



XPORT-EIP-MB

Serial Modbus to EtherNet/IP RJ45

The XPORT-EIP-MB Intelligent RJ45 connector converts a serial Modbus RTU/ASCII (RS485 or RS232) Server into an EtherNet/IP Server. The limitations of a Modbus serial network are removed; using Ethernet technology every node has the ability to read/write data to each other using EtherNet/IP.

Providing quality
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- Chips
- Modules
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- Products

The XPORT-EIP-MB is an intelligent RJ45 connector with Modbus Master and EtherNet/IP Slave software built-in. The XPORT-EIP-MB is a simple component that can be added to your existing board and converts your existing Modbus RTU/ASCII serial TTL port to an EtherNet/IP Ethernet port.

The XPORT-EIP-MB is available in a finished product as the NET232-EIP-MB or NET485-EIP-MB.

The XPORT-EIP-MB has a compact form factor, not much larger than a standard RJ45 Ethernet connector, which gets soldered onto your printed circuit board. The pins on the

XPort are the serial TTL signals that come from your local Modbus serial port.

The XPORT-EIP-MB is powered using +3.3 Volts and has an industrial temperature range of -40°C to +85°C. These specifications allow the XPORT-EIP-MB to be used in commercial and industrial applications.

The Ethernet port of the XPORT-EIP-MB supports both 10Base-T and 100Base-TX Ethernet connections. The serial port of the XPORT-EIP-MB supports Modbus baud rates up to 230kbps.

XPORT-EIP-MB

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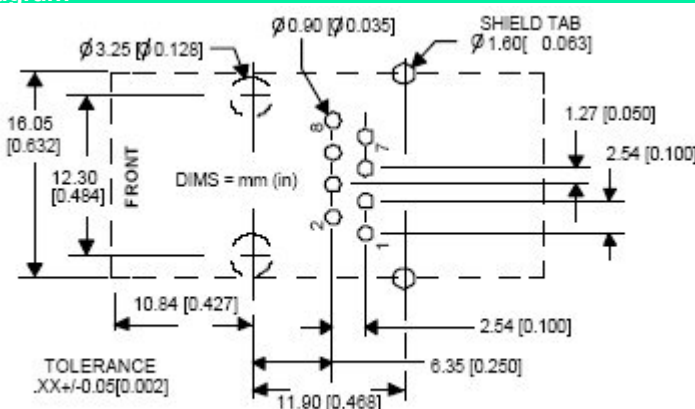
Features

- Compact RJ45 Size
- Modbus RTU/ASCII Serial Client
- EtherNet/IP Server
- Plugs into TTL serial port on PCB
- + 3.3 Volt operation
- 10BASE-T/100BASE-TX compliant
- Auto-Sensing
- Ethernet Activity and Status LEDs
- Wide temperature range -40° C to +85° C
- OEM and custom versions available
- RoHS Compliant

EtherNet/IP Specifications

- Communications Adapter Profile
- EtherNet/IP I/O Server
- Identity Object (configurable)
- Connection Manager Object
- Message Router Object
- Assembly Object
- Ethernet Link Object
- TCP/IP Object
- Vendor specific objects to configure Modbus client and register to I/O message mapping
- All required attributes and services
- Producer/Consumer I/O messaging
- CIP module and network status
- Customized features available

XPORT Diagram



XPort Solder Pin Assignments

Table 1 - Serial Interface Signals

Signal Name	Pin	Function
GND	1	Circuit Ground
Vcc	2	+3.3V Power In
Reset (In)	3	External Reset In
Data OUT	4	Serial Data Out
Data IN	5	Serial Data In
CP1	6	Configurable Pin 1: Flow control – connects to CTS of attached DTE device, Programmable Digital Input or Output, Status LED 1
CP2	7	Configurable Pin 2: Modem control – connects to DCD of attached DTE device, Programmable Digital Input or Output
CP3	8	Configurable Pin 3: Flow control – connects to RTS of attached DTE device, Modem control – connects to DTR of attached DTE device, Programmable Digital Input or Output, Status LED 3

Part Numbers:

GC-XPORT-EIP-MB

Modbus to EtherNet/IP RJ45

GC-NET232-EIP-MB

RS232 Modbus to EtherNet/IP

GC-NET485-EIP-MB

RS485 Modbus to EtherNet/IP

Complete products including the XPort are also available