



## Modbus TCP Server / Modbus RTU Master

### FEATURES

- Fully User Configurable Modbus RTU Master
- Support for up to 31 Modbus RTU Slave Devices
- Move Up to 400 Modbus Registers
- All Modbus RTU Slaves Map Directly to your Modbus TCP Client
- Modbus RTU Supports Function Codes 1, 2, 3, 4, 5, 6, 15, and 16
- Modbus TCP Supports 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 Devices to Your Modbus TCP Device

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

### Connect Your Modbus RTU Slave Network To A Modbus TCP Client

The 460MSMM transfers data between a set of Modbus RTU Slave devices on a Modbus RTU network and a single Modbus TCP Client device on a Modbus TCP network.

#### Move Your Data Bi-directionally

The 460MSMM can read and write both register and coil (single bits) data in each Modbus RTU Slave device. Both the register and coil data are stored as 16-bit unsigned integer data types. Each group of 16 coils is collected and stored as a single 16-bit register.

A Modbus TCP Client device can read the register data of the Modbus RTU Slaves using the registers collected from each slave. The Client device can write the register data of the Modbus RTU Slaves using the register list representing the register and coil data written to each Slave.

Up to 400 Registers of data can be transferred from up to 31 Modbus RTU Slave devices. Your Modbus TCP Client sees the 460MSMM as a Modbus TCP Server device with the accumulated register and coil data of all your Modbus RTU Slave devices.

#### Configure Your Data Transfer from a Web Page

All the data transfer is configurable using the embedded web server. You define the number of Modbus RTU Slave devices. You set one or more configurable groups of registers and coils to transfer from each Slave and in what order that those registers are transferred to the Modbus TCP Client.

The 460MSMM module is the Smart Connection solution for connecting Modbus RTU Slave devices to a Modbus TCP network.

### 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 Master and Modbus TCP Server communication modules to connect to your system using our easy browser based configuration page.

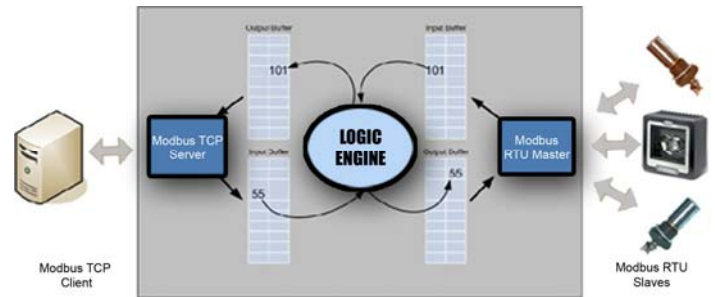
**THREE:** Set the IP Address, Subnet Mask, and Gateway Address to match your field setup and then connect our configured unit to your system.

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 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.

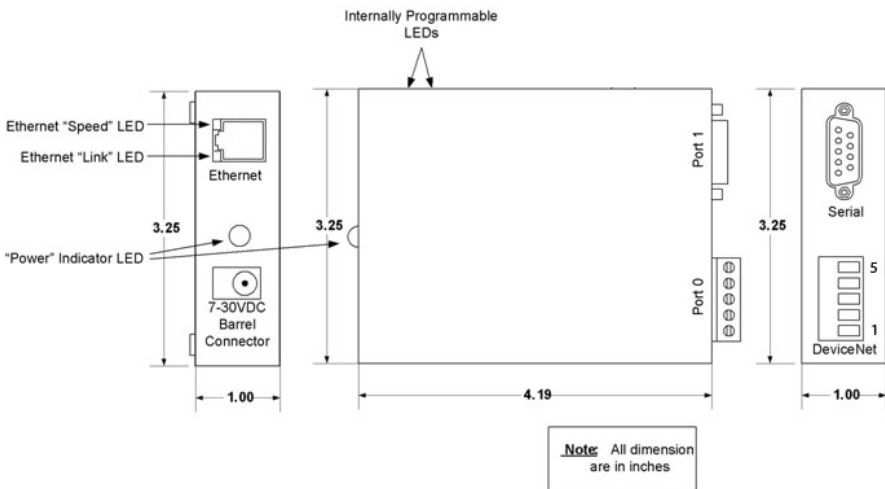


ENCLOSURE / HARDWARE	
Size	4.2" x 3.25" x 1"
Weight	5 oz.
Enclosure Type	Anodized Aluminum
Mounting	Din Rail
Connectors	Port 0: T-STRIP (RS232, RS485/RS422, CAN) Port 1: DB-9 (RS232, RS485/RS422, CAN) <i>**Only one RS232, RS485/RS422, or CAN port setting can be active per unit**</i> RJ45 10/100 Base-T (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



**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
460MSMM	Modbus TCP Server / Modbus RTU Master Gateway

**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 with more being added weekly. Every one of these is implemented using the simple web-based integration and configuration architecture found in all 460 Device Converters.

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 providing 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 yourself or an RTA Application System Engineer can implement a highly tailored solution specific to your application.



REAL TIME AUTOMATION

**For More Information**

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