



	Serial Port 1	Serial Port 2	5pin Terminal Block
MODport 101	RS232/422/485	-	-
MODport 111	RS232/422/485	-	✓
MODport 102	RS232/422/485	RS232	-
MODport 112	RS422/485	RS422/485	-
MODport 104	RS232/422/485 in all 4 ports		

Features

- DIN rail or Panel mount
- Supports 10/100 Mbps Ethernet
- Supports LAN and WAN communications
- Management access password protected
- Supports up to 8 MODBUS TCP master to MODBUS RTU/ASCII; Queries from different masters are pipelined and handled independently without disrupt each other
- 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

Overview

Modbus RTU/ASCII: emerged in the mid-1970s for linking terminals with Modicon PLC's using a master/slave protocol. The original Modbus serial line specification included two transmission modes: RTU and ASCII. The Modbus RTU uses binary coding and CRC error checking. Modbus ASCII mode is more readable, but less efficient because each byte is represented by two ASCII code and it uses less effective LRC error checking. The communication are initiated by Modbus masters using polling, query/response protocol. The master can send broadcast messages, using a unit ID of 0, which all slaves accept, but do not reply to. Normally the master polls individual slaves sequentially.

Modbus TCP is designed to allow Modbus protocol to be carries over TCP/IP based networks. Unlike Modbus RTU/ASCII, which a master can communicate to multiple slaves using UID, Modbus TCP sets up a point to point connection. To communicate with multiple slave devices, different TCP/IP connection is needed for each

slave device. Also multiple polling/queries messages can be pipelined or queued. The response messages could be replied out of order by the slave devices. Therefore a transaction ID is assigned to each polling message to avoid mixing up query and response message.

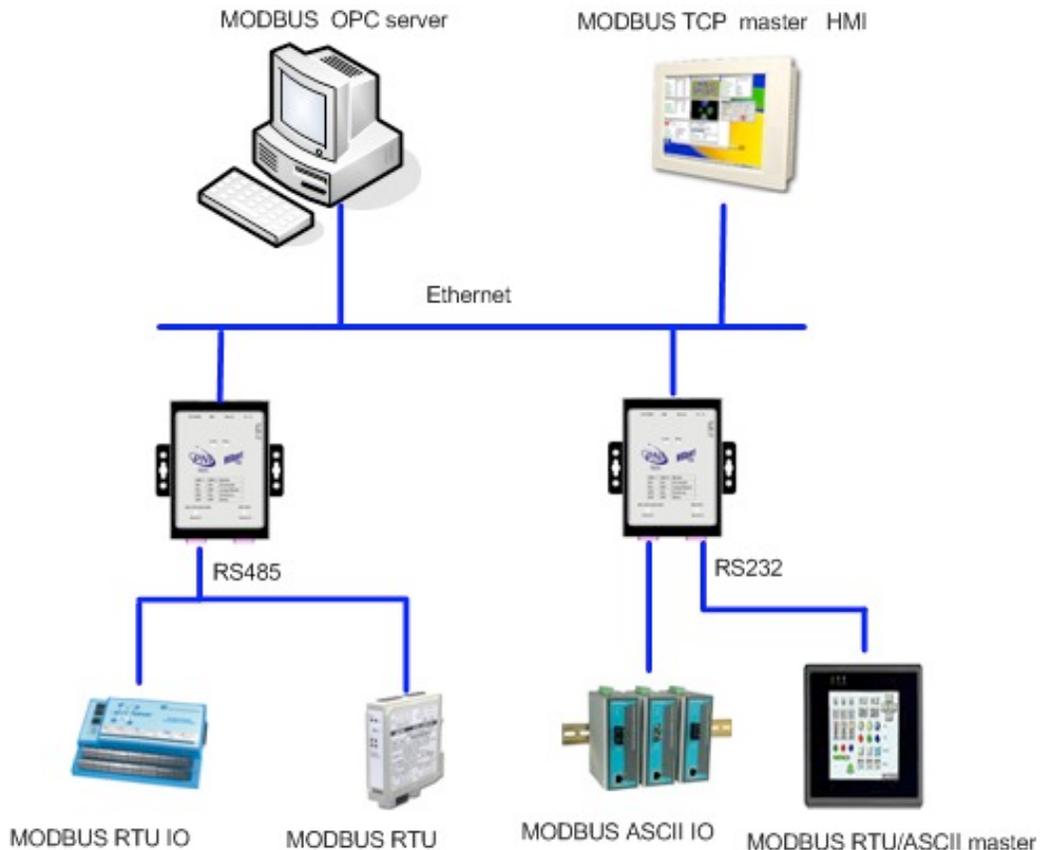
The MODport-10x, MODBUS gateway allows the legacy MODBUS RTU/ASCII devices to operate on a MODBUS TCP network. It allows either MODBUS serial master or slave to communicate with MODBUS TCP's slave or master.

Modbus TCP masters to Modbus RTU/ASCII slaves: MODPort 10X 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.

Modbus RTU/ASCII master to Modbus TCP slaves: When MODport function as MODBUS RTU/ASCII master to MODBUS TCP slave gateway, MODport can connect up to 8 MODBUS TCP slave. User can specify a UID range for each MODBUS TCP slave.

Inactive timeout: MODport provides inactive timeout that allows user to specify a time period to disconnect TCP/IP connection if there is no activity in the network. It could be the peer of the connection is down if the connection does not tear down it would occupy one connection slot and prevent any another connection again.

Configuration tools: User friendly MODport management software provides an easy way to configure MODport. 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. MODport can also be configured by its console port or through telnet connection. MODport also provides web interface for user to configure it by a web browser. MODport will work at Loop back Mode, all data is sent back immediately. This feature makes the connection testing easy.



Specifications

Serial Buffer:

output: 64K bytes for MODport-101/102/111/112
32K bytes for MODport-104
16K bytes for MODport-108

Input: 8K bytes per port

Serial Connection:

DTE – BD-9 male

LAN:

10/100 Mbps Auto-detecting – 10 Base T,
100 Base TX

Serial Interfaces:

RS-232 – TX, RX, RTS, CTS, DTR, DSR, DCD, GND

RS-422 – TX+, TX-, RX+, RX-, RTS+, RTS-,
CTS+, CTS-, GND

RS-485 - Data +, Data -, GND

Data Rate:

110 bps to 230.4 k bps

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, SNMP, ICMP

Management:

Manager software, Serial Console, Telnet, Web server
Firmware upgradeable, SNMP.

Dimensions:

MODport-101/102/111/112

3.35 x 4.5 x 0.90 in (8.5 x 11.5 x 2.3 cm)

MODport-104 4.5 x 7.3 x 1.1 in (11.4 x 18.5 x 2.9 cm)

Power Requirements:

9 ~15 VDC

500 mA MODport-112

Operating Temperature:

0 to 50 °C (32 to 122 °F)

Storage Temperature:

-20 to 60 °C (-4 to 140 °F)

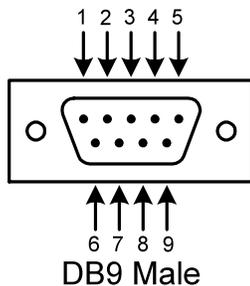
Humidity:

0 – 90% Non-Condensing

Approvals:

CE, FCC

Pin Assignment



DB9 M Pin	RS232	RS422	RS485
1	DCD	RX-	--
2	RXD	RX+	--
3	TXD	TX+	DATA+
4	DTR	TX-	DATA-
5	GND	GND	--
6	DSR	CTS-	--
7	RTS	CTS+	--
8	CTS	RTS+	--
9	RI	RTS-	--

Contacts

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