

Model PC-E Protocol Converter

Serial Modbus RTU Protocol to Modbus TCP/IP Ethernet Converter for PLC, HMI, SCADA, etc.

The model PC-E Protocol Converter (Serial Modbus / Ethernet) is an interface to bridge Serial Modbus devices, such as Future Design Controls [FDC-IO Series](#) (Digital / Analog IO to Modbus RS232/485) to computer hosts running Modbus/TCP on Ethernet networks (10/100 Base-TX Ethernet network). The PC-E may be connected to multiple Serial Modbus devices and multiple PC-E converters may be connected to Ethernet networks.

Fully compliant with Modbus/TCP, the PC-E offers a convenient solution to connect existing devices or controllers running Modbus Serial protocol (Modbus/RTU) to an Ethernet network.

The Ethernet/Serial Converter can be configured to operate in a number of different modes depending on the application. It can be configured as a transparent data link or it can perform the gateway function of converting Modbus TCP messages to Modbus RTU messages.

The PC-E allows OEM equipment manufacturers, system integrators, and end users to connect control devices with Serial Modbus ports to Ethernet networks quickly & cost-effectively.



Features

- Supports Serial Modbus/RTU
 - Transparent Mode: TCP or UDP
 - Modbus Gateway: TCP or UDP
- Connect to multiple Serial Modbus devices
- Supports 10/100 Mbps communication speeds
- Allows up to 4 Masters to access data
- Power Supply: 10VDC to 26VDC
- Easy DIN Rail mounting
- Configuration via Web Server

PC-E Technical Specifications

Power

Power Supply: 10 VDC to
Power Consumption: 90mA @1

Mechanical

Dimensions [W x H x D]: 70 x
2.76 x
Mounting: DIN I
Wiring Connection: Termi

Temperature / Humidity

Storage Temperature: -40C to
Operating Temperature: -10C to
Humidity: up to 9

LED Display: Power, Etherne
TX/RX Serial, I
communication

Ethernet Communication

Ethernet Interface: 10/100 Mbits/s and 10/100 Base - TX
Ethernet Connector: RJ45 plug

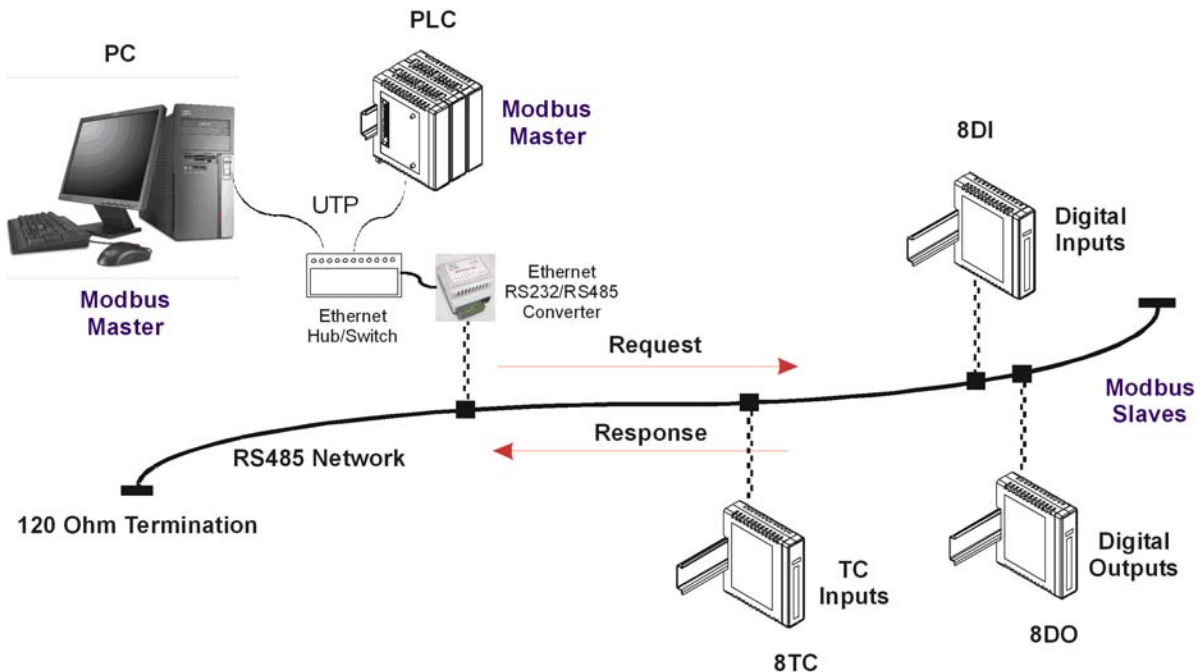
Serial Communication

RS232: 3-wire; TX, RX, GND
RS485: 2-wire multi drop twisted pair
Baud Rate: 2400 – 115,200
Parity: None, Even or Odd
Stop Bits: 1 or 2
Data Bits: 5, 6, 7, 8

Serial / Ethernet Converter Modes: [\(Refer to Manual\)](#)

Transparent Mode: TCP or UDP
Modbus Gateway: TCP or UDP

Sample Network diagram showing multiple Masters communicating on a link with 3 slaves shown as Digital Inputs, Digital Outputs & TC Inputs



Ordering Code

| <u>Model Number</u> | <u>Description</u> |
|---------------------|--|
| PC-E | Protocol Converter – Serial Modbus to Modbus TCP/IP Ethernet |

Accessories

| <u>Part Number</u> | <u>Description</u> |
|--------------------|--|
| SN10A | RS232 to 485 Converter (PC RS232 to Module(s) RS485) |
| DB9M-DB9F-6ft | Serial cable SN10A to PC |
| PSR5R-SD24 | Power Supply (DIN Rail Mount) Power Input: 85-264VAC Power Output: 24VDC 60 Watt (2.5 amp) Contact for larger capacity Power Supplies |

| <u>Ethernet Patch Cable Part Number</u> |
|---|
| CA-CAT5E-Patch-7ft |
| CA-CAT5E-Patch-25ft |
| CA-CAT5E-Patch-50ft |
| CA-CAT5E-Patch-100ft |

| <u>Ethernet Crossover Cable</u> |
|---------------------------------|
| CA-CAT5E-Crossover-7ft |
| CA-CAT5E-Crossover-15ft |

[FDC_PC-E_Manual_v1.0_August-2007.pdf](#)