FieldServer Data Sheet - BACnet IoT Gateway

Rev. 2.A

Overview

SMC's secure BACnet IoT Gateways are fully integrated with the SMC Cloud Platform. The gateways enable users to easily connect new and legacy BACnet devices to the cloud. These gateways connect BACnet devices and networks to the cloud via wired (Ethernet) or wireless (Wi-Fi or cell modem support depends on model selected) installations. BACnet devices can instantly be cloud enabled to support secure remote device monitoring, control, data collection and alarming.

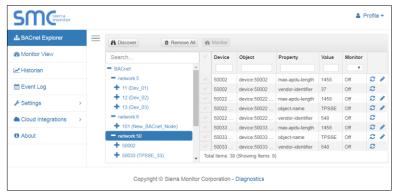
The gateways provide powerful device discovery and management across both serial and Ethernet BACnet networks. User tools enable easy gateway configuration to deliver BACnet objects to the cloud, either as individual devices or as filtered object groups.

SMC's BACnet IoT Gateways are the fastest and easiest way to cloud-enable BACnet products in the field as well as provide secure remote connectivity to installed fleets of BACnet devices. These gateways are delivered ready to discover, cloud connect and manage any BACnet devices without any programming or mapping (plug and play).

Business Applications IoT Cloud Platforms CRACLE Servicemax SSC Cloud BACINET devices BACINET devices

Benefits of the SMC BACnet IoT Gateway

- Deploy in an hour, not years.
- Eliminate all custom engineering development time and expense.
- Register gateways seamlessly through SMC's tenant based IoT Cloud Platform.
- Monitor and control any equipment connected to the cloud through a secure portal reducing field truck roll expenses.



BACnet Explorer

- Retrieve 30 days of data stored in the gateway by viewing the dashboard or download as csv, JSON, Webhooks or RESTful API.
- Generate cloud-based notifications/alarms via SMS and/or emails to keep users informed as soon as events occur.
- Includes a fully functional BACnet Explorer that allows user support teams to locally or remotely browse and command any of the devices on the BACnet network.
- On-board diagnostics allow easy troubleshooting for both serial and Ethernet communications.
- Can push up to 1,000 BACnet Objects to the SMC Cloud.

SMC IoT Cloud

- The SMC Cloud can use Webhooks or RESTful API make device data to be available to 3rd party cloud platforms. The cloud platform has no firewall dependencies through HTTPS by utilizing TLS/SSL (Transport Layer Security/Secure Sockets Layer) to ensure data security - port 80 & 443.
- No annual subscription to connect SMC's Gateways to the SMC Cloud Platform for 50 data points per minute up to 2023.
- Firmware upgradable via SMC IoT Cloud with admin access.

SMC= SMC cloud

SMC Cloud

SMC IoT Dashboard

SMC's Cloud Platform Dashboard provides enriched data visualization. Features include data metrics (averages and real time values displayed in gauges and graphs) enabling collaboration and comparison of results across multiple sites.

Ordering Information

- FS-IOT-BAC: two serial port model.
- FS-IOT-BACW (Wi-Fi): one serial port model, includes Wi-Fi antenna.
- FS-IOT-BACC (cellular): one serial port model, includes Wi-Fi and cellular antennas.



SMC Cloud Dashboard

BACnet IoT Gateway Hardware Specifications

Communication

Serial (Galvanic Isolation): RS-485/RS-232 Baud: 9600, 19200, 34800, 57600, 76800, 115000

Ethernet

10/100BaseT

MDIX

DHCP

Environment

Operating Temperature: -20 to 70°C (-4 to 158°F) Relative Humidity: 10-95% RH non-condensing

Web Configuration Toolbox diagnostic utility DIN rail mount included

Construction

Dimensions (HxWxD)

4 x 1.1 x 2.7 in (10.16 x 2.8 x 6.8cm)

Weight: 0.4 lbs (0.2 Kg)

Power Requirements

Input Voltage 12-24 VDC

BAC/BACW: Current draw @ 12V, 240mA BACC: Current draw @ 12V, 670mA

Approvals

CE and FCC Class B & C Part 15 TUV Approved to UL 60950 IC Canada **RoHS and WEEE Compliant**

PTCRB and CTIA













Radio Specifications

Vi-Fi 802.11 b/a/r

Frequency: 2.4 GHz Channels: 1 to 11 (inclusive)

Antenna Type: SMA Encryption: TKIP, WPA & AES Cellular

Features: 3G & GPS HSDPA: Up to 21.0 Mbps Antenna Type: SMA HSUPA: Up to 5.76 Mbps Carriers: AT&T, Kore Telematics & Vodafone

Contact SMC Sales for an easy proof of concept evaluation. Contact sales@sierramonitor.com.