



Remote Monitoring & Notifications

FGFD ProtoAir® Gateway



SAFEGUARDING PEOPLE, PLACES & THE PLANET.

■ Overview

The FieldServer FGFD ProtoAir wireless gateway provides instant IoT remote monitoring capabilities for all MSA Safety's Modbus and BACnet Fixed Gas & Flame Detectors (FGFD) in the field as well as devices from other manufacturers.

Integrated MSA Grid - FieldServer Manager support enhances the ProtoAir's value by enabling remote monitoring, control, cloud-based alarm notifications (SMS or E-Mail) for trouble or alarm conditions and data visualization through FieldVEU. Users can view data, configure dashboards, download historical data and provide remote monitor/control for any connected devices.

The ProtoAir FPA-C4X uses LTE to securely connect devices to AT&T, Verizon or Vodafone networks. This cellular connection allows IoT applications to move machine data into the cloud for maintenance, management and troubleshooting of remote equipment.

Every ProtoAir is pre-configured with MSA Safety's FGFD products before delivery to seamlessly enable Cloud communications to one or many MSA products.

■ FieldServer FGFD ProtoAir Features and Benefits

• Multiple Connections:

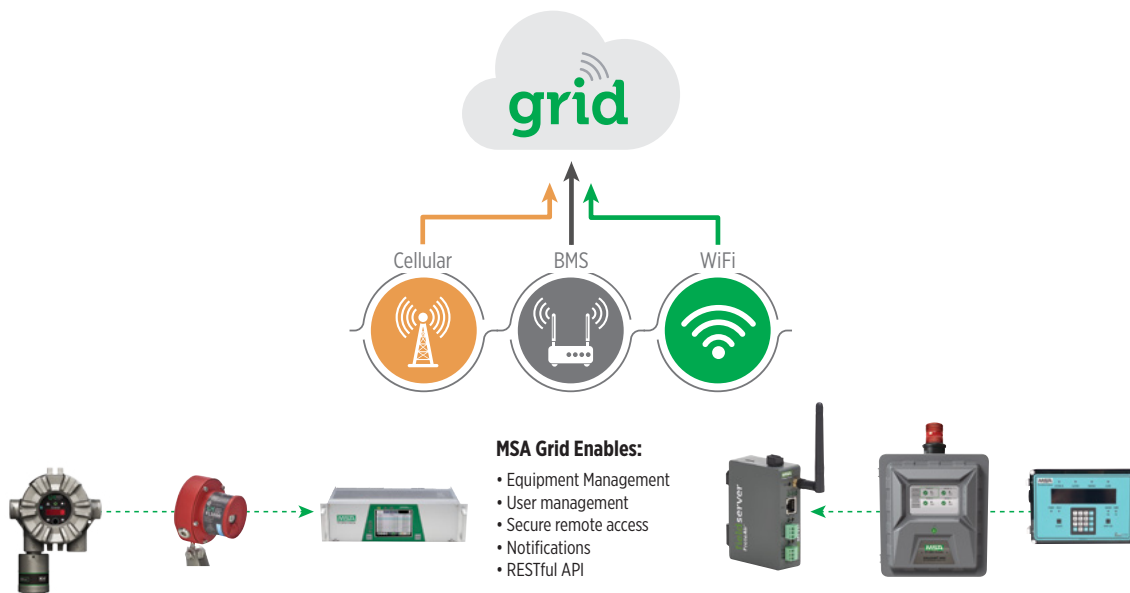
- 1 Ethernet
- 1 RS-485/RS-232
- 1 Wi-Fi
- 1 Cellular-LTE

- 4-20mA (NEMA only)
- Supports AT&T, Verizon and Vodafone Cellular networks.
- Short time to market to cloud connected devices.
- Shipped pre-configured, allowing for quick setup of one or multiple pieces of equipment.
- **Gas and Flame Detectors:** General Monitors® S5000, Observer® i, Senscient ELDS™, IR5500, FL5000, FL4000H, FL500 / FL500-H2, ULTIMA® X3, ULTIMA® X5000
- **Controllers and Monitors:** SENTRY io®, SUPREMATouch, GasGard XL, 9010/9020 SIL, 9010/9020 LCD, Chillgard® 5000, Chillgard® 5000 Ammonia, Z-Gard®, ModCon™ 75 Touch

- Supports 1 or multiple devices totaling up to 3,000 Modbus, EtherNet/IP or BACnet points for cloud data transfer.
- Enabling remote connection allows for access to Ethernet devices in the field with management and configuration programs to perform diagnostics, download new firmware, and reprogram the device without needing to visit the site. Connection to web servers located on remote segmented Ethernet devices is also available.
- 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 local applications.
- On-board diagnostics allow easy troubleshooting for both serial and Ethernet communications.

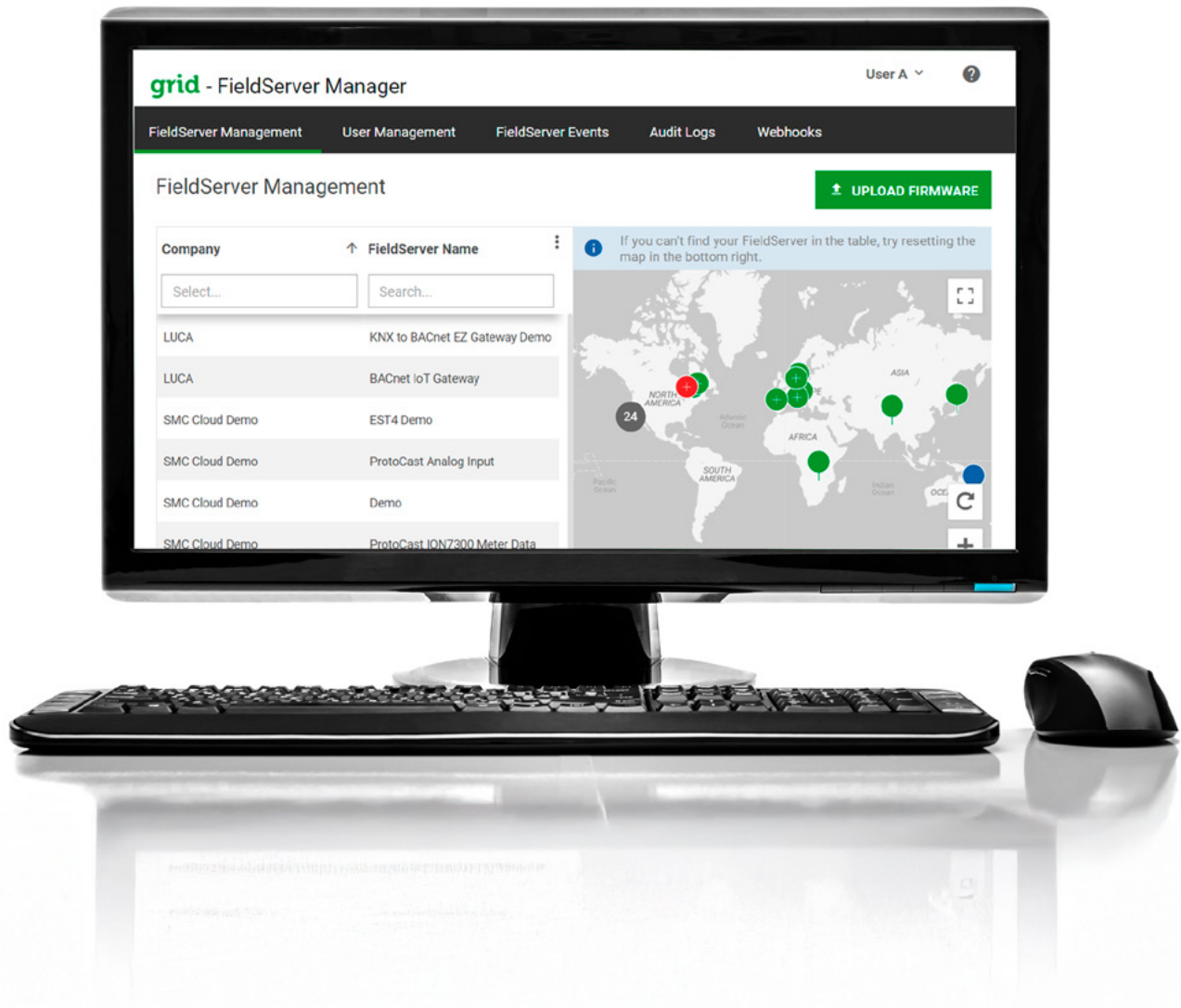
fieldserver ProtoAir® Application

Cloud Alarming via:  SMS  Email



MSA Grid - FieldServer Manager and FieldVEU

- Registering ProtoAir 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 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.





Hardware Specifications

Communication

Serial (Galvanic Isolation): RS-485/RS-232
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

Cellular Frequencies Supported

NA AT&T LTE: 700(B17/B12/B13) / 850(B5) / AWS1700(B4) / 1900(B2)

NA Verizon LTE: 700(B13) / AWS1700(B4) / 1900(B2)

EU LTE: 800(B20) / 900(B8) / 1800(B3) / 2100(B1) / 2600(B7) Rx Diversity and MIMO DL 2x2

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: 0.67A

Approvals

CE and FCC Part 15 C
UL 62368-1
RoHS3 and WEEE compliant
AT&T and Verizon
PTCRB and UKCA compliant
DNP 3.0 and Modbus conformance tested

Radio Specifications

Cellular

Features: LTE Cat.4
Antenna Type: SMA
Uplink: Up to 50 Mbps
Downlink: Up to 150 Mbps
Carriers: AT&T, Verizon & Vodafone
Output Power: Class 4 (2W, 33dBm), 108 dBm @UMTS



Ordering Information

Hardware

Part Number	Description
10218634	NEMA version AT&T
10218635	NEMA version Verizon
10222147	NEMA version AT&T (4 x 4-20mA)
10222301	NEMA version Verizon (4 x 4-20mA)
10225079	NEMA version International (4 x 4-20mA)
FPA-C41-2034	ProtoAir LTE (AT&T) Gateway
FPA-C42-2035	ProtoAir LTE (Verizon) Gateway
FPA-C43-2063	ProtoAir LTE (International) Gateway
FS-IOT-BACA	BACnet LTE (AT&T) Gateway
FS-IOT-BACV	BACnet LTE (Verizon) Gateway
FPA-W44-1919	ProtoAir (Wi-Fi) Gateway

NOTE: Please check with Customer Service for NEMA version options and availability.

Subscriptions

Part Number	Description	Region
Z-FST_PN-1-Y	Proto Air LTE NEMA with SIM, Annual Subscription	NNA only
Z-FST_PNN-1-Y	Proto Air LTE non-NEMA with SIM, Annual Subscription	NNA only
Z-FST_B-1-Y	BACnet LTE with SIM, Annual Subscription	NNA only
Z-FST_RM-1-Y	Remote Monitoring Annual Subscription (per gateway)	All
Z-FST_RM-1-Y	Remote Monitoring Additional Gateway (2+ gateways)	All
Z-FST_FVEU-1-Y	FieldVEU Dashboard Annual Subscription (per dashboard)	All

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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