

## Overview

The FieldServer 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 Grid cloud platform 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.

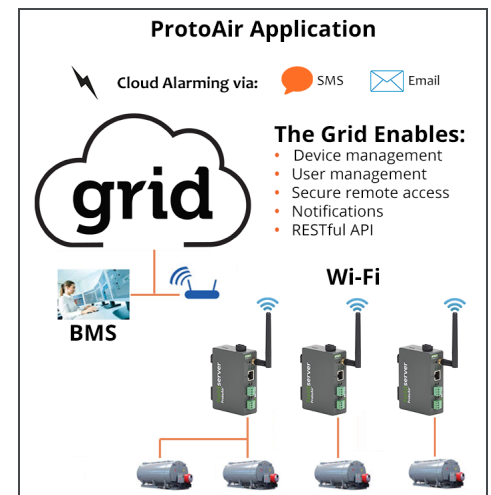
Cloud enabled devices change the game for OEMs. Users can view data via a configurable dashboard, download historical data and provide remote monitor/control for any connected device. Additionally, notification functions allow SMS/email for trouble or alarm conditions.

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



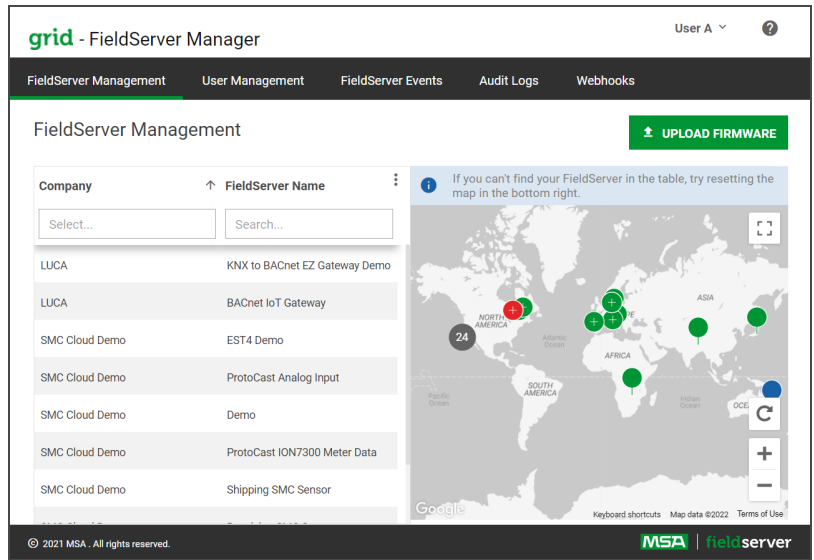
## FieldServer ProtoAir Features and Benefits

- Multiple Connections, such as: Ethernet, RS-485/RS-232, RS-485 & Wi-Fi.
- 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 OEM's 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 needing a BMS Integrator on site.
- 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.
- VPN support using OpenVPN.
- Supports up to 10 client connections to Wi-Fi AP.



## MSA Grid - FieldServer Manager

- Registering ProtoAir BMS/IoT Gateways on MSA’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.
- FieldVEU provides enriched data metrics (averages and real-time values displayed in gauges or graphs) enabling collaboration and comparison across sites.
- No annual subscription is needed to connect FieldServers to the FieldServer Manager for 50 data points per minute until 2023.



## Hardware Specifications

### Communication

#### Serial (Galvanic Isolation):

1 x RS-485/RS-232 & 1 x RS-485

**Baud:** 9600, 19200, 38400, 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

### Wi-Fi 802.11 b/g/n

**Frequency:** 2.4 GHz

**Channels:** 1 to 11 (inclusive)

**Antenna Type:** SMA

**Encryption:** TKIP, WPA2 & AES

### 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

**Input:** 24VAC 0.125A, 12-24VDC 0.25A

**Max Power:** 3W @12 VDC

### Approvals

CE and FCC Part 15 C

BTL Marked

UL 60950-1 and CAN/CSA C22.2

UKCA compliant and ODVA CONFORMANT

RoHS3 and WEEE compliant

DNP 3.0 and Modbus conformance tested



## Ordering Information

FPA-W44: Two serial port model, includes Wi-Fi Antenna

Contact MSA sales for an easy proof of concept evaluation: [SMC-insidesales@msasafety.com](mailto:SMC-insidesales@msasafety.com).

### MSA Safety

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