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.
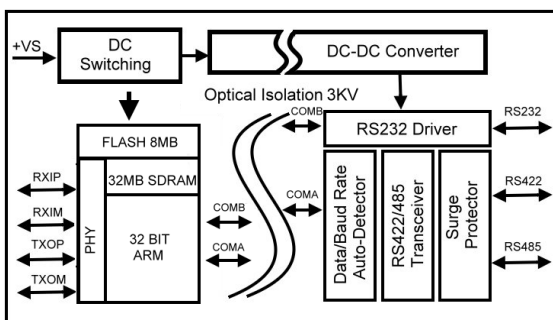 By specifying the IP address and the TCP Port number, a host computer can access different Serial Devices such as Serial Thermometers, Magnetic Card Readers, Barcode Scanners, Data Acquisition Systems, POS Terminals, Industrial PCs etc., over the Network, you can centralize Serial Device management and 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.
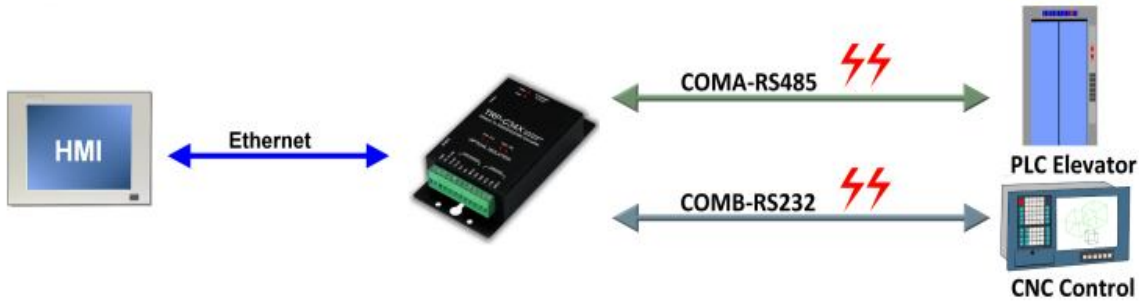•Din rail or panel mounts support.

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 $^{\circ}$C.
•Humidity: 0~90% Non-Condensing.
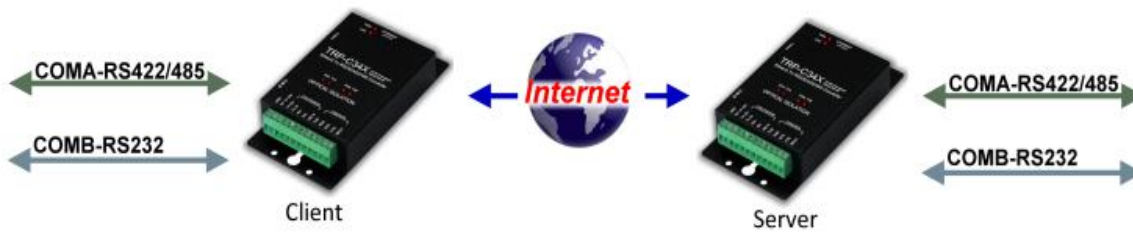•Dimensions: 141(L)*78(W)*26.5(H) /mm.
•Weight: 450g (W/Packing).

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Application Note

TCP or Real COM Mode

Paired Mode

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