

# Modbus-to-BACnet Protocol Converter

## Integrate Multiple Modbus Meters into a BACnet Network



E8950

### DESCRIPTION

E8950 Modbus-to-BACnet Protocol Converter enables easy integration of a broad selection of Veris meters with Building Automation Systems via BACnet protocol. When networked, the E8950 detects supported Modbus meters and gives them a unique BACnet Device ID and full set of measurement data and configuration objects. Simply select the desired MS/TP baud rate using DIP switches or configure the IP interface using the integral web server, and the supported Veris Modbus meters are available as fully-supported BACnet devices.

### APPLICATIONS

- Energy Management with Building Automation Systems
- Integrated metering of HVAC systems and chillers

### FEATURES

- Enables Veris meter access via BACnet MS/TP and/or BACnet IP...compatible with standard building protocols
- Supports a broad range of Veris meters: H8035, H8036, H8163 with H8163-CB, H8238, H8436, H8437, E50C2, E51C2, E50C3\*, E51C3\*, E30Ax42, E30Bxxx, E30Cxxx, E31Bxxx, E31Cxxx...application flexibility
- Each E8950 can support up to 1000 BACnet measurement points (or 32 meters max., if <1000 total points)...extensive data collection
- Simultaneously supports mixed meter types (with common baud rate)...versatility in the field
- Simple to set up...automatically detects supported meters and configures BACnet objects...no manual mapping of Modbus points required
- Presents a separate device object for each meter attached...easy to program
- Can be mounted on DIN rail or wall...installation flexibility

\*The logging functionality of these meters is not supported.

### SPECIFICATIONS



#### Downstream (Device) Interfaces:

<b>Physical Layer</b>	2-wire RS-485
<b>Line Termination</b>	Internal, 120 Ω
<b>Line Polarization</b>	Internal
<b>Protocol</b>	Modbus RTU
<b>Baud Rate</b>	9600 to 38400 (selections vary with Modbus devices used)
<b>Number of Devices Supported</b>	up to 32 devices (not to exceed 1000 total BACnet data objects)

#### Upstream (Controller) Ethernet Interface:

<b>Physical Layer</b>	10/100 Mb Ethernet
<b>Protocol</b>	BACnet IP

#### Upstream (Controller) Serial Interface:

<b>Physical Layer</b>	2-wire RS-485
<b>Protocol</b>	BACnet MS/TP
<b>Baud Rate</b>	9600, 19200, 38400, 76800

#### Input Power Requirements:

<b>Supply Voltage</b>	Class 2 9-30VDC or 12-24VAC
<b>Nominal Current Draw @ 12V</b>	240mA

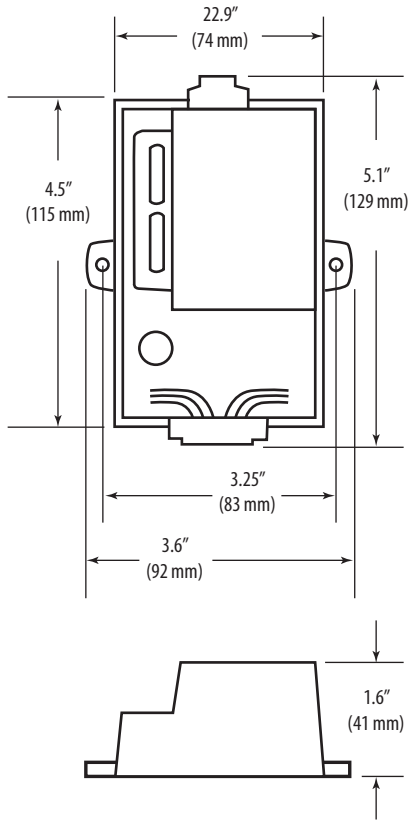
#### Environmental:

<b>Operating Temperature Range</b>	-40°C to 122°C (-40°F to 50°F)
<b>Operating Humidity Range</b>	5-90% RH noncondensing

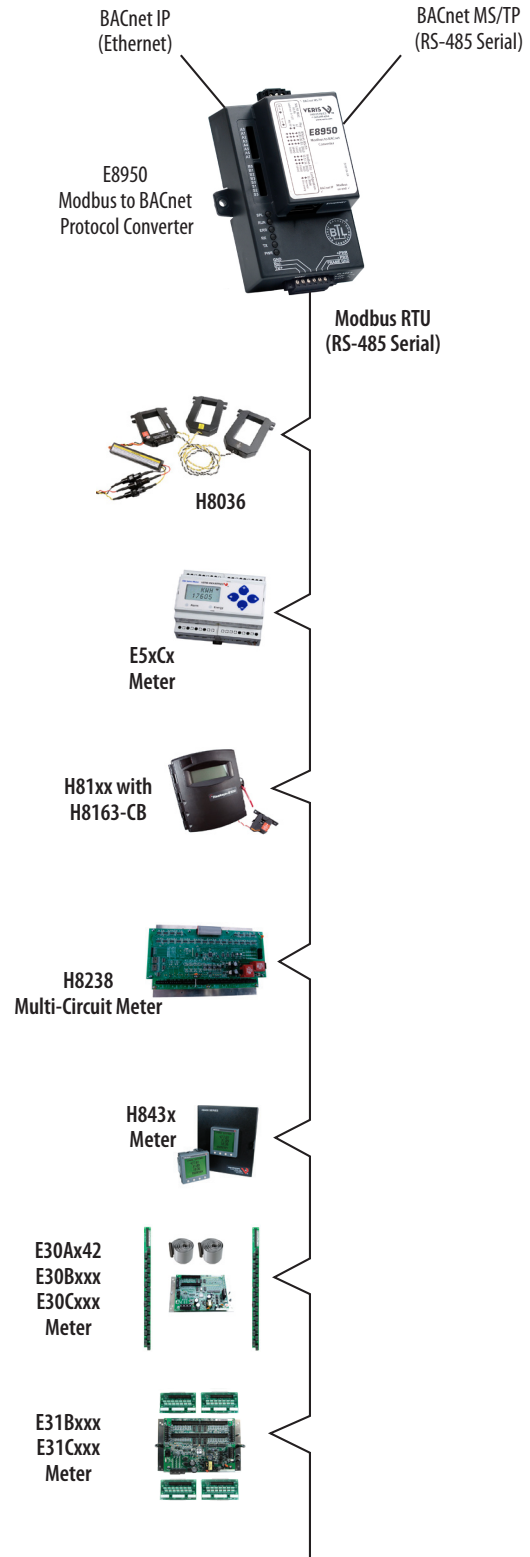
#### Agency Approvals

CE; TUV approved to UL916

### DIMENSIONAL DRAWING



### APPLICATION/WIRING EXAMPLE



NETWORK INTEGRATION

### ORDERING INFORMATION



MODEL	DESCRIPTION
E8950	Modbus to BACnet Converter