



REAL TIME AUTOMATION



Altivar Drives on Modbus TCP

FEATURES

- Web Based Visualization
- Easy straight forward Browser Based Configuration
- 10/100 baseT Operation
- RTA Discovery Tool to automatically locate RTA Instant Device Converters
- Fully Compliant Modbus TCP Server
- 100 Modbus TCP and Modbus RTU Server Integer input Properties
- 100 Modbus TCP and Modbus RTU Server Integer output properties
- Fully configurable Modbus RTU Master
- Support FC 1,2,3,4,6,16 and 23
- Fully configurable device address

An Instant Device Converter™ Product

Move Your Modbus Data From Altivar Drives To a Modbus TCP Network

Move Your Data

Where You Want ♦ When You Want ♦ How You Want

Get Your Altivar Drives on Modbus TCP

The 460MAV moves data between up to 10 Altivar Drives and an Modbus TCP Client. Now is the time to expand your market by getting your Drives on the Modbus TCP network making it easier to use them in a broad range of applications. The 460MAV is perfect for this task. In fact, it's been designed solely to move data from Altivar Drives to Modbus TCP based systems.

With the 460MAV you have a device that you can quickly deploy and easily configure to access and integrate Modbus RTU data from your Altivar Drives into your Modbus TCP network.

No Nasty Configuration Headaches

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

Move Your Data Bi-directionally

With the 460MAV module you can both write registers and coils to your Modbus RTU Slave network and read from those RTU Slaves. Up to 198 Registers of data can be transferred from up to 10 Altivar Drives.

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 to transfer from each slave and in what order that those registers are transferred to the Modbus TCP Client.

The 460MAV is the smart connection solution for integrating a network of Modbus RTU Slave devices with a Modbus TCP 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 from any browser. All you need to do is enter your IP address, gateway address and set your network mask. *Fig 1*

TWO

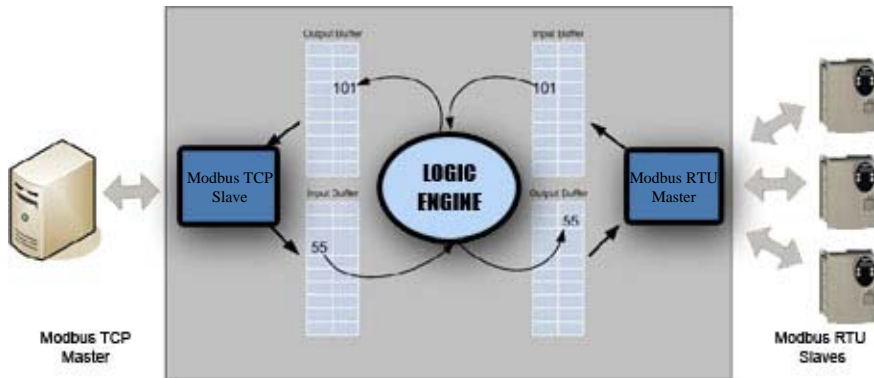
Edit your communication modules. Configure your device object properties like Object Identifier, Object Name, Object Description and Object Location. *Fig 2*

THREE

View the summary list of Modbus registers supported by the device, and You're Done! *Fig 3*

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.

Using an off-the-shelf, standard control engine for the transfer of data means that we can easily customized the software to meet your specific application requirements. Just call 1-800-249-1612 for details.

Fig 1 Main Page Screen Shot

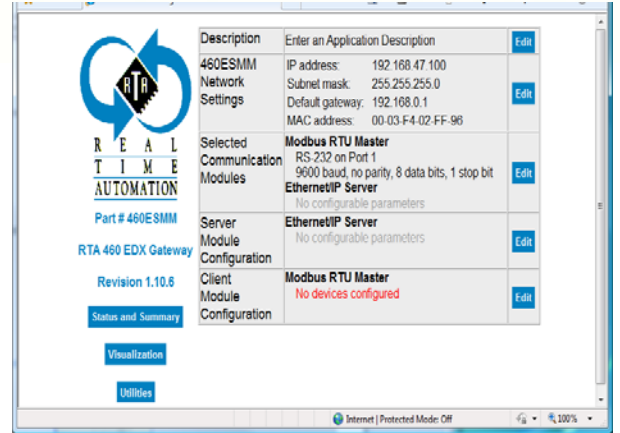


Fig 2 Communications Module Screen Shot

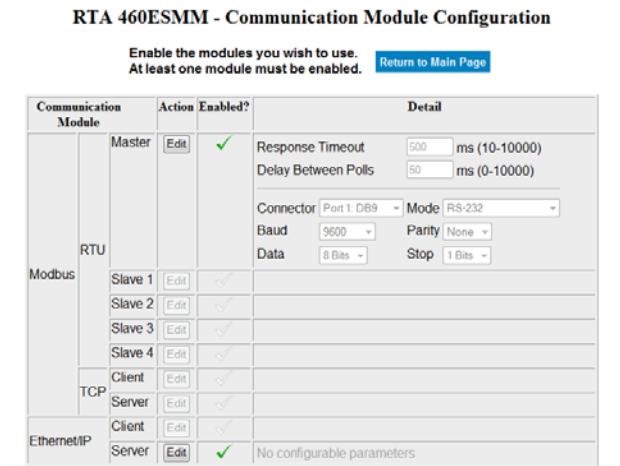


Fig 3 Device Communication Screen Shot

RTA 460ESMM - Internal Device Configuration

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Slave, Server, and Basic Serial Configuration

Action	Device Buffer #	Comm Module	Device Address	Data In		Data Out	
				Registers (or Coils)	Program Tags	Registers (or Coils)	Program Tags
	1	EthernetIP Server	IP 0.0.0.0	112 - 311 [200]	%W10 - %W209	100 - 299 [200]	%QW4096 - %QW4295



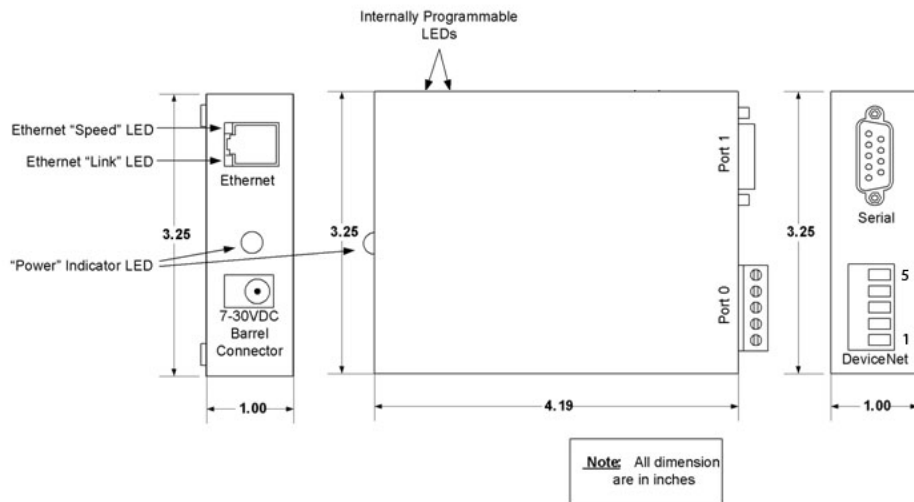
ENCLOSURE / HARDWARE	
Size	4.2" x 3.25" x 1"
Weight	5 oz.
Enclosure Type	Anodized Aluminum
Mounting	Din Rail
Connectors	Port 0: T-STRIP (RS232, RS485, RS422, CAN) Port 1: DB-9 (RS232, RS485, RS422, CAN) <i>(Only one RS232, RS485, RS422 or CAN port setting can be active per unit. For example, a unit cannot have two ports set for RS232 or two ports set for CAN.)</i> RJ45 10/100 Base-T (Ethernet) Barrel Power Connector (2.1mm P5)
LEDs	Ethernet Link/Data LED, Ethernet Speed LED, Power LED, & 2 general purpose LEDs on side.
CONTROL LOGIC	
Specification	IEC 61131-3
Supported Logic Types	Ladder Logic, Instruction List, Function Block Programming, Structured Text, and Sequential Function Chart
Application Debug & Monitoring	Included
Visualization Access	Remote Browser
Data Typing	Strong Data Typing

ELECTRICAL/ENVIRONMENTAL	
Network Interface	10/100 Base-T with RJ-45 Connector
DC Input Voltage	8 V @ 230 mA to 28 V @ 80 mA
Power Adapter	1.2 A @ 7.5 VDC
Maximum 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



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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
460MAV	Altivar Modbus TCP Device Converter *This product in preliminary stages, and will be available early in the first quarter of 2010

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 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:

Networking Product Manager

1-800-249-1612

sales@rtaautomation.com