

COMMUNICATION CONVERTER



TRP-C31M Modbus TCP to RTU/ASCII Gateway

Introduction

The TRP-C31M, MODBUS TCP to RTU/ASCII gateway, is designed to enable MODBUS protocol to be carried over TCP/IP based network, it allows the legacy MODBUS RTU/ASCII devices to operate on a MODBUS TCP network and also allows either MODBUS serial master or slave to communicate with MODBUS TCP's slave or master.

When TRP-C31M functions as "MODBUS TCP masters to MODBUS RTU/ASCII slaves", TRP-C31M allows multiple MODBUS TCP masters to communicate with a MODBUS serial network. Since MODBUS serial network can only handle one query at one time, queries from different masters are pipelined and processed one by one.

When TRP-C31M function as "MODBUS RTU/ASCII master to MODBUS TCP slaves gateway," TRP-C31 can connect up to 8 MODBUS TCP slaves. User can specify a UID range for each MODBUS TCP slave.

TRP-C31M provides inactive timeout that allows user to specify a time period to disconnect TCP/IP connection if there is no activity in the network. This could avoid none connection channel be occupied or prevent any unnecessary connection again.

Friendly management software provides an easy way of configuration; it can search all MODport within a local area network independent of its subnet. It can also find a MODport of a specific IP address over wide area network. TRP-C31M can also be configured by its console port or through telnet connection. TRP-C31M features web interface setting for user to configure it by a web browser, and loop back test mode, all data is sent back immediately this makes the connection testing easy. The industry DIN rail and panel mounting design enable user a fast and professional installation.

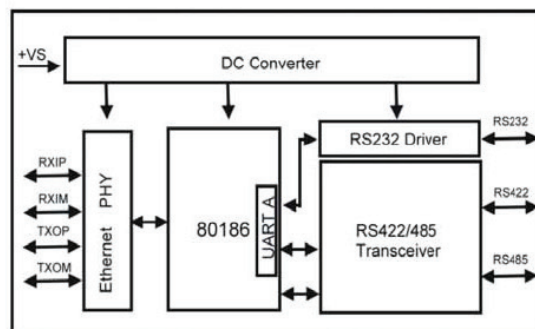
Features

- ◆ DIN rail or Panel mount support..
- ◆ Supports 10/100Mbps Ethernet.
- ◆ Supports RS232/422/485 serial interfaces.
- ◆ Supports LAN and WAN communications.
- ◆ Management access password protected.
- ◆ Supports up to 8 MODBUS TCP master to MODBUS RTU/ASCII (up to 31).
- ◆ High speed up to 230.4Kbps.
- ◆ Supports MODBUS RTU/ASCII master to link up to 8 MODBUS TCP clients.
- ◆ Supports inactive timeout to shutdown connection for allowing accepting next connection.
- ◆ Supports loop back mode, data is echoed back for easily testing the connection.

Specifications

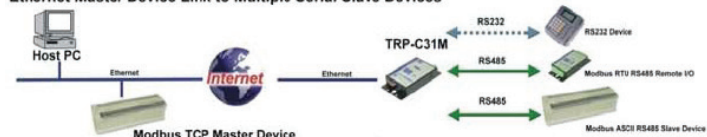
- ◆ CPU: RDC 80186.
- ◆ System memory:1MB Byte.
- ◆ SDRAM:1MB Byte.
- ◆ Flash:256KB.
- ◆ Serial buffer: 64KB.
- ◆ Input: 8KB per port.
- ◆ Serial Connection: DTE DB-9 male.
- ◆ LAN: 10/100Mbps Auto-detecting, 10/100 Base-T.
- ◆ RS232: TX, RX, RTS, CTS, DTR, DSR, DCD, GND.
- ◆ RS422: TX+, TX-, RX+, RX-, RTS+, RTS-, CTS+, CTS-, GND.
- ◆ RS485: Data +, Data-, GND.
- ◆ Data Rate: 110bps to 230.4Kbps.
- ◆ Parity: none, even, odd, mark, space.
- ◆ Data Bits: 5, 6, 7 or 8.
- ◆ Stop Bits: 1, 1.5 or 2.
- ◆ Protocol: TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP.
- ◆ Management: Manager Software, Serial Console, Telnet, Web server Firmware Upgradeable.
- ◆ Power consumption:15V/150mA.
- ◆ Operating Temperature:-20 to 65 °C.
- ◆ Storage Temperature:-20 to 66 °C.
- ◆ Humidity: 10~90% Non-Condensing.
- ◆ Dimension: 151mm x 77mm x 26mm.
- ◆ Weight: 377g.

Block Diagram



Application Note

Ethernet Master Device Link to Multiple Serial Slave Devices



Master Serial Device link to Serial Slave Devices By Ethernet

