

## Overview

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

The EZ Gateway M-Bus to Modbus & BACnet combines field-hardened M-Bus, Modbus and BACnet protocol drivers with an easy to use configuration interface that, once configured, allows M-Bus devices to be presented as virtual BACnet devices which simplifies commissioning, configuration and troubleshooting. The intuitive web-based interface allows configurations to be built in the field or in the office. Additionally, the configuration profiles can be downloaded and then uploaded to other FieldServer M-Bus applications, simplifying the commissioning and integration process on repeatable applications.

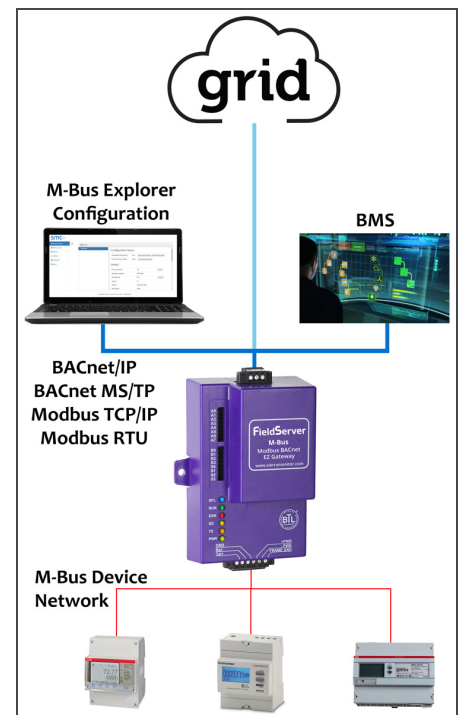
MSA Safety's M-Bus Explorer and Device Profiles apps allow M-Bus devices to be auto discovered, templated and presented to quickly configure new M-Bus devices. This makes each corresponding M-Bus device into a virtual BACnet device within the EZ Gateway, providing granular visibility and control over each device from within a BACnet management framework. For example, offline / online status is visible at the individual M-Bus device level.

With the EZ Gateway M-Bus to Modbus & 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.



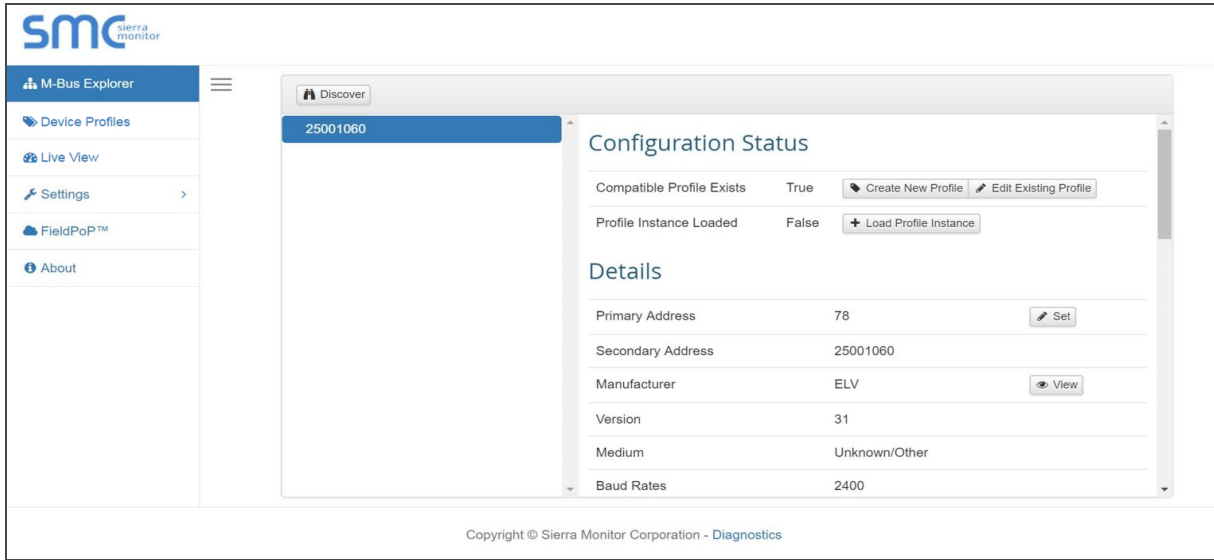
## Features and Benefits

- The M-Bus protocol can be converted to the following protocols: Modbus RTU, Modbus TCP/IP, BACnet MS/TP & BACnet/IP
- M-Bus Interoperability:
  - M-Bus Explorer discovers all M-Bus devices in the network, shows the manufacturer details as well as available points, and offers one-click profile generation
  - Device Profiles management enables efficient profile editing, exporting and importing
  - Up to 64 slave devices (max device count based on model)
  - Communication between devices with different baud rates at the same time
  - Virtual nodes allow any M-Bus device connected to one EZ Gateway to show as unique devices on the BACnet network
- BACnet COV support provides fast data communication while reducing BACnet network traffic
- BTL certified
- BACnet BBMD Server support for connecting to remote BACnet networks
- Diagnostics of the devices connected to the network are available via Web Interface
- **MSA Grid - FieldServer Manager** 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.
- **FieldSafe** adds a wealth of security options, including: web configuration page authentication (self-signed certificates), robust user and password management features



## Configuration

The configuration interface is used to discover and configure the M-Bus to Modbus and BACnet connections. Profiles are created for each M-Bus device to be connected to the EZ Gateway. The EZ profile can 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.



## Hardware Specifications

### Environment

**Operating Temperature:** -40 to 75°C (-40 to 167°F)

**Relative Humidity:** 5-90% RH non-condensing

### Power Requirements

9-24VDC or 12-24VAC

**Current Draw:** @12 V

**1 Slave:** 580 mA

**64 Slaves:** 980 mA

### Physical Dimensions

H x W x D: 4.5 x 2.9 x 1.6 in. (11.5 x 7.4 x 4.1 cm)

**Weight:** 0.4 lbs (0.2 Kg)

### Other

Configuration/Diagnostic utilities

Capacity (part# / max slave devices):

FS-EZ1-MBUS-MD-BAC / 16 slave devices

FS-EZ2-MBUS-MD-BAC / 32 slave devices

FS-EZ3-MBUS-MD-BAC / 64 slave devices

### Communication

**Baud:** 2400, 4800, 9600, 19200, 38400

**Start Bit:** 7, 8

**Ethernet:** 10/100 BaseT MDIX

### Approvals

CE and FCC

UL 916 and CSA C22.2 standards

BTL Marked and UKCA compliant

RoHS3 and WEEE compliant

GOST-R certified



## Ordering Information

The EZ Gateway M-Bus to Modbus & BACnet is available in the following models:

FS-EZ1-MBUS-MD-BAC 16 slave devices

FS-EZ2-MBUS-MD-BAC 32 slave devices

FS-EZ3-MBUS-MD-BAC 64 slave devices

## Options

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

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

**Warning:** This equipment is compliant with Class A of CISPR 32. In a residential environment, this equipment may cause radio interference

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