



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.

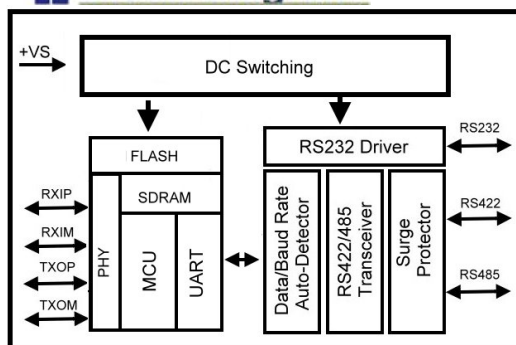
TRP-C37M Modbus TCP to RTU/ASCII Gateway

- 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.
- 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.

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.

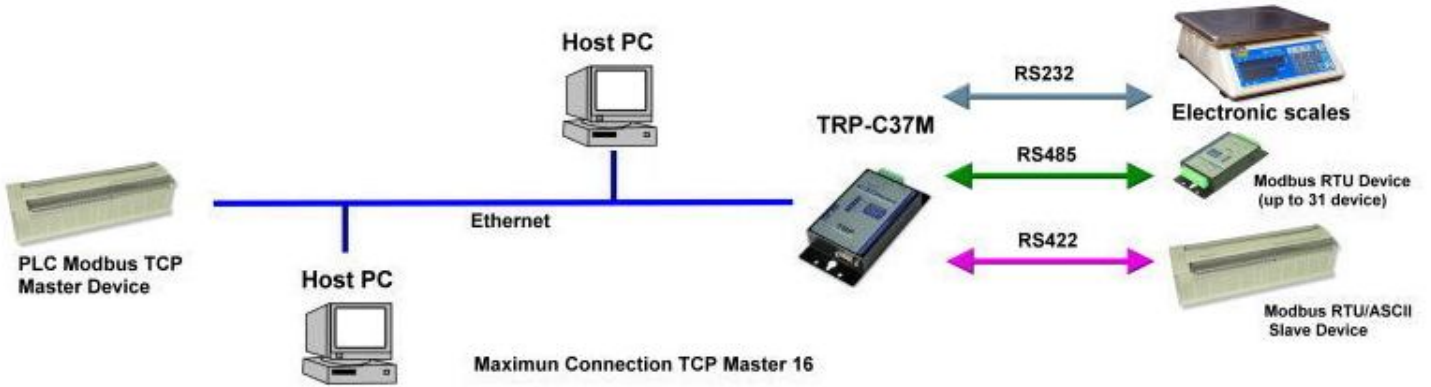
Block Diagram



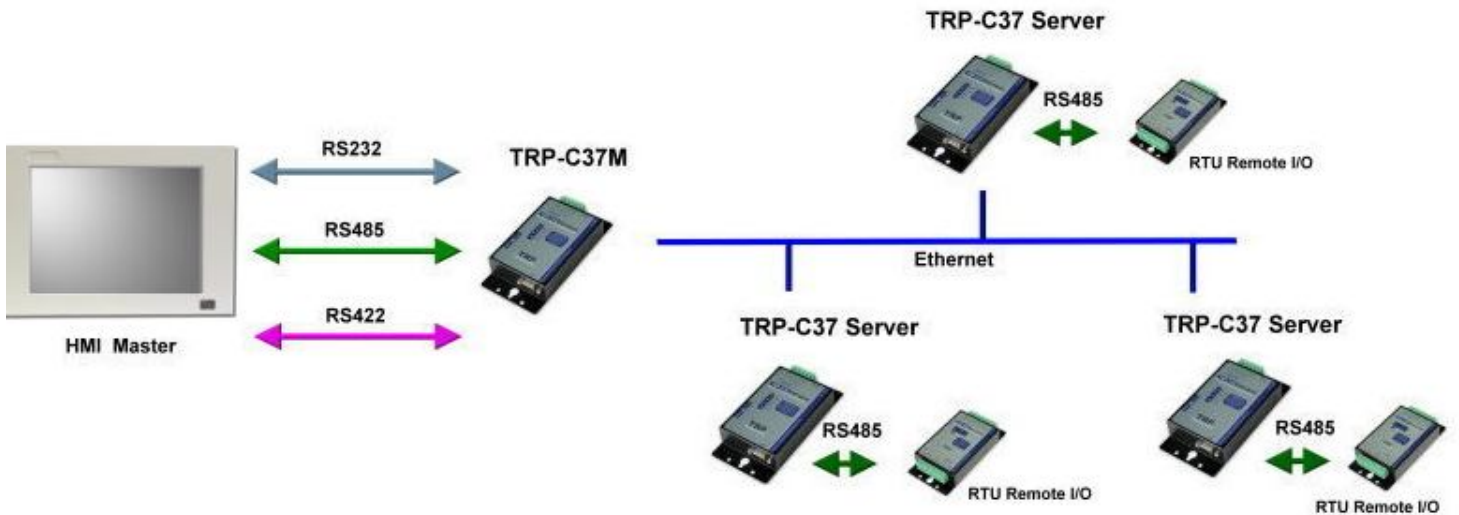
TRP-C37M Modbus TCP to RTU/ASCII Gateway

Application Note

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

