

Modbus-to-BACnet Protocol Converter

E8951



E8951



SPECIFICATIONS

Agency Approvals	CE; TUV approved to UL916; FCC Part 15 Class A; BTL
DOWNSTREAM (DEVICE) INTERFACES	
Physical Layer	2-wire RS-485
Line Termination	Internal, 120Ω
Line Polarization	Internal
Protocol	Modbus RTU
Baud Rate	9600 to 38400 (selections vary with Modbus devices used)
Number of Devices Supported	BACnet mode - Up to 32 devices (10,000+ total BACnet data objects) SNMP mode - One 84-channel E30A/E31A or two 42-channel E30A per E8951 Modbus mode - 32 devices
UPSTREAM (CONTROLLER) ETHERNET INTERFACE	
Physical Layer	10/100 Mb Ethernet
Protocol	BACnet IP, Modbus TCP, SNMP
UPSTREAM (CONTROLLER) SERIAL INTERFACE	
Physical Layer	2-wire RS-485
Protocol	BACnet MS/TP or Modbus RTU
Baud Rate	9600, 19200, 38400, 76800
Parity	Even, Odd or None (Modbus RTU only, BACnet MS/TP is always None)
INPUT POWER REQUIREMENTS	
Supply Voltage	Class 2; 9-30VDC or 12-24VAC 50/60Hz
Nominal Current Draw @ 12V	240mA
ENVIRONMENTAL	
Operating Temp Range	-40°C to 60°C (-40°F to 140°F)
Operating Hum. Range	5-90% RH non-condensing; indoor use only

Integrate Multiple Modbus Meters into a BACnet Network

FEATURES

- Enables access to most Veris Modbus RTU meters via standard building automation protocols - BACnet MS/TP, BACnet IP, Modbus TCP and SNMP*
- Supports BACnet IP and Modbus TCP access simultaneously
- Supports a broad range of Veris meters: H8035, H8036, H8163 with H8163-CB, H8238, H8436, H8437, E50C2, E51C2, E50C3**, E51C3**, E30xxxx, E31xxxx and U013-0010/0011 I/O modules...application flexibility
- Each E8951 can support over 10,000 BACnet measurement points (32 meters max.)...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 programming or manual mapping of Modbus points required
- Presents a separate device object for each meter attached...easy to program
- Supports BBMD and registration by foreign devices
- BTL Certified

- Easily configured with built-in web server or DIP switches
- Can be mounted on DIN rail or wall...installation flexibility

DESCRIPTION

The **E8951** 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 E8951 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 protocol settings using DIP switches and 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
- SNMP access to E30A/E31A products in data centers*

* Supports SNMP with a single E30A or E31A meter per E8951.

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

APPLICATION EXAMPLES

DIMENSIONAL DRAWING

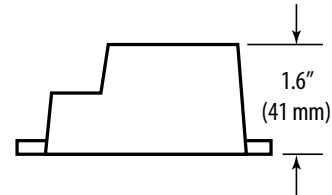
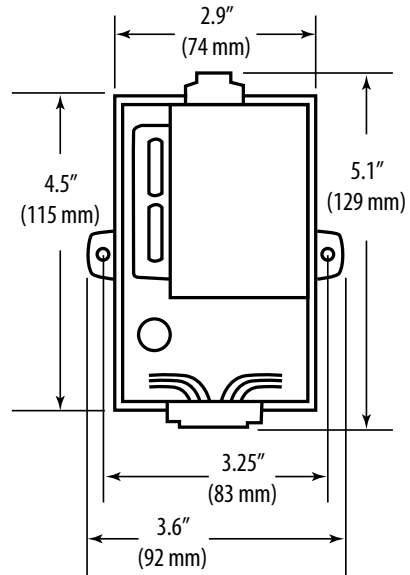
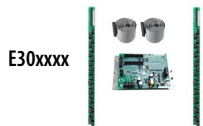
BACnet IP and Modbus TCP
(or SNMP* AND Modbus TCP)
(Ethernet)

BACnet MS/TP or
Modbus RTU
(RS-485 Serial)

E8951
Modbus to BACnet
Protocol Converter



Modbus RTU
(RS-485 Serial)



*Supports SNMP only with a single E30A or E31A meter per E8951.

ORDERING INFORMATION



MODEL	DESCRIPTION
E8951	Modbus to BACnet Protocol Converter