



## Modbus TCP Server / BACnet/IP Server

### FEATURES

- Fully Compliant BACnet/IP Server
- Fully User Configurable Modbus TCP Server
- BACnet/IP Supports Up To 150 Analog Input and 150 Analog Output Properties
- Send and Receive up to 400 Modbus Registers
- Support Modbus Function Codes 3, 6, and 16
- Effortless Browser Based Configuration
- 10/100 BaseT Operation
- Includes Ethernet Device Management Tool
- No Programming Required

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

Move Your Legacy Modbus TCP data to a BACnet/IP Network

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

### **Integrate Your Modbus TCP Client Into Your Building Management System Over BACnet/IP**

The 460MSBS moves data between a Modbus TCP Client device and a Building Management system using BACnet/IP. The 460MSBS module bundles your Modbus TCP data and makes it available as a BACnet/IP Server. The module provides complete Modbus TCP Server and BACnet/IP Server capability.

**With the 460MSBS you have a device that you can quickly deploy and easily configure to access and integrate your Modbus TCP Controller into Building Automation Systems.**

#### **Move Your Data Bi-directionally**

You can both send data to your Modbus TCP Enabled Controller, and read current status data. Data is mapped between the Modbus TCP device and BACnet/IP using BACnet/IP properties of Analog Input and Analog Output. Up to 150 Analog Inputs and 150 Analog Outputs can be mapped into the register set of the Modbus TCP Client device.

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

All the data transfer is configured using the embedded web server. You define the number of BACnet/IP Analog Input and Output properties and RTA will map those properties into a block of Modbus Registers inside your Modbus TCP Client.

The 460MSBS is the Smart Connection solution for moving data from Modbus TCP enabled HMIs, Programmable Controllers to BACnet/IP enabled Client devices.

### **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 plants been around for more than a few years your plant floor is probably littered with devices that send out all kinds of data, and in most case data talking in a lot of 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 completely proprietary data and now you're the guy that has to move that data to some other network!*

*I feel your pain... and better than my sympathy I have a solution for you. You see while your business isn't moving data around the factory floor mine is. In fact it is all we have done for more than twenty years now. Our 460 series of Device Converters line 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 TCP Server and BACnet/IP communication modules to connect to your system using our easy browser based configuration page.

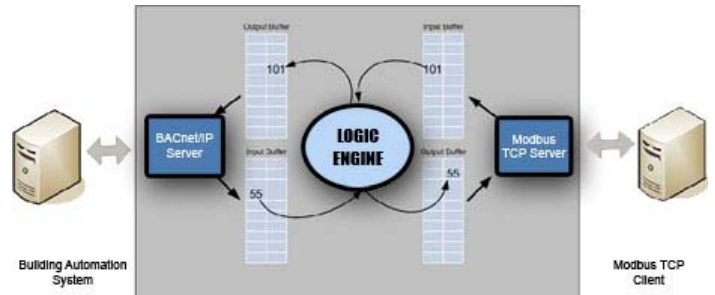
**THREE:** Set the IP Address, Subnet Mask, and Gateway Address to match your field setup and then connect our configured unit to your system.

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.

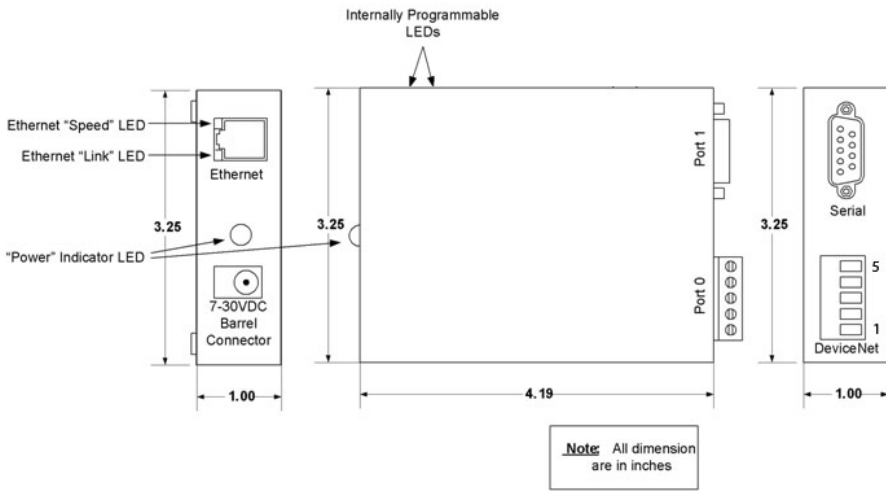


ENCLOSURE / HARDWARE	
Size	4.2" x 3.25" x 1"
Weight	5 oz.
Enclosure Type	Anodized Aluminum
Mounting	Din Rail
Connectors	Port 0: T-STRIP (RS232, RS485/RS422, CAN) Port 1: DB-9 (RS232, RS485/RS422, CAN) <i>**Only one RS232, RS485/RS422, or CAN port setting can be active per unit**</i> RJ45 10/100 Base-T (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
460MSBS	Modbus TCP Server / BACnet/IP Server Device Converter

## Sales & Service

### PLACING YOUR ORDER

Orders can be placed 24 hours per day. You can place your order by faxing 262-439-4999 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

## For More Information:

1-800-249-1612  
[products@rtaautomation.com](mailto:products@rtaautomation.com)



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