



Modbus RTU Power Meters / BACnet/IP Server

FEATURES

- Fully Compliant BACnet/IP Server
- Pre-loaded Modbus Power Meter Profile
- Profile Includes Tag Names, Units and Scaling Factors
- BACnet/IP Analog and Binary Objects Automatically Scaled per Power Meter Profile
- Support for up to 31 Power Meter Devices
- Support Modbus Function Codes 1, 2, 3, 4, 5, 6, 15 and 16
- Effortless Browser Based Configuration
- 10/100 Base-T Operation
- Includes Ethernet Device Management Tool
- No Programming Required

Get Your Power Meter Data on BACnet/IP

The 460MX moves power and energy data between one or more Power Meters and BACnet/IP Clients. With Energy costs rising and increased concern about energy and power quality, more and more building managers need access to the real time energy and power data collected by Power Meters. Managers want to access that data over BACnet/IP, the networking standard for commercial building automation. The 460MX is perfect for this task. In fact, it's been designed solely to move data from Power Meters to BACnet-based Building Automation systems.

With the 460MX you have a device that can be quickly deployed and easily configured to integrate any Power Meter into Your BACnet Building Automation System.

No Nasty Configuration Headaches

The 460MX comes pre-programmed ready to be integrated. A user editable profile automatically maps many of the important Power Meter Modbus registers to BACnet Analog points. You simply select the Modbus address for each Power Meter. If your application requires additional Registers you can simply edit and reload the profile to access other data points. **In Most Apps There's No Need To Look At The Register List!**

Some BACnet Clients require more than just data values. To meet this need the Power Meter profile includes tag names, unit designations and scaling factors for each register. These tag strings and automatic scaling factors are easily customized for your application by editing the Power Meter profile.

Move Your Data Bi-directionally

You can both receive energy data from your Power Meter and send new control parameters to the Meter from your BACnet/IP Client.

Configure Your Data Transfer from a Web Page

No special software is required. The unit is completely configurable using your Browser.

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 RTU Master and BACnet/IP Server communication modules to connect to your system using our easy browser based configuration page.

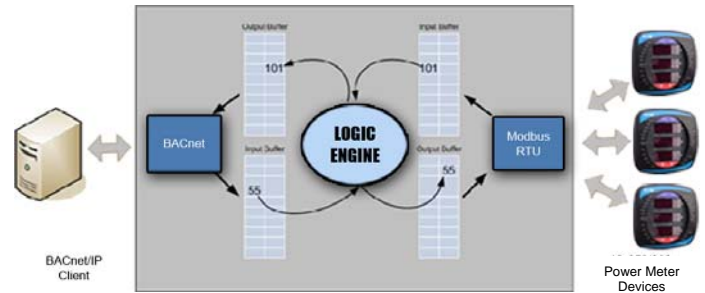
THREE: Set the IP Address, Subnet Mask, and Gateway Address to match your field setup and then connect our configured unit to your system.

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 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	IPSetup™ — automatically locates RTA Instant Device Converters
Operating Temperature	-40 C to 85 C
Certification	RoHS-Compliant, UL, CUL, CE Approvals



Supported Power Meters

The 460MX currently supports the following Power Meters:



Eaton IQ 250/260



Power Logic 820U



Janitza UMG96S



Carlo Gavazzi WM14



Quadlogic MiniCloset
5 Multi-Tenant



Contrec BTU 212



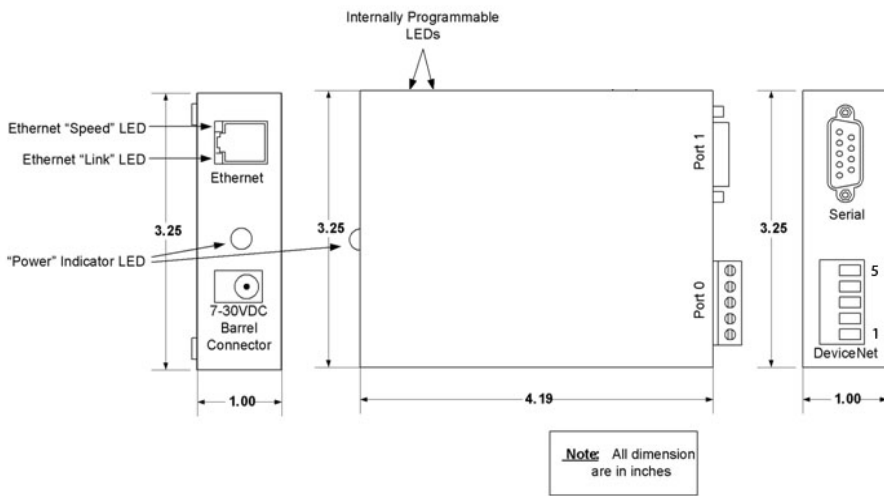
Calec ST

Don't see your power meter? Additional Power Meters can be added upon request. Contact RTA at 262-439-4999 to inquire about adding support for your Power Meter.



REAL TIME AUTOMATION

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
460MX	Power Meter to BACnet/IP

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.

TECHNICAL SUPPORT

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

Email Support: Is available by emailing 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	*** CALL ABOUT YOUR PROPRIETARY PROTOCOL ***		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. Logic 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:

Call: 1-800-249-1612
products@rtaautomation.com