



Overview

Sierra Monitor’s ProtoAir™ wireless gateways provide a cost effective interface to Building Management Systems (BMS) and an immediate IoT cloud interface. The ProtoAir enables OEMs to compete in a broader market by meeting specifications for BMS connectivity. Integrated SMC Cloud support further enhances the ProtoAir’s value by enabling remote monitoring, control and data visualization. The only protocol wireless gateway with a no cost cloud interface, the ProtoAir dramatically improves time to market and remote site support for OEM field devices.

The ProtoAir has the unique ability to act as a Wi-Fi access point. Users can directly connect their mobile device to a ProtoAir without having to be on the facility’s LAN or WAN to access the local applications.

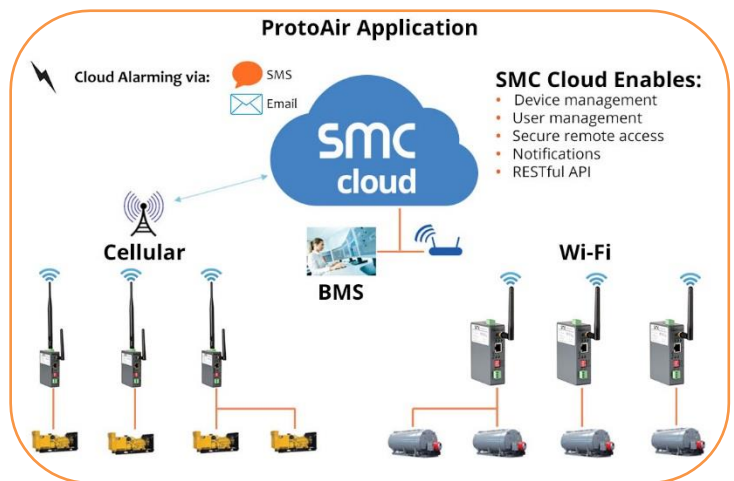
A single ProtoAir wireless gateway can seamlessly connect one or many OEM devices into BMS networks including BACnet, Modbus, EtherNet/IP and others.

Cloud enabled devices change the game for OEMs. Users can view data via a configurable dashboard, download historical data and provide remote monitor/control for any connected device. Additionally, notification functions allow SMS/email for trouble or alarm conditions.

Each gateway is delivered pre-configured for the OEM’s specific requirements. No additional programming or mapping is necessary.

ProtoAir Features and Benefits

- Multiple Connections:
 - Ethernet
 - RS-485/RS-232
 - Wi-Fi
 - Cellular
- Short time to market for BMS, industrial protocols and cloud connected devices.
- No configuration files need to be built in the field to support one or multiple of the OEMS devices.
- One ProtoAir connects multiple Serial and Ethernet devices to field protocol networks (BACnet MS/TP, BACnet/IP, Metasys N2, SNMP, XML over HTTP, EtherNet/IP, DNP 3.0 and many others).
- Supports up to 10,000 device points.
- Can support OEM proprietary protocols to building management systems.
- Wi-Fi access point allows for direct connection from any mobile device without having to be on the facility’s LAN or WAN to access the local applications.
- BTL certified.
- The **optional embedded BACnet Explorer** allows reps and OEMs to quickly validate that their product is working on BACnet MS/TP and/or BACnet/IP without a BMS Integrator on site.
- On-board diagnostics allow easy troubleshooting for both serial and Ethernet communications.



Benefits of the SMC Cloud

- Registering SMC’s ProtoAir BMS/IoT Gateways on SMC’s tenant based IoT Cloud Platform, effortlessly connects the OEM’s devices to the cloud, allowing secure remote access for diagnostics, monitoring, alarming and configuration of their products in the field.
- SMC’s Cloud Platform Dashboard provides enriched data metrics (averages and real-time values displayed in gauges and graphs) enabling collaboration and comparison across multiple sites.
- No annual subscription to connect SMC’s Gateways to the SMC Cloud Platform until 2023.



SMC Cloud

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

Other

Web configuration

On-board diagnostics

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

12-24 VDC;

Current draw @ 12V: 670 mA

Approvals

CE

FCC Class B & C Part 15

TUV Approved to UL 60950

IC Canada

RoHS Compliant

PTCRB and CTIA



* Specifications subject to change without notice

Radio Specifications

Cellular

Features: 3G & GPS

Antenna Type: SMA

HSDPA: Up to 21.0 Mbps

HSUPA: Up to 5.76 Mbps

Carriers: AT&T, Kore Telematics & Vodafone

Wi-Fi 802.11 b/g/n

Frequency: 2.4 GHz

Channels: 1 to 11 (inclusive)

Antenna Type: SMA

Encryption: TKIP, WPA & AES

Bluetooth

Bluetooth 3.0 + HS

Standard pairing

Bluetooth class 1 & 2

Antenna Type: SMA

Ordering Information

- FPA-C34 (cellular): one serial port model, includes Wi-Fi and cellular antennas