



REAL TIME AUTOMATION

Modbus RTU to EtherNet/IP Gateway

FEATURES

- Organize Your Modbus RTU Registers for Maximum Efficiency
- Create Up To 450 byte I/O Data Transfers using your Modbus RTU Registers
- Fill the 31 Modbus Device Slots With Your Modbus Devices In The Order That Matches What You Want In Your PLC Data Table
- Read and Write any Modbus RTU Register from your Logix Programmable Controller
- You Control how the Modbus RTU registers are mapped into your Logix PLC with the easy-to-use web server
- Simple, Browser-Based Configuration
- Specially Designed for Modbus RTU and EtherNet/IP Logix Communications – Custom Versions available on Request



Support Up To 31 Modbus RTU Devices Using EtherNet/IP Explicit And I/O Communications

The Fastest Way to Move Modbus RTU Data in and out of Logix Controllers

If you need to move Modbus RTU data to your ControlLogix or CompactLogix Programmable Controllers you now have an exceptional tool – a tool designed for this task and this task only. With support for up to 31 Modbus Devices, easy web server configuration and Explicit and Implicit (I/O) EtherNet/IP communications you can easily read and write all your Modbus registers from a Logix PLC at half the investment of rack-based solutions.

Not Your Usual Gateway

You've probably tried the expensive, complex solutions from some of the big, well-known companies. Probably tried them and either fought through the 100 page manuals or abandoned the effort in disgust. If that's been your experience with Ethernet/Modbus gateways you are going to love the 451EM. First it gives you 31 device slots to play with. You assign a Modbus RTU address, and either a set of registers to read or a set of registers to write. You do that with one of the device slots or as many as you need. Mapping to your ControlLogix is based on how you assign your Modbus devices to these device slots. Want 10 registers from Modbus Address 99 as the first 10 registers of your ControlLogix input? Just assign Address 99 to the Device Slot 1. As you fill your Device Slots you build the Logix data table you will use in the PLC. Need two different registers sets from the same Modbus RTU Address? Just configure a second device slot with that same address. Isn't this a lot simpler than the typical Modbus gateway?

A Gateway, A Philosophy, My Company,

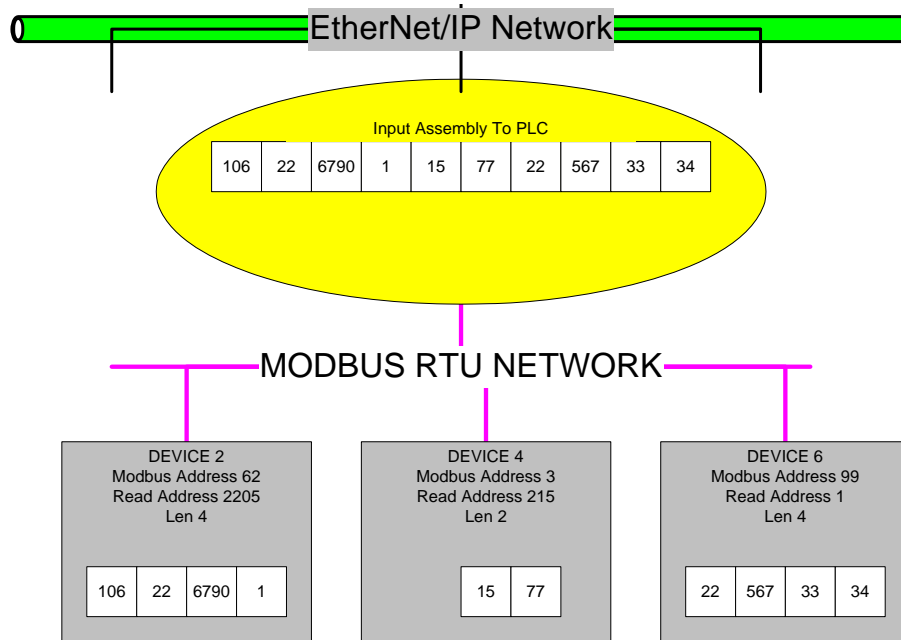
"I remember my days as an engineer in the factory. I remember the pressure to keep the line running and product flowing. The endless headaches and stress that came every time I had to install a new gateway. If I never saw another hundred page manual or had to deal with fifty features I didn't need it would be too soon. I knew there had to be a better way.

That's how Real Time Automation was formed. I found the best engineers and gave them one task. I asked them to make solutions so easy to use the hardest part would be opening the box. It has been twenty years now and we still strive for that same goal everyday"

John Rinaldi



Registers from Three Modbus RTU devices at Modbus Address 62, 3 and 99 are read and the resulting data forms the EtherNet/IP Input Assembly to the Programmable Controller. Data can be written to Modbus RTU devices in exactly the same way. An output assembly is distributed to Modbus devices based on the number of registers configured for each Modbus RTU device.



BROWSER CONFIGURATION

ModBus Slave Device Configuration

Pick a device to configure:

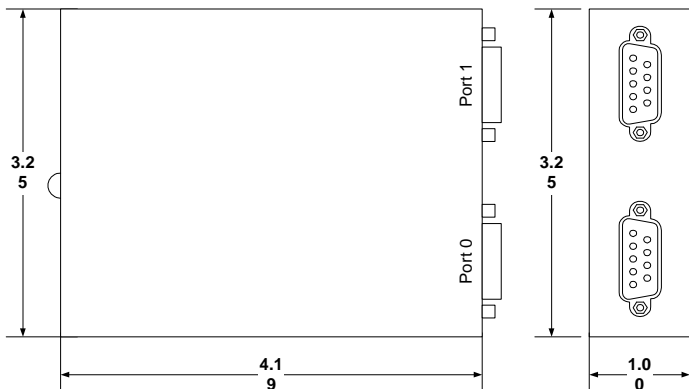
Current Device Configuration

Device 1 Read disabled Write disabled
Device 2 (Slave Address 62) Read Register Address 2205 Read Register Length 4 Write Register Address 101 Write Register Length 15
Device 3 Read disabled Write disabled
Device 4 (Slave Address 3)



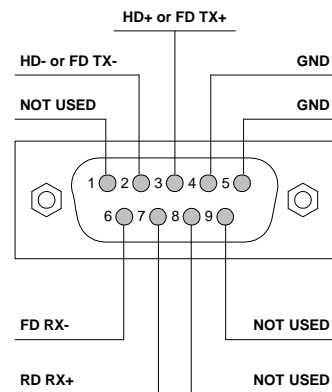
Ethernet Hardware	Serial Communications	LED's	Physical
32-Bit Coldfire IC	Two DB-9M Connectors	Link/Speed LEDS	Dimensions: 4.2" x 3"
10/100 BaseT	Baud Rate: 300 to 19.2K	Data LED	Weight: 5oz
RJ45 connector	Even/Odd/No/Space Parity		
	One RS232 Serial Port	Power Requirements	Environmental
Network Interface	One RS232/485 Port	12VDC @ 500ma	0 – 70 Degrees C
Ethernet TCP/IP		9-30VDC	5 to 90% Relative Humidity
Modbus RTU	Mounting Options		
Configuration	Din Rail		
Browser Interface	Panel		

DIMENSIONS



CONNECTOR PINOUTS

Serial Port 0 (RS485 MODE)



ORDERING INFORMATION

Part Number	Description	Mounting Option
451EM	Logix EtherNet/IP Modbus RTU Gateway	Desk Mounted Gateway
451EM-P	Logix EtherNet/IP Modbus RTU Gateway	Panel Mounted Gateway
451EM-D	Logix EtherNet/IP Modbus RTU Gateway	Din Rail Mounted Gateway

Orders can be placed 24 hours per day. You can place your order by faxing 414-453-5125 or emailing orders@rtaautomation.com.

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