FieldServer Data Sheet – EZ Gateway Modbus to BACnet FS-EZX-MOD-BAC   **Rev. 1.C**

Overview

The EZ Gateway Modbus to BACnet (FS-EZX-MOD-BAC) is an easy to use, high-performance building and industrial automation protocol gateway for integrators to interface Modbus certified products to BACnet management systems in commercial buildings, campuses, and industrial facilities. Modbus-certified products encompass a wide range of applications such as energy, gas, heating, water, VFD drives, and PLCs. The EZ Gateway Modbus to BACnet integrates such Modbus-based devices and systems to BACnet-based management systems over BACnet MS/TP or BACnet/IP protocols.

The EZ Gateway Modbus to BACnet combines field-hardened Modbus and BACnet protocol drivers with an easy to use configuration interface. The EZ Gateway's Modbus interface is compatible with all Modbus-certified products, while the EZ Gateway's BACnet interface has been certified by BACnet Test Laboratory (BTL) at Version 12. The intuitive web-based interface allows configurations to be built in the field or in the office, thereby simplifying the commissioning and integration process.

Sierra Monitor's unique FieldServer DeviceProxy™ feature allows each Modbus device to be presented as a corresponding virtual BACnet device within the EZ Gateway, thereby providing granular visibility and control over eac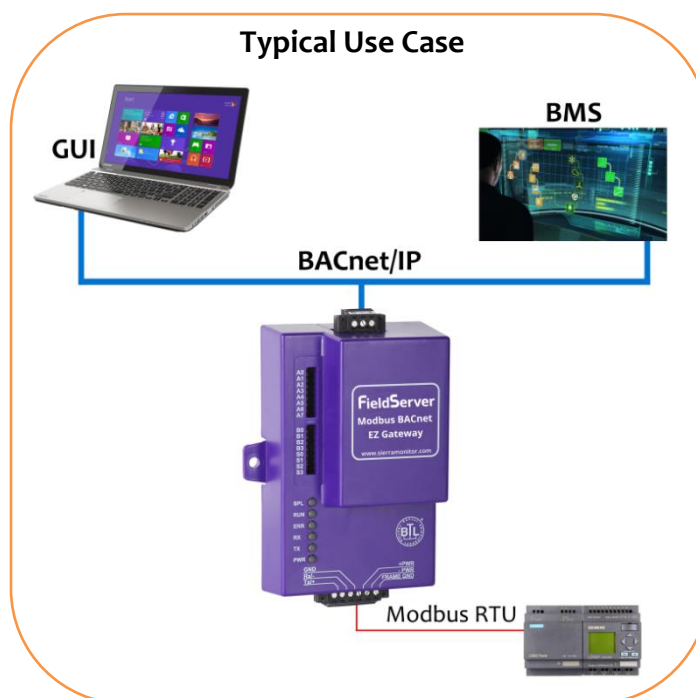h Modbus device from within a BACnet management framework. For example, offline / online status is visible at the individual Modbus device level.
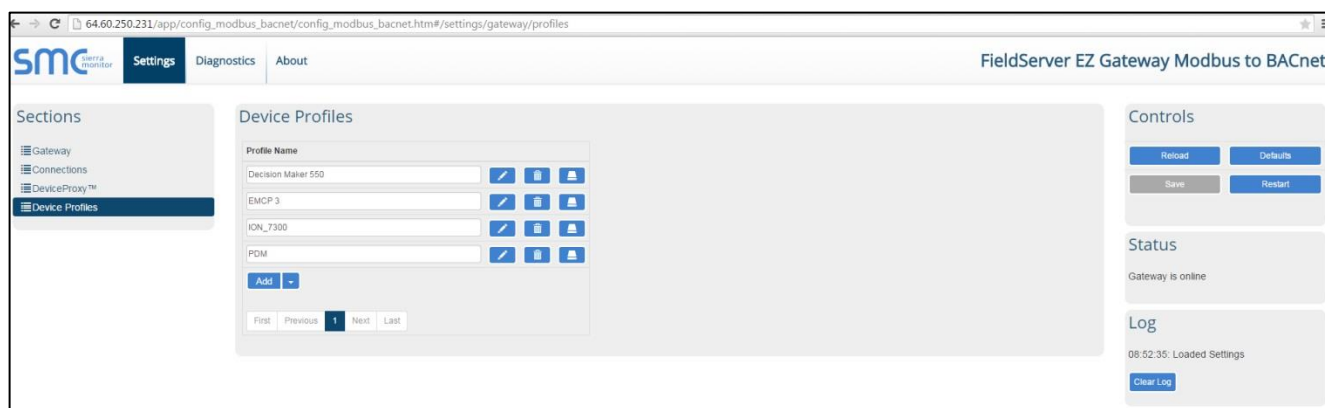
With the EZ Gateway Modbus to BACnet, the integrator or contractor does not need to be a protocol expert, and can minimize configuration and commissioning time, while also reducing ongoing operating and maintenance costs.

EZ Gateway Features and Benefits

- Protocols supported:
  - Modbus RTU
  - Modbus TCP/IP
  - BACnet/IP
  - BACnet MS/TP
- Any combination of the two Modbus protocols can be selected to connect to either of the BACnet protocols
- Supports up to 32 Modbus RTU devices to BACnet MS/TP and up to 64 Modbus RTU devices to BACnet/IP per EZ Gateway
- Supports up to 500 or 1,000 Modbus registers
- BACnet COV support provides fast data communication while reducing the traffic over a BACnet network
- BACnet BBMD Server support for connecting to remote BACnet networks
- Supports virtual nodes allowing each Modbus device connected to a single EZ Gateway to be seen as a separate device on the BACnet network
- Easy to configure via the Web Interface
- Diagnostics of the devices connected to the EZ Gateway can be seen via the Web Interface
- Modbus TCP/IP offers concurrent polling of devices to ensure a quick response
- BTL approval marked
- **SMC Cloud** registration connects your devices to the cloud, allowing secure remote access for diagnostics, monitoring, alarming and configuration
- On-board diagnostics allow easy troubleshooting for both serial and Ethernet communications

Typical Use Case

Configuration

The Web Interface is used to configure the Modbus and BACnet connections and then profiles are created for each Modbus device to be connected to the EZ Gateway. The EZ profile can then be used for additional connections on this EZ Gateway or other EZ Gateways. The EZ profiles can be shared amongst anyone using the EZ Gateway.

Specifications*		
Environment	**Other**	**Approvals**
Operating Temperature: -40 to 75ₒC (-40 to 167ₒF)	**Configuration/Diagnostic Utilities**	**CE and FCC**
Relative Humidity: 5-90% RH non-condensing	**Capacity:** 500 points FS-EZ1-MOD-BAC	**TUV Approved** to UL 916, EN 60950-1, EN 50491-3
	1,000 points FS-EZ2-MOD-BAC	and CSA C22.2 standards
Power Requirements	**Table, Wall or DIN rail mount**	**BTL Mark**
9-30 VDC or 12-24 VAC		**RoHS Compliant**
Current Draw: @ 12V	**Communication**	**GOST-R Certified**
FS-EZX-MOD-BAC: 240 mA	**Baud:** 4800, 9600, 19200, 38400, 57600, 115200	
	Start Bit: 7, 8	
Physical Dimensions	**Stop Bit:** 1, 2	
H x W x D: 4.5 x 2.9 x 1.6 in. (11.5 x 7.4 x 4.1 cm)	**Parity:** Even, Odd, None	
Weight: 0.4 lbs (0.2 Kg)	**Ethernet:**10/100 BaseT MDIX	

Specifications in the above list: Operating Temperature: -40 to 75°C (-40 to 167°F)

*Specifications subject to change without notice

Ordering Information

The EZ Gateway Modbus to BACnet is available in multiple point count configurations.

- FS-EZ1-MOD-BAC   500 Points
- FS-EZ2-MOD-BAC   1,000 Points

Options

The Accessory Kit consists of a power supply, Ethernet cable, Screwdriver, DIN rail mount, and USB flash drive of all manuals, data sheets, notes, and the discovery tool.

- FS-8915-36-QS   Accessory Kit, 110/220V

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