

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 Vista64/32,Windows 98/ME/2000/XP/CE3.0/WIN 7, and Linux, and Mac OS

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℃.
- Storage temperature: -20 to 65℃.
- Dimension: 151mm X 75mm X 26mm.
- Weight: 395g.
- Humidity: 10-90% non-condensing. .
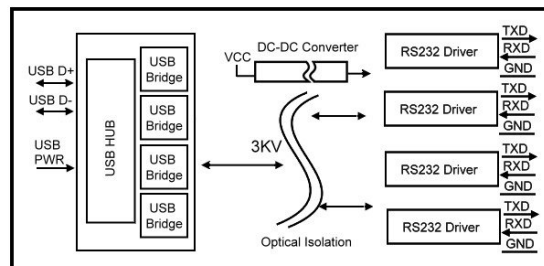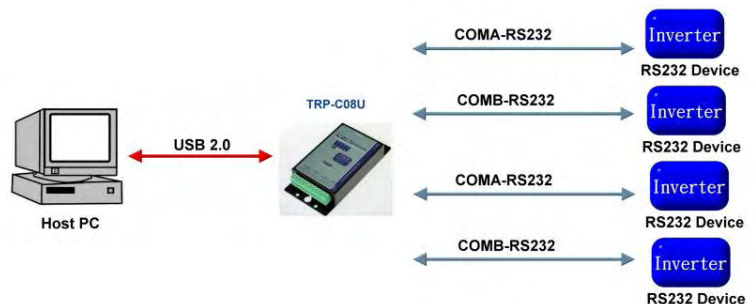
Block Diagram

Application Note

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

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 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.
■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.
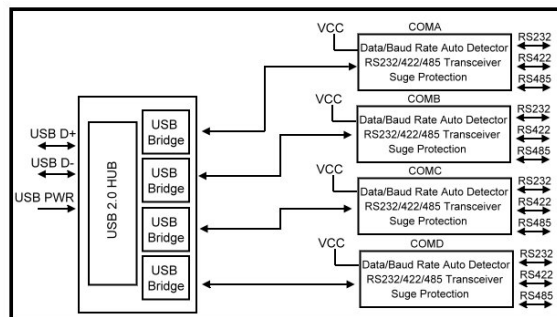■Driver support: Vista64/32, Windows 98/ME/2000/XP/CE3.0/WIN 7, and Linux, and Mac OS.

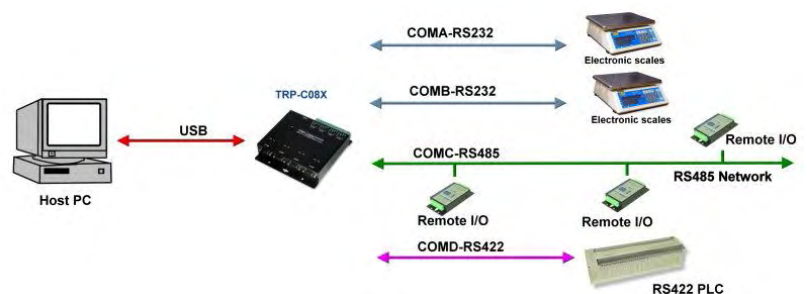## Specifications

■Input: USB 2.0.
■RS232 signal: 4 Pair16c450/16c550 compatible UARTS.
■RS422 signal:4 Pair Differential 4 full-duplex wires (TX+, RX+, TX-, 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℃.
■Storage temperature: -20 to 65℃.
■Dimension: 151mm X 111mm X 26mm.
■Weight: 691(W/Packing) .
■Humidity: 10-90% non-condensing.

Block Diagram

Application Note

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

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: Vista64/32, Windows 98/ME/2000/XP/CE3.0/WIN 7, and Linux, and Mac OS.

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℃.
■Storage temperature: -20 to 65℃.
■Dimension: 151mm X 111mm X 26mm.
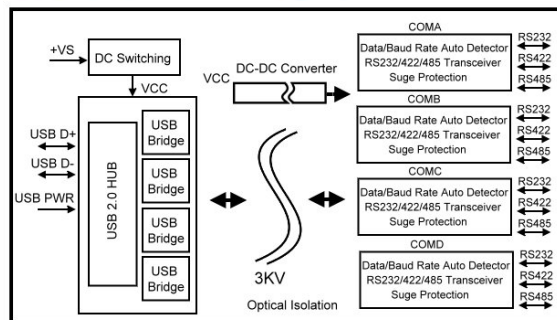■Weight: 691(W/Packing) .
■Humidity: 10-90% non-condensing.

Block Diagram

Application Note

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

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 3750Vms 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 watch-dog, 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.

Specifications

- Built-in USB 2.0 to serial bridge.
- 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).
- Output Maximum voltage: +/-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℃.
- Storage temperature: -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram

Application Note

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℃.
- Storage temperature : -20 to 70℃.
- Humidity: 10-90% Non-condensing.
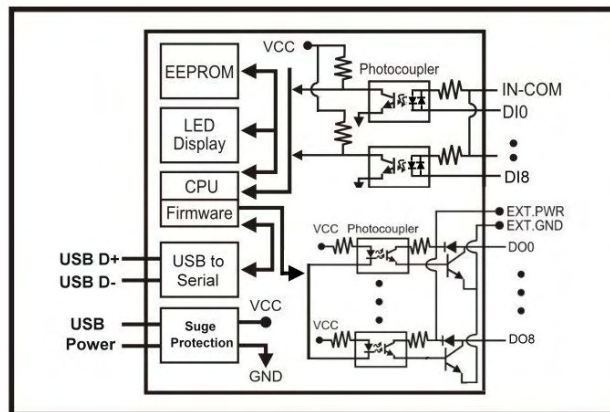- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

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.

Block Diagram

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.

Application Note

TRP-C41S
Ethernet to Fiber media Converter ,SC/40KM

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.
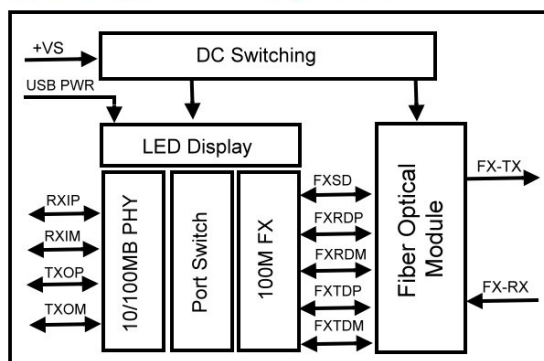
Features

- 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.
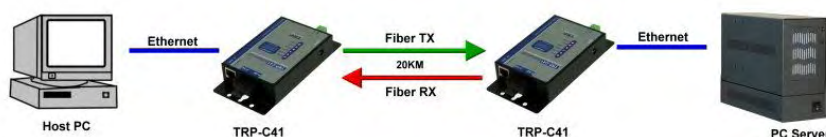- Support IEEE Standard: 802.3u 100BaseTX & 100BaseFX.

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℃.
- Storage temperature : -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram
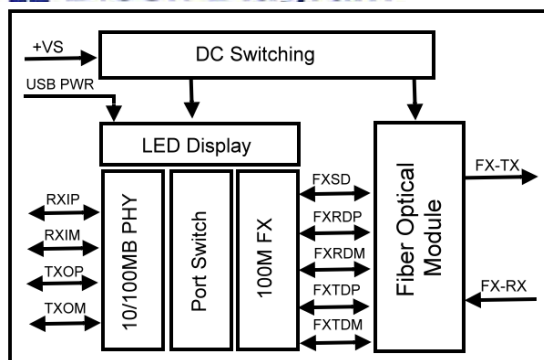
Application Note
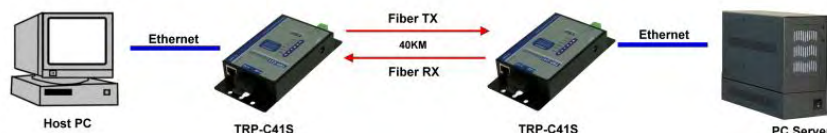
TRP-C39
Fiber TO RS232/422/485 Isolated Converter, ST 2KM

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.

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℃.
■Storage temperature: -20 to 70℃.
■Humidity: 10-90% non-condensing.
■Dimension: 151 mm X 75mm X 26mm .
■Weight: 375g .

Block Diagram

Application Note

Fiber Serial Device

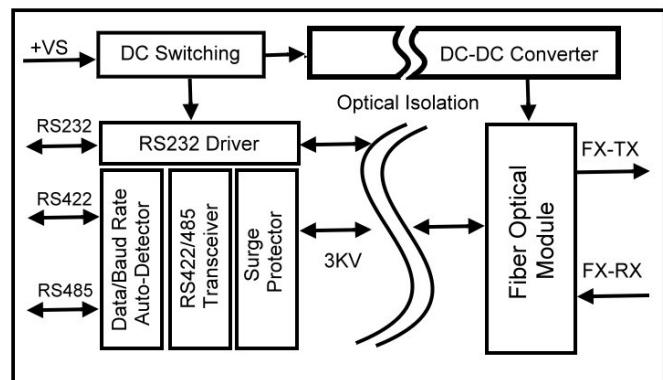## TRP-C39S
Fiber TO RS232/422/485 Isolated Converter, SC 40KM

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.

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℃ .
- Storage temperature: -20 to 70℃.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 388g .

Block Diagram

Application Note

14

TRP-C51
Bluetooth to RS232/422/485 Converter

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.

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℃.
- Storage temperature: -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram
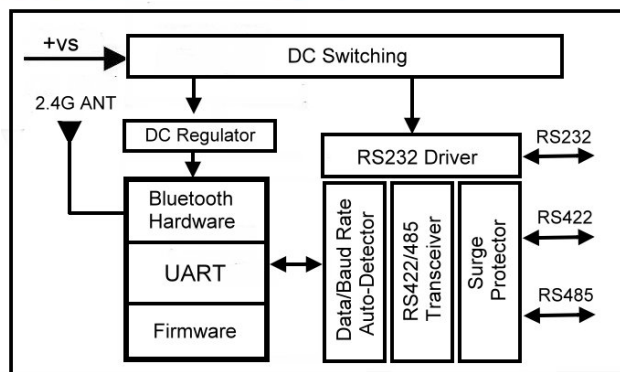
Application Note
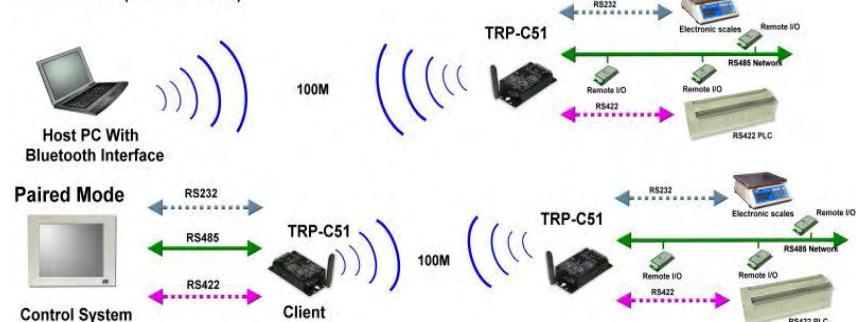
TRP-C24
Isolated 16 CH. O.C RS485 Module

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-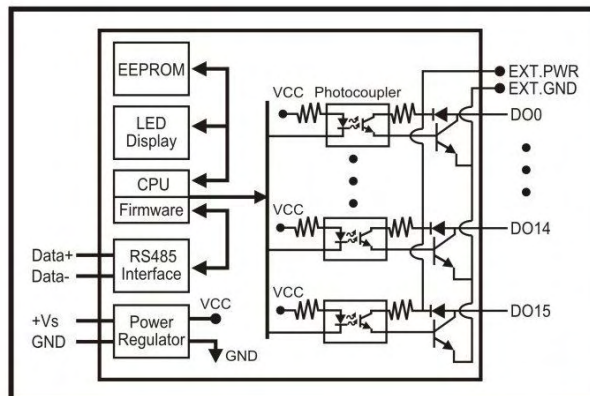485 network. All channels feature screw terminals for convenient connection of field signals as well as LED's to indicate channel working status. All outputs are equipped with photo-couplers to protect the module against high voltage spikes, as well as ground potential differences. For easy user access, 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 watch-dog, 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.
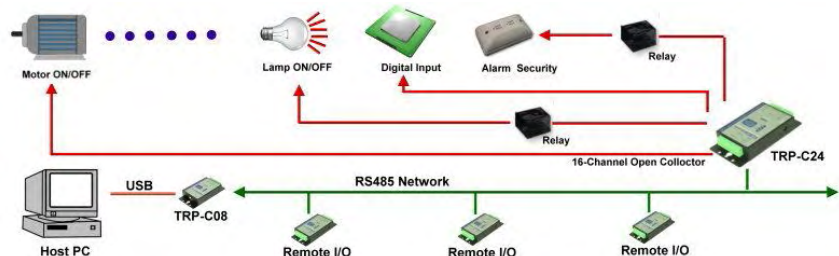■Support screw terminal and external DC power adaptor.

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℃.
■Storage temperature:. -20 to 70℃.
■Humidity: 10~90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
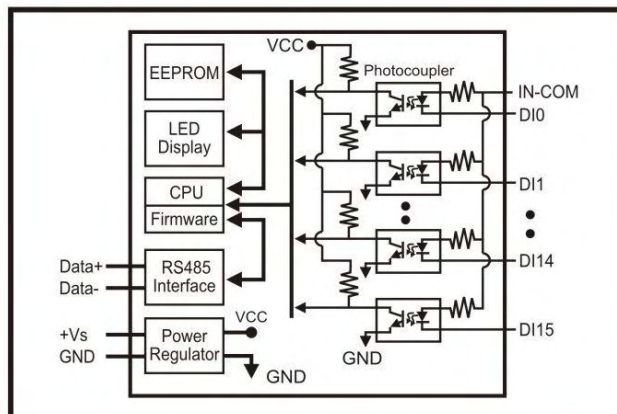■Weight: 395g .

Block Diagram

Application Note

TRP-C26
Isolated 16 CH. DI RS485 Module

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 watch-dog, 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 ca 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.
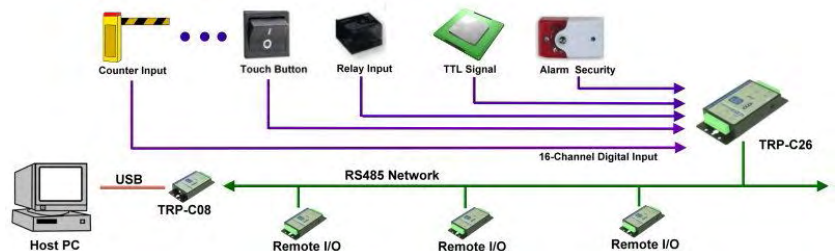- Support screw terminal and external DC power adaptor.

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.duples wires.
- Communication speed: Baud rate from 1200bps to 115.2Kbps.
- Data format: Data bit: 8, Parity Check: NoneStop 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℃.
- Storage temperature: -20 to 70℃.
- Humidity: 10-90% non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g .

Block Diagram

Application Note

TRP-C28
Isolated 4 CH. DI and 4 CH. AC Relay RS485 Module

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 3750Vms DC isolation, and surge protection on RS-485 data lines that protect the module and divece 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 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 4 channels digital input ca 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.

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 reply outputs.
■Relay type: 2 Form A (RL1,RL2) , 2 Form C (RL3,RL4).
■Contact ratting: 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℃.
■Storage temperature: -20 to 70℃.
■Humidity: 10-90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
■Weight: 400g .

Block Diagram

Application Note

TRP-C29
Isolated 8 CH. DI and 8 CH. O.C
RS485 Module
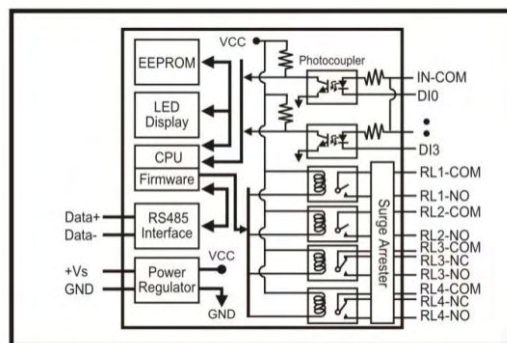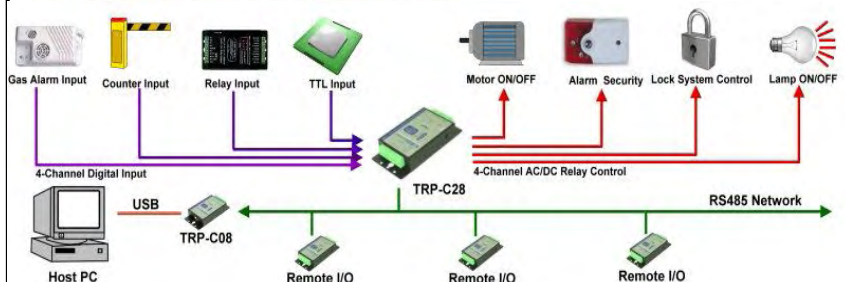
Introduction

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 3750Vms 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 ca 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.

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℃.
- Storage temperature: -20 to 70℃.
- Humidity: 10-90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 400g .

Block Diagram

Application Note
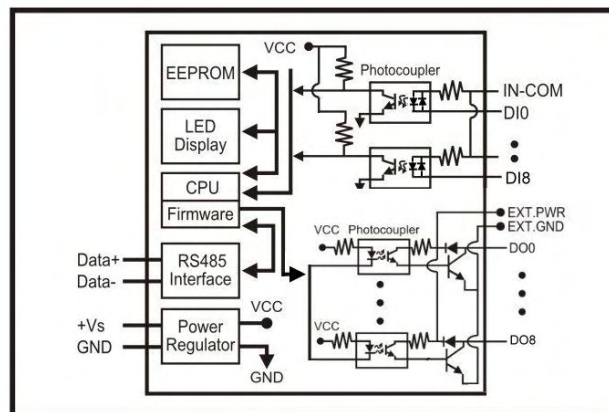
TRP-C68
Isolated 8 CH. AI RS485 Module
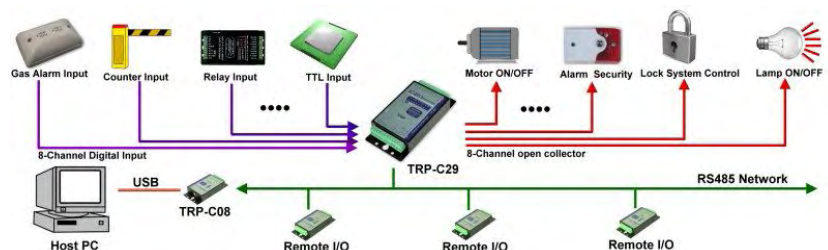
Introduction

TRP-C68 , 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 support the sample rate in " Normal " or "Fast" mode. All channels feature screw terminals for convenient connection, and LED's to indicate channel status. All 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.

Features

■Wide input range DC power supply..
■Support ASCII and Modbus RTU protocol.
■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 status.
■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.

Specifications

■Resolution :16 bit/24bit
■Sample rate:
Normal mode: 10 sample / sec.
Fast Mode: 60 sample / sec.
■Bandwidth:
Normal Mode: 15.72Hz.
Fast Mode:/78.72Hz.
■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:±10V,±5V,±2.5V,±1.25V,±650mV..
Current: +/-20mA.
■CMRR:92 db min/50/60Hz
■Analog input over voltage protection:+/- 35V .
■RS-485 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: -10 to 50℃ .
■Storage Temperature: -20 to 60℃.
■Humidity: 10-90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
■Weight: 398g .

## Block Diagram
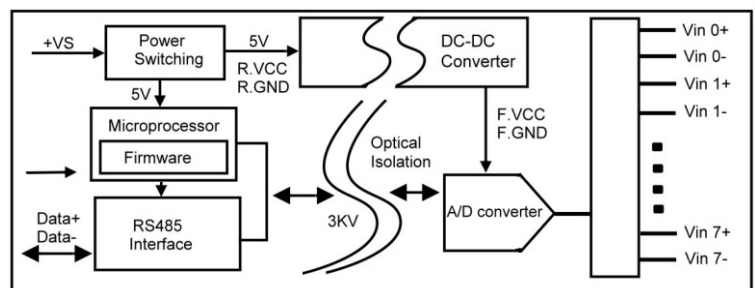
Application Note
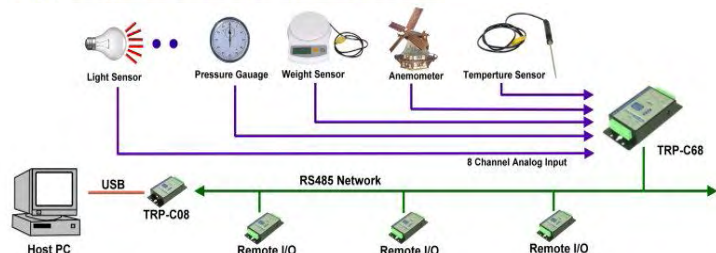
TRP-C24H
Isolated 16-channel Open Collector Modbus TCP Module

- Power/Link/16 CH DO LED indicator.
- DIN-Rail and panel mount support.
- Dual power input select from screw terminal or DC-Jack.

■■ 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.
- 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℃.
- Storage temperature:. -10 to 70℃.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g .
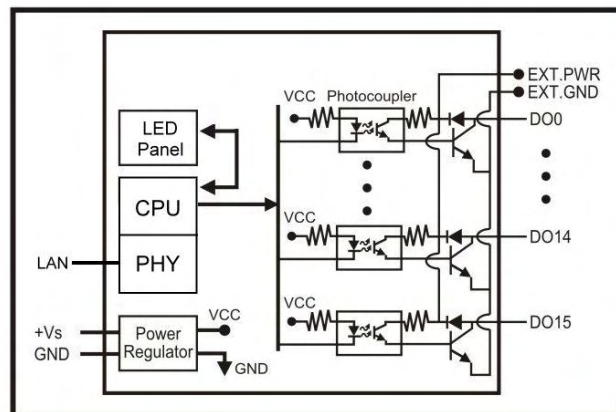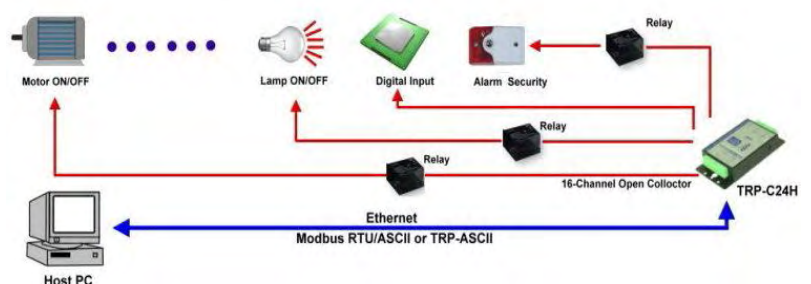
■■ Introduction

TRP-C24H an Isolated open collector digital outputs Modbus TCP Module, provides 16 channels that allow you output open collector signal (100mA) to driven your devices on network, it supports 3 communication protocol, TRP-ASCII, Modbus RTU / ASCII, TRP-C24H can be easy and convenient to use application supports Modbus. Software engineers can use the TRP-ASCII or Modbus RTU command set quickly and easily integrated into the self-development program, such as Microsoft VB, VC... The TRP-C24H built-in independent IP, WEB-browsing more convenient to rewrite the configuration and collect information through computers, tablet computers, smart phones, will be available! TRP-C24H built-in watchdog function to ensure the normal operation of the module, and a built-in voltage monitoring to ensure that the boot, excellent and advanced hardware for harsh environment. TRP-C24H with TRP-C26H, 16 remote control directly, do not need to run the software and equipment. TRP-C24H also offers the maximum connection 16 host client to link the network server that is easy to operate in Modscan32 ,Modbus Poll,CAS Modbus Scanner and SCADA ...application uses TCP mode and Virtual-COM mode.

■■ 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.
- Support Virtual-COM mode.
- IO 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.
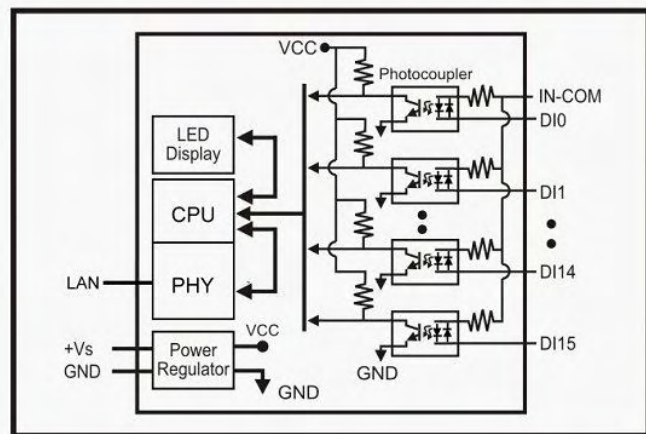- Support Auto-MDIX twisted pair crossover detection and Auto-Correction.

■■ Block Diagram

■■ Application Note

TRP-C26H
Isolated 16-channel Digital Input with counter Modbus TCP Module

Introduction

TRP-C26H an Isolated Digital Input with counter Modbus TCP Module, provides 16 optical isolated digital input channels and counter that allow you to input the logic signal from +/- 0 to 30V DC on network, it supports 3 communication protocol, TRP-ASCII, Modbus RTU / ASCII, TRP-C26H can be easy and convenient to use application supports Modbus.
Software engineers can use the TRP-ASCII or Modbus RTU command set quickly and easily integrated into the self-development program, such as Microsoft VB, VC...
The TRP-C26H built-in independent IP, WEB-browsing more convenient to rewrite the configuration and collect information through computers, tablet computers, smart phones, will be available!
TRP-C26H built-in watchdog function to ensure the normal operation of the module, and a built-in voltage monitoring to ensure that the boot, excellent and advanced hardware for harsh environment.
TRP-C26H with TRP-C24H, 16 remote control directly, do not need to run the software and equipment.
TRP-C26H also offers the maximum connection 16 host client to link the network server that is easy to operate in Modscan32 ,Modbus Poll,CAS Modbus Scanner and SCADA ...application uses TCP mode and Virtual-COM mode.

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.
■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.
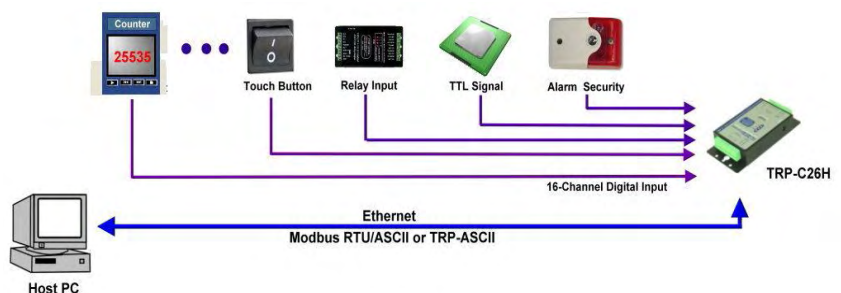■Dual power input select from screw terminal or DC-Jack.

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℃.
■Storage temperature:. -10 to 70℃.
■Humidity: 10~90% Non-condensing.
■Dimension: 151mm X 75mm X 26mm .
■Weight: 395g.

Block Diagram

Application Note

TRP-C28H
Isolated 16-channel Digital Input with counter Modbus TCP Module

Introduction

TRP-C28H an Isolated Digital Input with counter and AC Relay Modbus TCP Module, provides 4 channels optical isolated digital input channels and counter and 4 Channel AC Relay that allow you to input the logic signal from +/- 0 to 30V DC and 5A /250V AC relay on network, it supports 3 communication protocol, TRP-ASCII, Modbus RTU / ASCII, TRP-C28H can be easy and convenient to use application supports Modbus. Software engineers can use the TRP-ASCII or Modbus RTU command set quickly and easily integrated into the self-development program, such as Microsoft VB, VC...

TRP-C28H built-in independent IP, WEB-browsing more convenient to rewrite the configuration and collect information through computers, tablet computers, smart phones, will be available!

TRP-C28H built-in watchdog function to ensure the normal operation of the module, and a built-in voltage monitoring to ensure that the boot, excellent and advanced hardware for harsh environment.

TRP-C28H with another TRP-C28H remote control directly, do not need to run the software and equipment.

TRP-C28H also offers the maximum connection 16 host client to link the network server that is easy to operate in Modscan32 ,Modbus Poll,CAS Modbus Scanner and SCADA ...application uses TCP mode and Virtual-COM mode.

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.
- 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-ln 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.
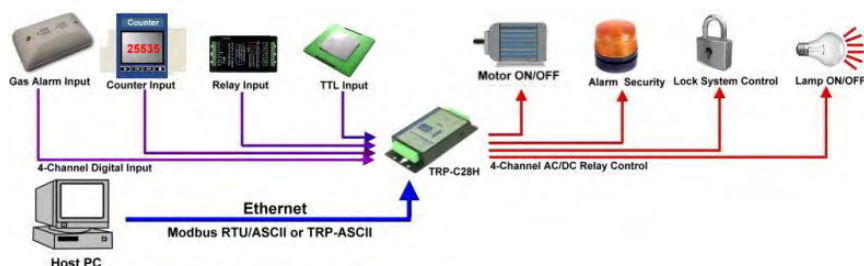- Dual power input select from screw terminal or DC-Jack.

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 reply outputs.
- Relay type: 2 Form A (RL1,RL2) , 2 Form C (RL3,RL4).
- Contact ratting: 5A /30V DC , 5A /120V AC , 5A /250V AC.
- Relay surge strength: 4000V.
- Relay operating time: 3mS.
- Relay operating life: 2 X 10(7).
- 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℃.
- Storage temperature:. -10 to 70℃.
- Humidity: 10~90% Non-condensing.
- Dimension: 151mm X 75mm X 26mm .
- Weight: 395g .

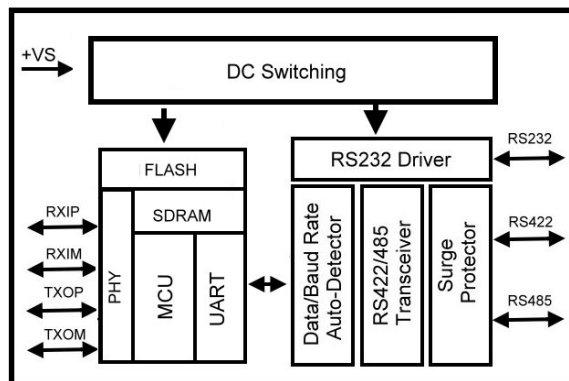## Block Diagram

Application Note

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.

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.

 The TRP-C37 provides a watchdog timer function, The Watchdog timer allows the system to automatically recover from a system crash. When the TRP-C37 MCU stop working correctly, the watchdog timer waits for a preset period of time, and the performs a hardware reset.
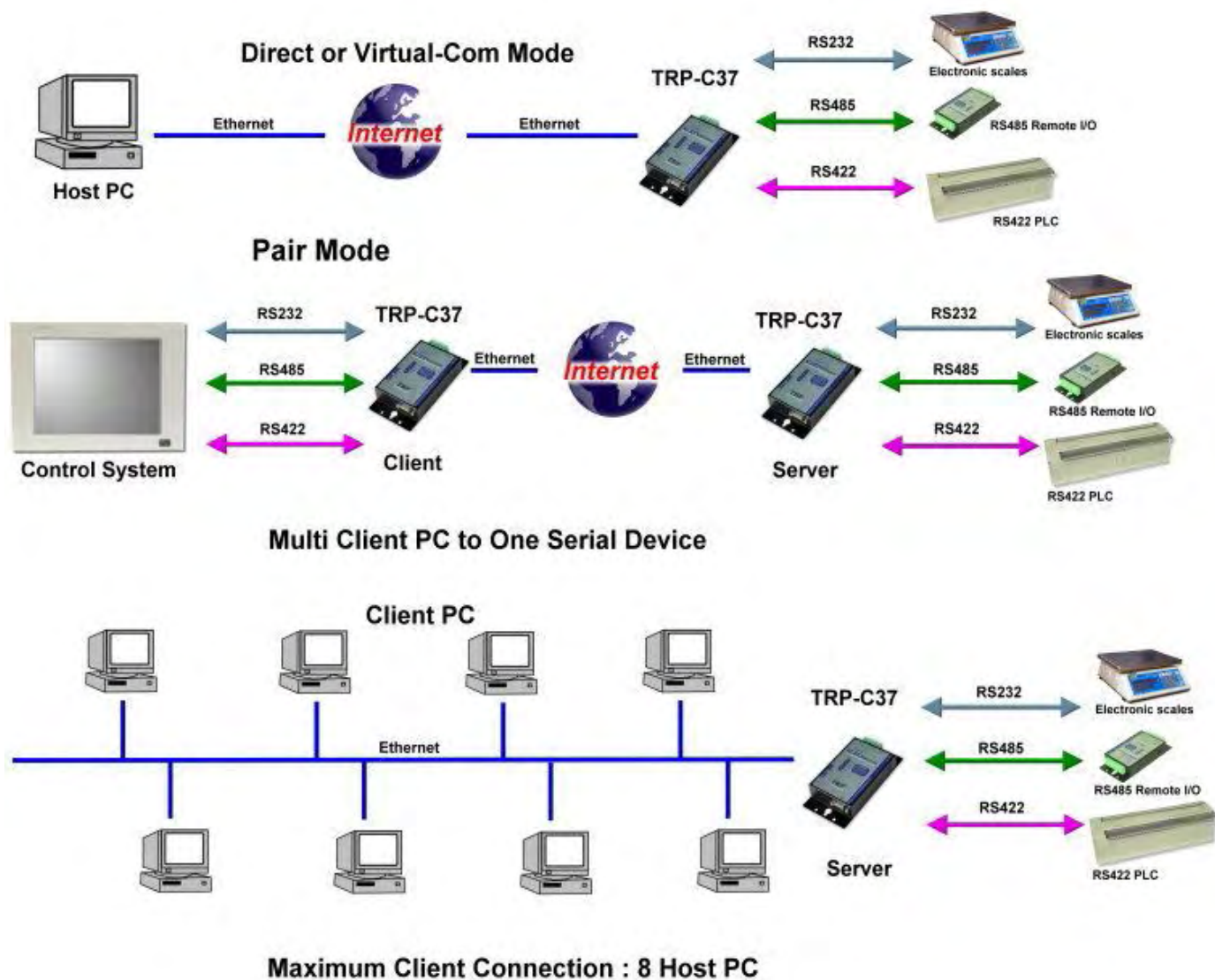
When TRP-C37 working at industrial environment, if the voltage is unstable , The TRP-C37 built-in power detection circuit can prevent the power fail cause of the system boot fail.

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.
- Auto fast Bi-direction RS485 hardware .
- Surge protection and over current and over voltage on RS-422/485 data lines.
- Support baud rate form1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7.
- Virtual Com Support Server, Client, UDP mode.

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-.

- 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 ℃.
- Humidity: 0~90% Non-Condensing.
- Dimensions: 151(L)*75(W)*26(H) mm.
- Weight: 395g with packing.

Block Diagram

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

■■ Application Note

Direct or Virtual-Com Mode

Pair Mode

Multi Client PC to One Serial Device

Maximum Client Connection : 8 Host PC

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 from1200~921600Kbps.
- Auto switching RS-232/422/485 signal interface.
- Virtual COM drivers for Windows 98/WIN2000/WIN XP/Vista/WIN2003/WIN 7.
- 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.
- Support configuration by serial console.
- Update the firmware from LAN.
- Dual power input select from screw terminal or DC-Jack.

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.

TRP-C37M provides a watchdog timer function, The Watchdog timer allows the system to automatically recover from a system crash. 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.
- Auto fast direction RS485 flow control by hardware.

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 ℃.
- Humidity: 0~90% Non-Condensing.
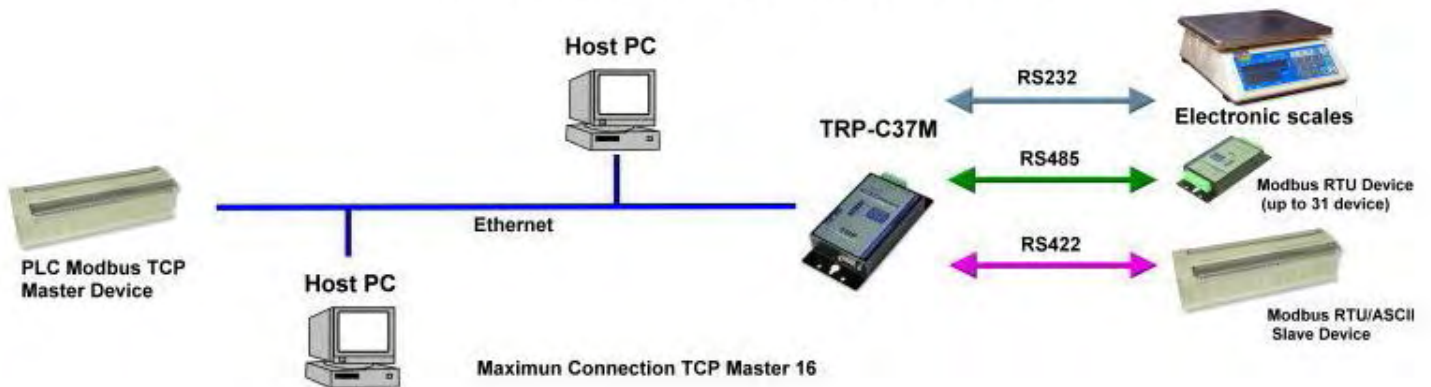- Dimensions: 151(L)*75(W)*26(H) mm.
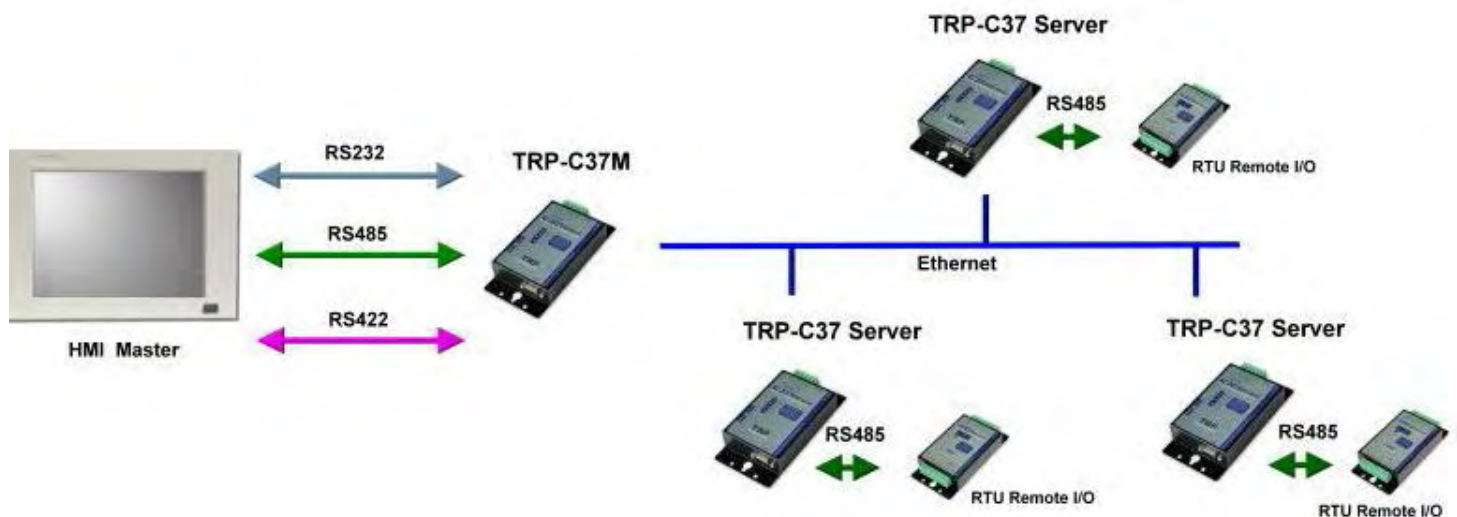- Weight: 395g with packing.

Block Diagram
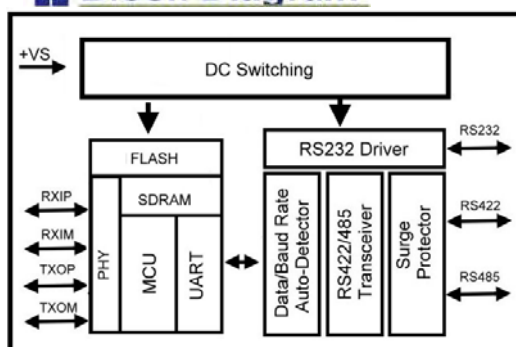
■■ Application Note

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

Pair Mode

Multi Client PC to One Serial Device

Maximum Client Connection : 16 Host PC

One TRP-C37M Server to Multi Client PC

Maximum Client Connection : 16 Host PC

TRP-C34X Optical-Isolation Ethernet to RS232/422/485 Converter
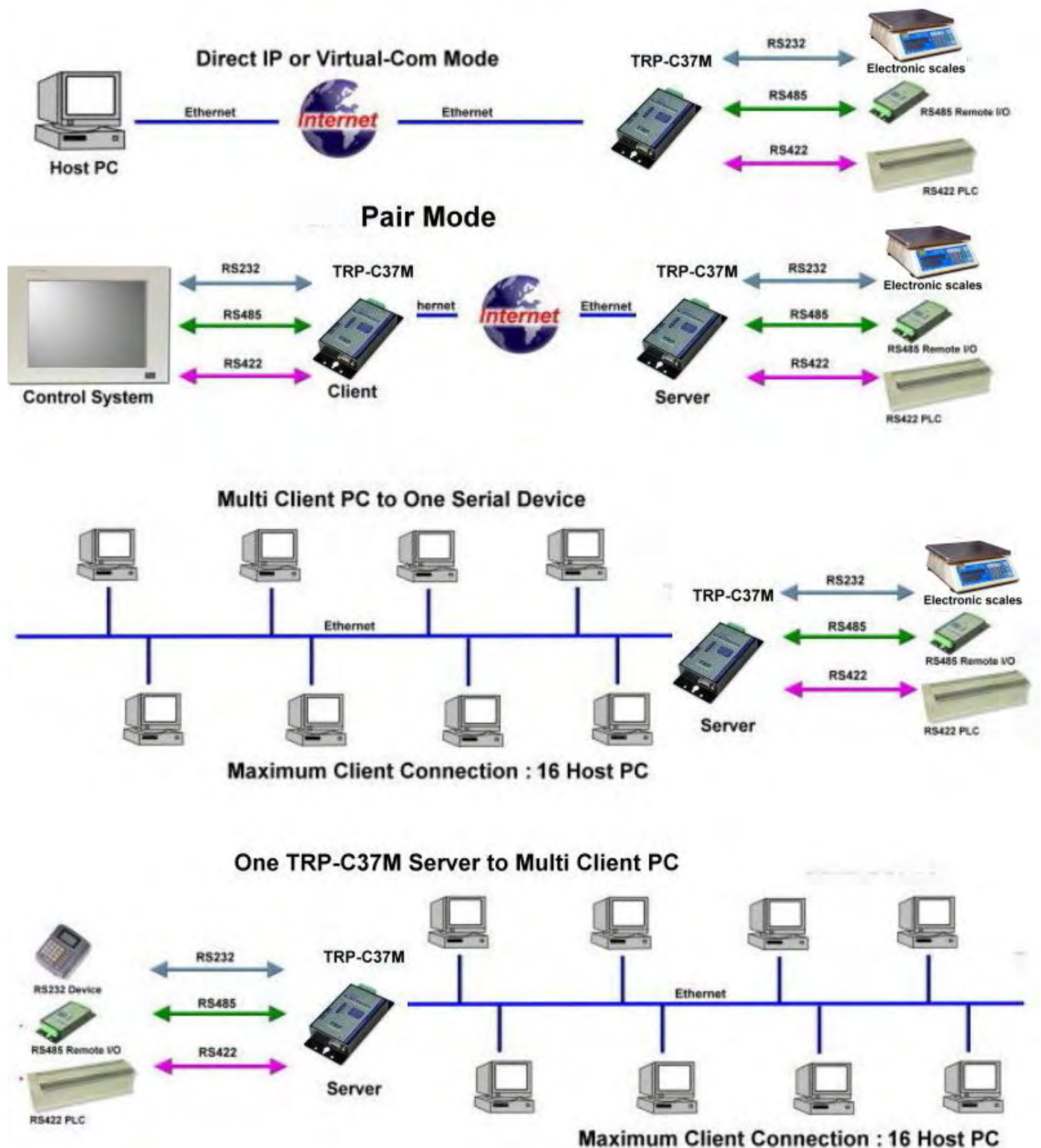
Introduction

TRP-C34X Serial Server provides a transparent way of connecting Serial devices over Ethernet. directionally. To establish automatic or remote data acquisition, TRP-C34X Serial Server also provides 3KV optical isolation and surge protection to protect system from ground loops and destructive.
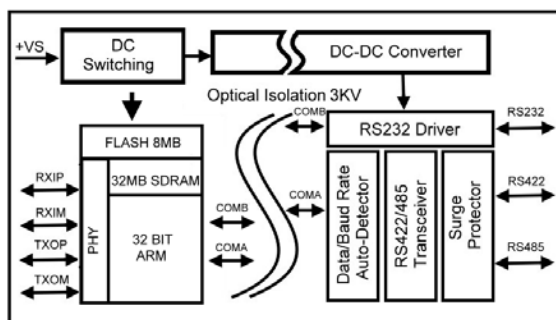 By specifying the IP address and the TCP Port number, a host computer can access different Serial Devices such as Serial Thermometers, Magnetic Card Readers, Barcode Scanners, Data Acquisition Systems, POS Terminals, Industrial PCs etc., over the Network, you can centralize Serial Device management and distribute the management to different hosts at the same time. TRP-C34X makes possible to access distant Serial Devices over Network as if they were directly connected to the Standard COM Port of a Personal Computer.
 TRP-C34X 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.
When TRP-C34X working at unstable voltage industrial environment, the hardware circuit detection can prevent the power fail cause of the boot fail and Re-Boot.

Block Diagram

Features

■Wide input range DC power supply.
■RS232/422/485 Built-in 3KV Optical-Isolation.
■Surge protection and over current and over voltage on RS-422/485 data lines.
■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 460 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 TRP-C34X.
■Features Auto IP Address Report to periodically report the IP Address of TRP-C34X to the assigned Host on Network.
■Auto direction RS485 flow control by hardware.
■Virtual COM drivers for WIN 32bit XP /Vista/2003Server/2008 Server (32-bit & 64-bit), 2000 Server OS, Win 7 (32-bit & 64-bit).
■Fully compatible with Ethernet and TCP/IP protocol.
■Power/Link and 2 pair Serial RX/TX mode LED indicator.
■Support screw terminal and standard external DC power adaptor.
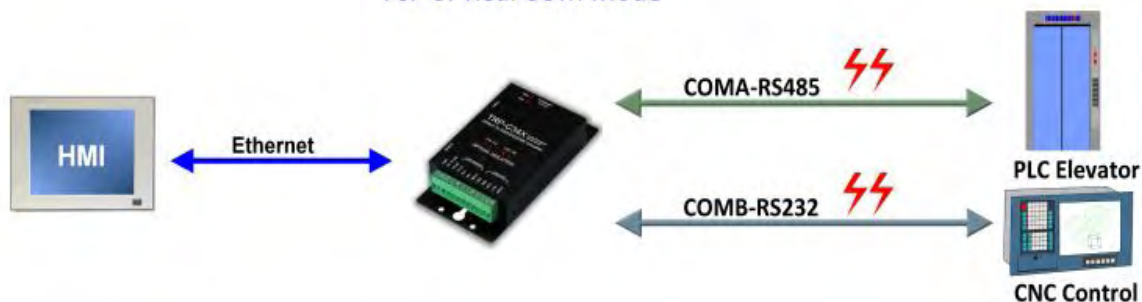■Din rail or panel mounts support.

Specifications

■CPU:32 bit 170MHZ with MMU.
■SDRAM:32MB.
■FLASH:8MB.
■Power Input Voltage: DC +10V to +30V.
■LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
■RS-232: TXD, RXD, RTS, CTS, ISO GND.
■RS-422: TX+, TX-, RX+, RX-, ISO GND.
■RS-485: Data +, Data –, ISO GND.
■Data Rate: 75~921Kbps.
■Parity: none, even, odd.
■Data Bits: 5, 6, 7 or 8.
■Stop Bits: 1, 1.5 or 2.
■Configuration through Windows Admin Utility / Web Console / Telnet Console.
■Supports Real COM mode using RFC 2217 protocol.
■Protocol: ICMP, TCP/IP, UDP, DHCP, Boot, Telnet, DNS, SNMP, HTTP, SMTP, SNTP.
■Power supply: Screw terminal, or standard external DC adapter.
■Serial interface: +/-15 KV ESD.
■RS422/485 interface: Surge, over current, over voltage protection.
■Power consumption: 12V/230 mA (without external device).
■Operating Temperature: 0 to 65 ℃.
■Humidity: 0~90% Non-Condensing.
■Dimensions: 141(L)*78(W)*26.5(H) /mm.
■Weight: 450g (W/Packing).

TRP-C34X Optical Isolated Ethernet to RS32/422/485 Converter

Application Note

TCP or Real COM Mode

HMI — Ethernet — TRP-C34X
COMA-RS485 → PLC Elevator
COMB-RS232 → CNC Control

Paired Mode

COMA-RS422/485
COMB-RS232
Client — Internet — Server
COMA-RS422/485
COMB-RS232

1 Serial Device to 4 TCP Host PC at Same Time Broadcase

COMA-RS422/485
COMB-RS232
Server — Host PC

30

TRP-C34H
Ethernet to 4 RS232/422/485 Converter
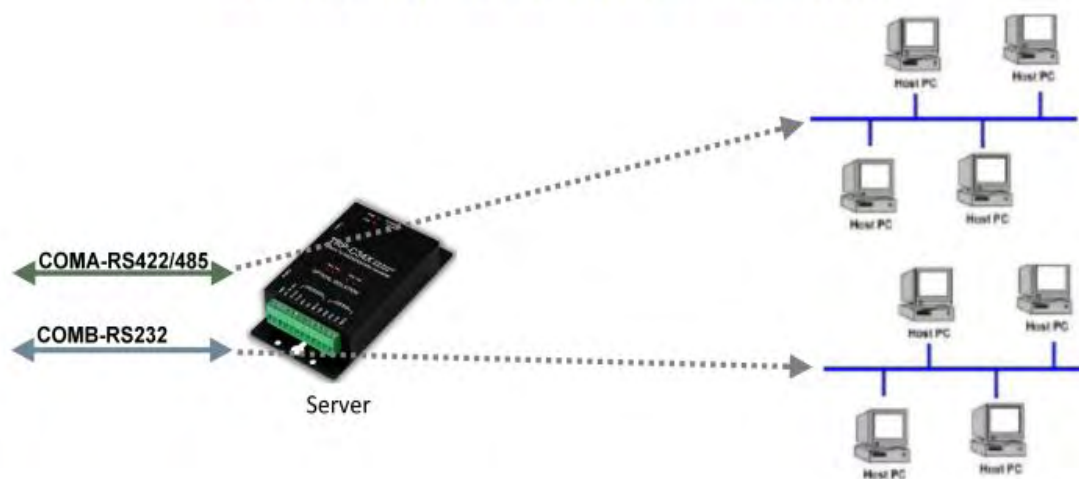
Introduction

. **TRP-C34H** 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, TRP-C34H Serial Server Solution can connect to TRP-C08S/C08U/C08H and C08X/C29U with only one IP address.

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-C34H Serial Server, you can centralize Serial Device management and distribute the management to different hosts at the same time. TRP-C34H Serial Server makes possible to access distant Serial Devices over Network as if they were directly connected to the Standard COM Port of a Personal Computer. TRP-C34H Serial Server supports 4/6/8/10/12/14/16 Serial Ports and allows you to control that much number of RS-232/RS-422/RS-485 Serial devices over Ethernet. TRP-C34H 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-C34H 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-C34H 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.

Features

• Wide input range DC power supply.
• Support Auto-MDIX twisted pair crossover detection and auto-correction.
• Can Up to 6/8/10/12/14/16 RS-232/422/485 Serial Ports.
• Each Port Maximum Connection 4 Hosts PC at TCP Server Mode.
• External 3 USB port ,each port can connect TRP-C08S/TRP-C08U/TRP-C08H/TRP-C08X/TRP-C29U.
• Maximum allowed bandwidth is 460 Kbps per Serial Port.
• Supports Web Console, Serial and Telnet Console.
• Runs in Stand Alone Mode.
• Supports Restore Factory Defaults push button.
• Features Accessible IPs 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 Windows 32bit XP / Vista / 2003 Server / 2008 Server (32-bit & 64-bit), 2000 Server OS, Win 7 (32-bit & 64-bit). Real COM drivers for Windows XP/WIN7/VISTA.
• Fully compatible with Ethernet and TCP/IP protocol.
• Supports 10/100 Mbps Ethernet.
• Power/Link and UART RX/TX mode LED indicator.
• Support screw terminal and standard external DC power adaptor.
• Din rail or panel mounts support.

Specifications

• Power Input Voltage: DC +10V to +30V
• LAN: Auto-MDIX, 10/100 Mbps Auto-detecting.
• RS-232: RI,TX, RX, RTS, CTS, DTR, DSR, DCD, GND
• RS-422: TX+, TX-, RX+, RX-.
• RS-485: Data +, Data –.
• Data Rate: 75~921Kbps .
• Parity: none, even, odd.
• Data Bits: 5, 6, 7 or 8.
• Stop Bits: 1, 1.5 or 2.
• Configuration through Utility / Web Console / Telnet Console.
• Supports Real COM mode using RFC 2217 protocol.
• Features Auto IP Address Report to periodically report the IP Address of Serial Server to the assigned Host on Network.
• Protocol support for ICMP, TCP/IP, UDP, DHCP, BootP, Telnet, DNS, SNMP, HTTP, SMTP, SNTP.
• Power supply: Screw terminal, or standard external DC adapter.
• External P1,P2,P3 connector: USB A Type, Power consumption: 500mA/5V.
• Serial interface: +/-15 KV ESD.
• RS422/485 interface: Surge, over current, over voltage protection.
• Power consumption: 12V/450 mA.
• Operating Temperature: 0 to 65 ℃.
• Humidity: 0~90% Non-Condensing.
• Dimensions: 145(L)*118(W)*26(H) /mm.
• Weight: 728g (W/Packing).

TRP-C34H
Ethernet to 4 RS32/422/485
Converter

Application Note

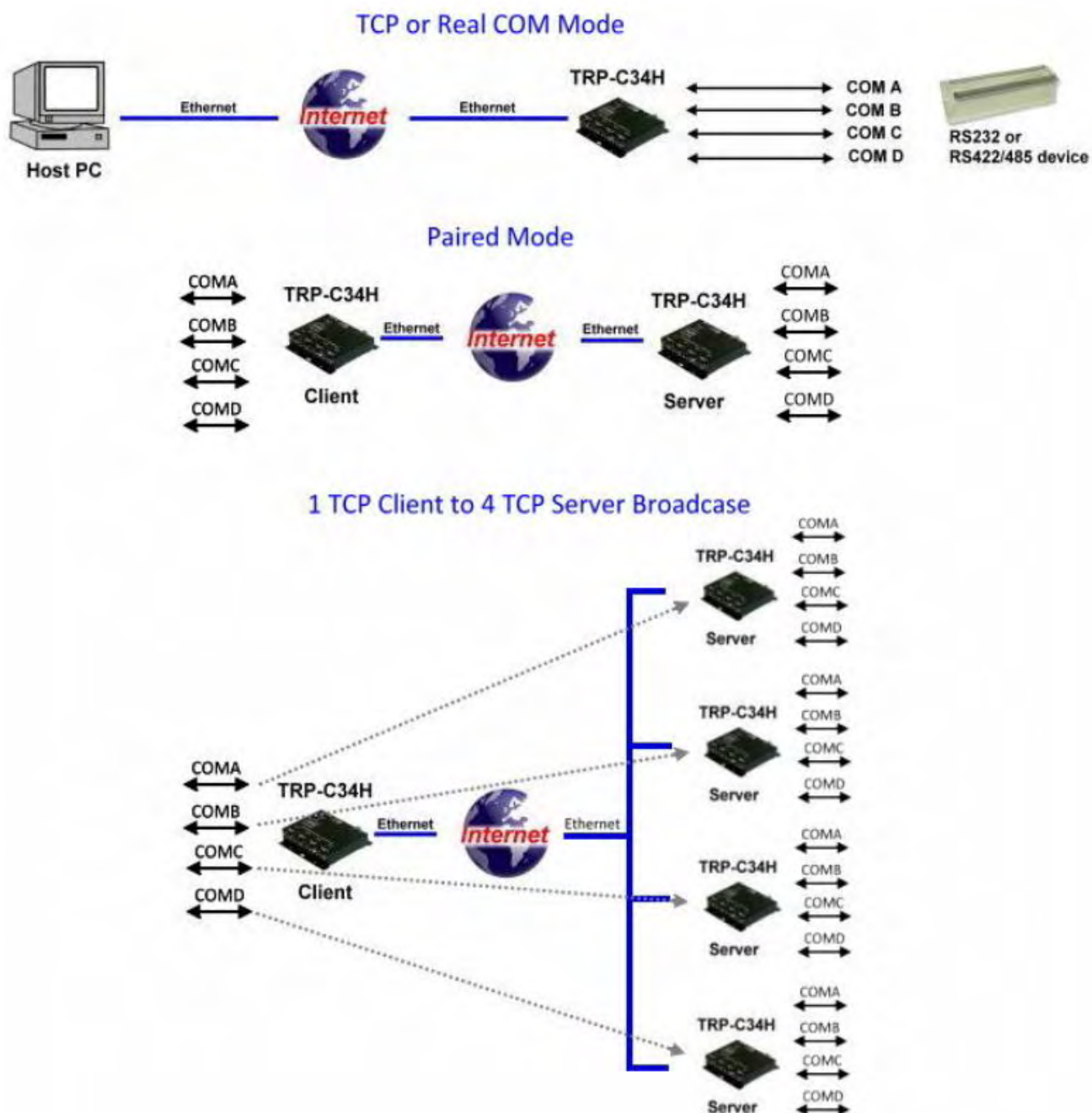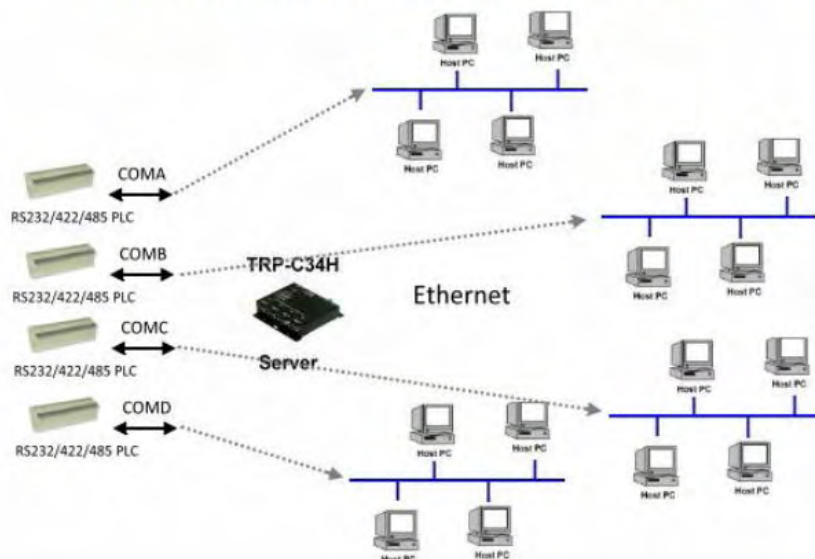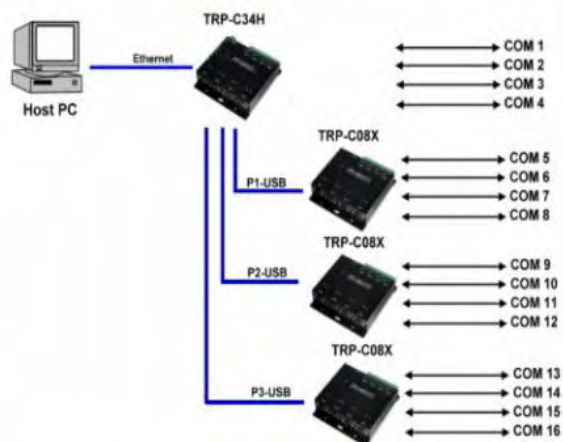### TCP or Real COM Mode

Paired Mode

1 TCP Client to 4 TCP Server Broadcase

TRP-C34H
Ethernet to 4 RS32/422/485
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1 Serial Device to 4 TCP Host PC at Same Time Broadcase

TRP-C34H up to 16 Real COM or 16 TCP Port (only one IP)

TRP-C34H with TRP-C08X/TRP-C08S/TRP-C08H/TRP-C08U/TRP-C29U

TRP-C08X USB to 4 RS232/422/485 Converter
TRP-C08S USB to 1 RS232 and 1 RS422/485 Isolated Converter
TRP-C08H USB to 2 RS232 and 2 RS422/485 Isolated Converter
TRP-C08U USB to 4 RS232 Isolated Converter
TRP-C29U USB to 8 Channel Isolated DI and Isolated DO (O.C).

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Accessories

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

■■ Specifications

Input Specifications:
- Power Input Voltage: 100VAC~240VAC.
- Power Input fequency: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 ℃ ~40 ℃.
- Storage temperature:-20 ℃ ~70 ℃.

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.