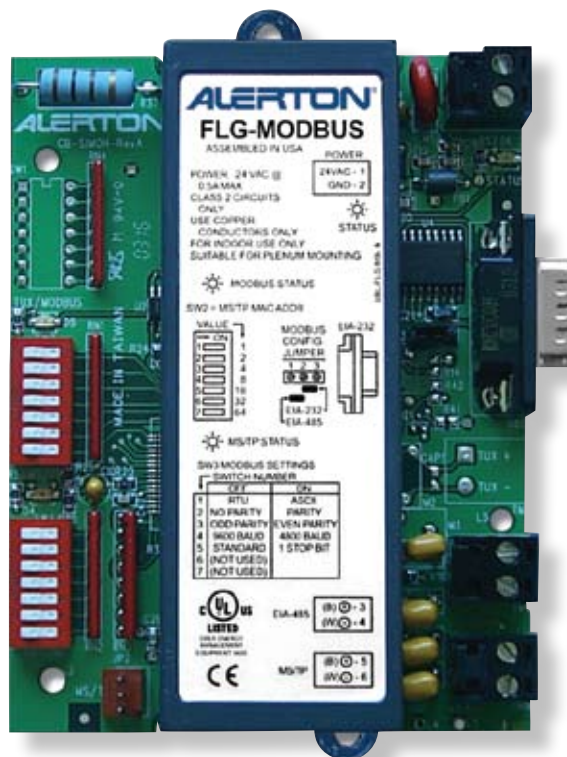


BACtalk® Field-Level Gateway for Modbus

Features and highlights

- **Interoperable**
BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.
- **Versatile**
Supports 100 analog and 100 binary values to integrate Modbus device data with a BACnet system.
- **Reliable**
AZ60 processor, with all program data backed up in nonvolatile flash memory.
- **Economical**
Simple, low cost solution for field-level integration of Modbus devices.
- **Flexible**
Offers user-configurable poll delay, response timeout and unreliable threshold for increased compatibility with other Modbus devices.



The Alerton® FLG-MODBUS is a field-level gateway that resides on a BACnet MS/TP network and connects to Modbus over EIA-232 or EIA-485, translating Modbus data to BACnet AVs and BVs. EIA-232 can interface to a single Modbus device; EIA-485 can interface to up to 10 Modbus devices (with a valid address between 1–247). The FLG-MODBUS appears to the BACnet system as a single BACnet device instance.

The FLG-MODBUS offers a point capacity of 100 BACnet AVs and 100 BVs—an ideal point count for most Modbus applications such as chillers and VFDs. A single FLG-MODBUS supports up to 10 Modbus devices on a multi-drop Modbus EIA-485 network. A DB-9 connector supports a point-to-point connection to a Modbus device over Modbus EIA-232.

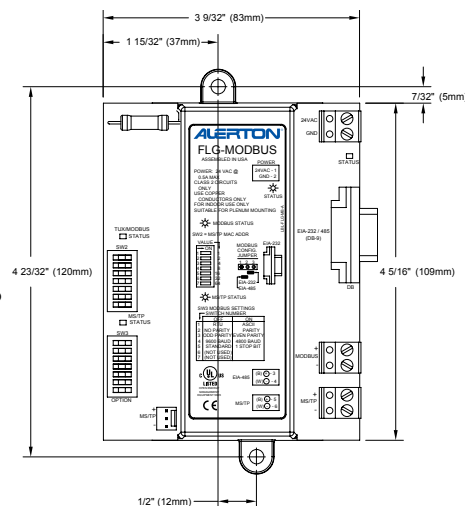
High baud rates of 4800, 9600, 19200, 38400, 76800 and 115200 baud provide fast transactions. User-configurable poll delay, response timeout and unreliable threshold enable users to further customize the FLG-MODBUS operation. Enhanced diagnostics facilitate troubleshooting.

The FLG-MODBUS features an AZ60 processor. All configuration data is backed up in nonvolatile flash memory. An MS/TP header provides for connection of an Alerton FST-100 with an AC-2680 cable, which is helpful for troubleshooting and field service.

BACtalk® Field-Level Gateway for Modbus

Technical data

- **Power** 24 VAC @ 5 VA. Utilizes a half-wave rectifier, which allows a single transformer to power multiple devices. One leg of 24 VAC connects to earth (panel) ground.
- **Processor and Memory** Motorola AZ60 processor with on-board flash memory. Flash memory provides nonvolatile program and data storage, and allows for encrypted updates to the program for future product enhancements.
- **Max. Dimensions** 4.75" (120mm)H x 3.25" (83mm)W x 1.13" (28mm)D.
- **Terminations** Removable header-type screw terminals for BACnet MS/TP and Modbus EIA-485 accept 14–24 AWG wire. Male DB-9 connector for Modbus EIA-232.
- **Environmental** 0–158 deg. F (-17–70 deg. C). 0–95% RH, non-condensing.
- **Modbus Communications** Either EIA-232 (serial cable) to single Modbus device or multi-drop EIA-485 (twisted pair) to up to 10 Modbus devices. Network options configurable for ASCII/RTU, 4800, 9600, 19200, 38400, 76800 and 115200 baud, even/odd/no parity, and stop bit options for compatibility with various Modbus implementations.
- **BACnet Communications** BACnet MS/TP LAN with auto-detection of MS/TP communications rate up to 76.8 Kbps.
- **Software** Support for 100 BACnet AVs and 100 BACnet BVs, each mapped to a Modbus data point through a string written to the description property of the AV or BV object.
- **Ratings**
Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916; listing includes U.S. and Canadian certification
Suitable for plenum mounting
EMC Directive 89/336/EEC (European CE Mark)
FCC Part 15, Subpart J, Class A



Ordering information

Item number	Description
FLG-MODBUS	BACtalk field level gateway for Modbus

Specifications subject to change without notice