

## Overview

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

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

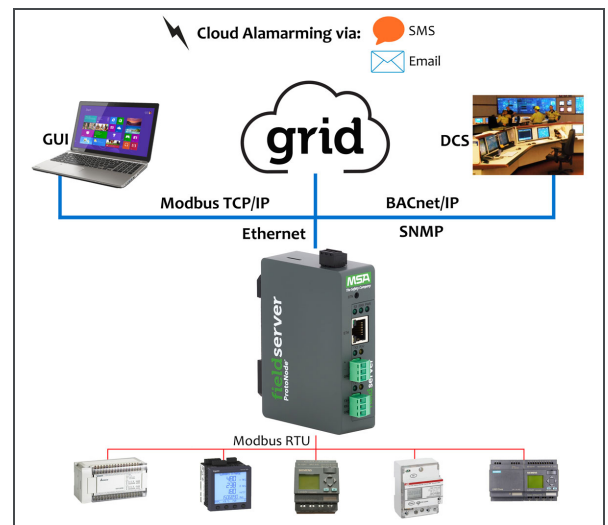
Cloud enabled devices change the game for OEMs. Users can view data via a configurable dashboard, download historical data and provide remote monitor/control for any connected device. Additionally, notification functions allow SMS/email for trouble or alarm conditions.

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



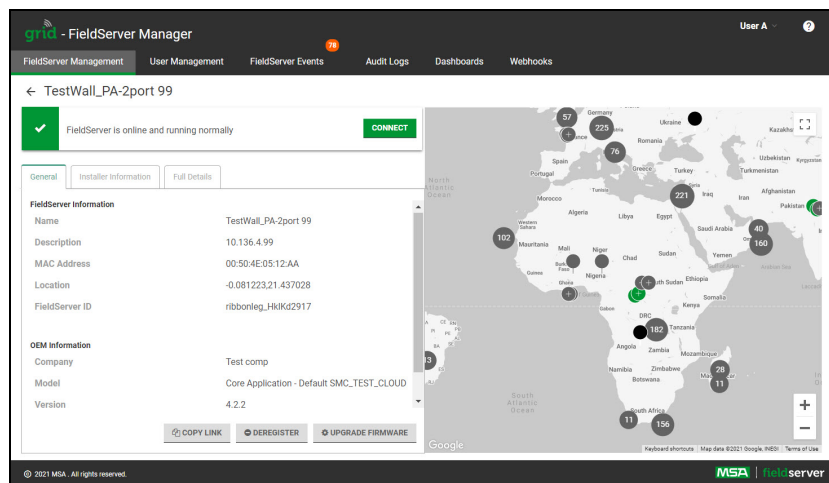
## ProtoNode Features and Benefits

- Multiple Connections:
  - Ethernet
  - RS-485 & RS-232
- 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 ProtoNode 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.
- 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.



## Benefits of the MSA Grid

- Registering ProtoNode 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.
- The MSA Grid 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 FieldServers to the MSA Grid platform 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

### 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

9-30VDC 0.25A @12 VDC

**Max Power:** 3W

### Approvals

CE and FCC Class B & C Part 15

BTL Marked

UL 60950-1 and CAN/CSA C22.2

IC Canada and UKCA compliant

RoHS3 and WEEE compliant



## Ordering Information

FPC-N54: two serial port model

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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