BACnet IoT Gateway



fieldserver

Overview

The 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 cellular) installations. BACnet devices can instantly be cloud enabled to support secure remote device monitoring, control, data collection and alarming. BACnet IoT Gateways have an embedded OpenVPN server, enabling secure remote connectivity to Ethernet BACnet devices.

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.

The BACnet IoT Gateways are the fastest and easiest way to cloud-enable BACnet products in the field, providing secure remote access 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).

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Benefits of the BACnet IoT Gateway

- Deploy in an hour, not years.
- Eliminate all custom engineering development time and expense.
- Register gateways seamlessly through MSA's tenant based IoT Cloud Platform.
- Utilize cloud data by viewing on the dashboard or download as CSV, JSON, Webhooks or RESTful API.

BACnet Explorer	A Discover	Ð	Monitor							
Monitor View	Search		Network	Device	Object	Property	Value	Monitor		
Data Log Viewer	- BACnet							~		
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ogout	+ 102 (temp)		Total Items: 464							

- Enabling OpenVPN allows remote connection to Ethernet devices in the field with management/ configuration programs to perform diagnostics, download new firmware and reprogram the device without going to the site. Connection to webservers located on remote segmented Ethernet devices is also available.
- Generate cloud-based notifications/alarms via SMS and/or emails, keeping users informed 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.
- FieldSafe adds a wealth of security options, including: web configuration page authentication (self-signed certificates), robust user and password management features.
- MQTT connection to 3rd party clouds available.



FieldServer Data Sheet – BACnet IoT Gateway

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 FieldServers to the SMC Cloud Platform for 50 data points per minute up to 2023.
- Firmware upgradable via SMC Cloud with admin access.

SMC IoT Dashboard

The SMC 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.

SMC Aruba Power Meter

71.4

80.75

From: 2018-01-28T13:22:27-08:00

60.38

0.07

Ordering Information

- FS-IOT-BAC: two serial port model.
- FS-IOT-BACW (Wi-Fi): two serial port model, includes Wi-Fi antenna.
- FS-IOT-BACA (LTE-AT&T): one serial port • model, includes Wi-Fi and cellular antennas.
- FS-IOT-BACV (LTE–Verizon): one serial port model, includes Wi-Fi and cellular antennas.
- FS-IOT-BACF (LTE–Vodafone): one serial port model, includes one cellular and one Wi-Fi antenna.
- FS-IOT-BAC2E: two serial port and two Ethernet port model.

Hardware Specifications

Environment

Serial (Galvanic Isolation): RS-485 Baud: 9600, 19200, 38400, 57600, 76800 Ethernet: 10/100BaseT, MDIX, DHCP Environment Operating Temperature:-20 to 70°C (-4 to 158°F)

Relative Humidity: 10-95% RH non-condensing 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)

Radio Specifications

Wi-Fi 802.11 b/g/n Frequency: 2.4 GHz Channels: 1 to 11 (inclusive)

Other

Antenna Type: SMA

Web Configuration Toolbox diagnostic utility DIN rail mount included **Power Requirements** BAC/BACW: Current draw @ 12V, 0.25A

Input Voltage 9-30 VDC or 24 VAC BACA/V/F: Current draw @ 12V, 0.67A Input Voltage 12-24 VDC

Approvals

CE and FCC / BTL Marked IC Canada UL 60950-1 and CAN/CSA C22.2 RoHS3 and WEEE compliant PTCRB and CTIA



Features: LTE Cat. 4 Encryption: TKIP, WPA & AES Antenna Type: SMA Carriers: AT&T, Verizon & Vodafone

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Downlink: Up to 150 Mbps Uplink: Up to 50 Mbps

Contact MSA sales for an easy proof of concept evaluation: SMC-insidesales@msasafety.com.

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FS-IOT-BACC (Cellular)