



REAL TIME AUTOMATION



## EtherNet/IP Server/ Modbus RTU Slave

### FEATURES

- Fully Compliant EtherNet/IP Server
- Fully Compliant Modbus RTU Slave
- EtherNet/IP Server Supports Up To 400 Bytes of Input
- EtherNet/IP Server Supports Up To 400 Bytes of Output
- Support for Modbus Function Codes 3, 6, and 16
- Effortless Browser Based Configuration
- 10/100 Base-T Operation
- Includes Ethernet Device Management Tool
- No Programming Required

## **An Instant Device Converter™ Product**

Move Your Modbus RTU Data to an EtherNet/IP Client

**Move Your Data Where You Want, When You Want, How You Want**

### The Smart Way To Move Modbus RTU Registers To An EtherNet/IP Client

The 460ESMRS moves data between a Modbus RTU controller device and an EtherNet/IP Client. The module provides complete communication to an EtherNet/IP Client from a Modbus RTU Master. Our unit provides Modbus RTU Master data to an EtherNet/IP Client as EtherNet/IP Server data and provides EtherNet/IP Client data to a Modbus RTU Master as Modbus RTU Slave data.

**With the 460ESMRS you have a device that you can quickly deploy and easily configure to access and integrate these Modbus devices into your EtherNet/IP network.**

#### Move Your Data Bi-directionally

With the 460ESMRS module you can both write registers to your Modbus RTU Master Device and read from that Modbus RTU Master. Up to 200 Registers of data can be transferred from a single Modbus RTU Master device.

#### No Configuration Needed

There is no configuration to figure out. The registers from EtherNet/IP are automatically mapped into the Modbus RTU Registers. This is the quickest, easiest way of exchanging data between Modbus RTU Master such as HMIs, controllers, and an EtherNet/IP Client.

The 460ESMRS is the Smart Connection solution for integrating a Modbus RTU Master device with an EtherNet/IP Client.

### **The Legend Begins**

*"It's likely that your business isn't industrial networking and it shouldn't be. You make products, products that do wonderful things. Whatever it is that you make, the process creates data. If you're a control engineer and your plant has been around for more than a few years your floor is probably littered with devices that send out all kinds of data and in most cases data comprised of many different protocols. If you're an automation device developer you probably need to move your data into some other network. Either way, you've got a device conversion problem. You have devices that generate ASCII data, Modbus RTU, Ethernet TCP Data, DeviceNet data or some other completely proprietary data and now you're the person that has to move that data to some other network!"*

*I feel your pain... and rather than just my sympathy, I have a solution for you. You see, while your business may not be moving data around a factory floor mine is. In fact, it's all that we have done for over twenty years now. Our 460 series of Device Converters is the culmination of those twenty years. You can now move all of your data, where you want, when you want and how you want. Best of all **THE HARDEST PART IS OPENING THE BOX.**"*

*John Rinaldi*

## It's Easy to Set Up

*Sound complicated? It's not. Just Three Simple Steps!*

**ONE:** Start by opening the web page for the device with Internet Explorer.

**TWO:** Edit the Modbus RTU Slave and EtherNet/IP Server communication modules to connect to your system using our easy browser based configuration page.

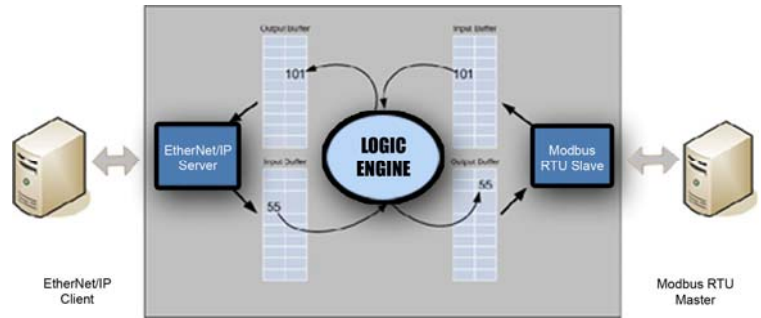
**THREE:** Set the IP Address, Subnet Mask, and Gateway Address to match your field setup and then connect our configured unit to your system.

Nothing complicated, and best of all it's browser driven!

**NO SPECIAL SOFTWARE IS REQUIRED**

## How It Works:

The products in the Instant Device Converter product line contain an IEC 61131-3 standard control engine that moves your data from buffer to buffer. Input data from one network is moved to the output buffer of one or more other networks. Input data from those networks is moved to the output area of the other networks.



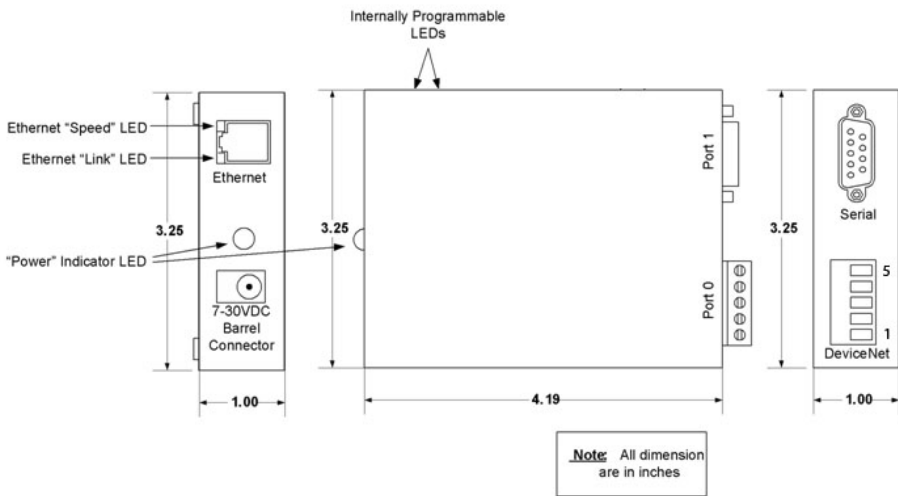
ENCLOSURE / HARDWARE	
Size	4.2" x 3.25" x 1"
Weight	5 oz.
Enclosure Type	Anodized Aluminum
Mounting	Din Rail
Connectors	Port 0: T-STRIP (RS232, RS485/RS422, CAN) Port 1: DB-9 (RS232, RS485/RS422, CAN) <i>**Only one RS232, RS485/RS422, or CAN port setting can be active per unit**</i> RJ45 10/100 Base-T (Ethernet) 2 Pin Barrel Connector
LEDs	Ethernet Link/Data, Ethernet Speed, Power, and two general purpose LEDs

ELECTRICAL/ENVIRONMENTAL/TOOLS	
Network Interface	10/100 Base-T with RJ-45 Connector
Power	8 V @ 230 mA to 28 V @ 80 mA
Maximum Serial Baud Rate	115K Baud
Device IP Address Management	<b>IPSetup™</b> — automatically locates RTA Instant Device Converters
Operating Temperature	-40 C to 85 C
Certification	RoHS-Compliant, UL, CUL, CE Approvals



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## Dimensions



## Connector Pin-Outs

PORT 1 (DB9)				
Pin	RS-232	RS-485	RS-422	CAN
1	CD	-	-	-
2	RX	TX-	TX-	CANL
3	TX	-	RX+	-
4	DTR	-	-	-
5	GND	GND	GND	GND
6	DSR	-	RX-	-
7	RTS	TX+	TX+	CANH
8	CTS	-	-	-
9	RI	-	PWRIN	PWRIN

PORT 0 (TStrip)				
Pin	RS-232	RS-485	RS-422	CAN
1	GND	GND	GND	GND
2	RX	TX-	TX-	CANL
3	TX	TX+	TX+	SHEILD
4	RTS	RX-	RX-	CANH
5	CTS	RX+	RX+	PWRIN

CATALOG #	DESCRIPTION
460ESMRS	EtherNet/IP Server / Modbus RTU Slave Device Converter

## Sales & Service

### PLACING YOUR ORDER

Orders can be placed 24 hours per day. You can place your order by faxing 262-439-4989 or emailing [orders@rtaautomation.com](mailto:orders@rtaautomation.com).

### TECHNICAL SUPPORT

**Phone Support:** 1-800-249-1612 during normal business hours

**Email Support:** Is available by emailing [support@rtaautomation.com](mailto:support@rtaautomation.com)

## Support for Other Industrial Networks

Versions of the **460 Line of Instant Device Converters** support a large number of industrial networks and more are being added. Every one of these are implemented using our simple web-based integration and configuration architecture found in all 460 Device Converters. Connect any number of protocols with the same easy integration and configuration the 460 Line

INDUSTRIAL NETWORK SUPPORTED			
ASCII RS232	Modbus RTU Slave	Raw TCP Client	EtherNet/IP Server
ASCII RS485	Modbus TCP Server	Raw TCP Server	EtherNet/IP Client
BACnet IP	Modbus RTU Master	CANopen Slave	DeviceNet Master
Modbus TCP Client	<b>*** CALL ABOUT YOUR PROPRIETARY PROTOCOL ***</b>		DeviceNet Slave

## Proprietary Protocol Support

The **460 Instant Device Converters** can be customized for specific applications and proprietary communications. All 460 Instant Device Converters are based on an IEC 61131-3 programming engine. The engine supports five worldwide, open standard programming languages and provides maximum flexibility for controlling your data as it moves around your factory floor or building. Logix can be added to the Instant Device Converter using standard Ladder Logic, Structured Text, Sequential function Charts or Function Block Programming. You can do the programming or an RTA Application System Engineer can implement a fine tailored solution specifically for your application.



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## For More Information:

1-800-249-1612  
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