



**fieldserver**

# Multi-Protocol IIoT Solutions

for Integrators & Solution Providers



WE KNOW WHAT'S AT STAKE.

# The Multi-Protocol IIoT Gateway & Cloud Solution

## Remote & Local Connectivity

Integrators and solution providers working on facility or building automation projects are often required to connect the facility's controllers, sensors, and other instruments to local management systems or to the cloud. The **MSA FieldServer family of gateways, routers, and cloud solutions** enables integrators and system providers to complete their projects without surprises.

## Remote Connectivity and Support

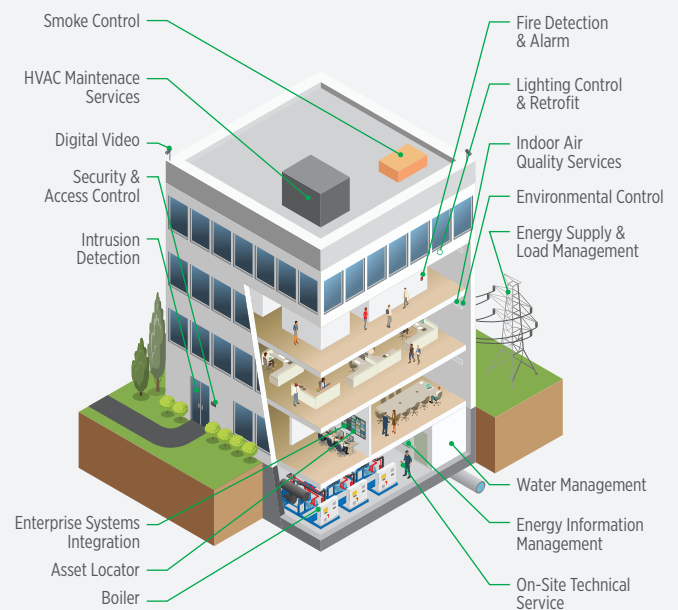
FieldServer products can seamlessly connect to the MSA Grid FieldServer Manager or to other popular IoT application platforms. Secure remote connectivity enables integrators to access the FieldServer products remotely for configuration and troubleshooting.

## New Applications

Software applications for asset management, energy management, etc. need to be able to retrieve and act on device data from the field. The FieldServer products along with the FieldServer Manager serve as the perfect IIoT on-ramp from the facility to the solution provider's applications.

## Buildings: "A Connectivity Dilemma"

- AC Controls—  
HVAC Roof Top Units
- Air Handlers
- Boiler Controls,  
Steam, Hot Water
- Chillers
- Dehumidifiers
- Energy BTU Flow Meters
- Energy Electricity Sub-Meters
- Fire Alarm Panels
- Fume Hood Controllers
- Gas Detectors
- Generator Sets
- Lighting Control Systems
- Motorized Window Shading
- Power Managers
- Programmable  
Logic Controllers
- Security Panels
- Temperature Controllers
- Thermostats
- Valves
- Variable Frequency Drives



## Multi-Protocol Versatility

FieldServer products support more than 140 protocols including standards such as BACnet, LonWorks, Modbus, M-BUS, and KNX; along with vendor-specific proprietary protocols, enabling integrators to connect virtually any device to any other system.

Given the popularity of BACnet in building automation, integrators should take advantage of FieldServer's leading portfolio of BACnet gateways and routers. While FieldServer BACnet gateways can convert virtually any device into a BACnet device, FieldServer BACnet routers are used to integrate BACnet MS/TP devices into a BACnet/IP backbone—a far more efficient approach than burning up expensive ports on a BACnet controller.



FieldServer  
BACnet Router



FieldServer EZ Gateway  
M-Bus Modbus BACnet



FieldServer  
QuickServer Gateway

# FieldServer & MSA Grid: The Easy Choice

## Consider These Requirements While Choosing a Multi-Protocol IIoT Gateway

### Choice of Connectivity Options

FieldServer gateways and routers can connect to devices over Serial or Ethernet links. Uplink options include Ethernet, Wi-Fi, and Cellular.

Building Automation	Industrial Automation	Proprietary	Fire Alarms	Utility/Energy
<ul style="list-style-type: none"> <li>BACnet MS/TP</li> <li>BACnet/IP</li> <li>LonWorks</li> <li>KNX</li> <li>Metasys N2</li> <li>Carrier</li> <li>McQuay</li> <li>Etc.</li> </ul>	<ul style="list-style-type: none"> <li>Modbus RTU</li> <li>Modbus TCP/IP</li> <li>GE-EGD</li> <li>EtherNet/IP</li> <li>DF1</li> <li>Etc.</li> </ul>	<ul style="list-style-type: none"> <li>CresNet</li> <li>Siemens</li> <li>Canatal</li> <li>Weightronics</li> <li>Russelectric</li> <li>Honeywell</li> <li>Etc.</li> </ul>	<ul style="list-style-type: none"> <li>Siemens</li> <li>Edwards</li> <li>Notifier</li> <li>Vesda</li> <li>Simplex</li> <li>Fike</li> <li>Gamewell</li> <li>Etc.</li> </ul>	<ul style="list-style-type: none"> <li>EnergyWise</li> <li>DNP 3.0</li> <li>DNP Ethernet</li> <li>SNMP</li> <li>XML</li> <li>M-Bus</li> <li>Etc.</li> </ul>

### Choice of Access Devices

With an intuitive and flexible, web-based user interface, FieldServer products can be accessed over the local network or remotely through PCs, tablets, and smartphones.

### Choice of Clouds

All FieldServer products come with the ability to register them and access them through the MSA Grid FieldServer Manager. Additionally, FieldServer products include adapters and APIs that allow the solution provider to connect to popular IoT 3<sup>rd</sup> party applications to build value-added applications.

### Additional Considerations

#### Is it simple to configure and deploy? Is it cloud-connected?

#### Is it smartphone and tablet friendly?

By using technologies such as auto-discovery, profiles, easy to edit configuration files, and simple GUI-based configurators, FieldServer gateways deliver ease-of-use along with flexibility.

#### What is the risk associated with deploying the gateway? Is it deployed widely?

#### Will it work as advertised? Will the protocol implementations stay current?

More than 300,000 FieldServer gateways have been deployed to date, more than any other gateway in the world.

#### What support does the gateway vendor offer to the on-site integrator?

#### Does the vendor have well-trained support staff who share the integrator's urgency and can assist in commissioning the site rapidly?

Even though a gateway product may be easy to use, there can still be surprises. The MSA FieldServer support organization has built a reputation for unmatched support.

#### Are the protocol drivers in the gateway or router certified and interoperable with other standard implementations?

For example, is the product's BACnet implementation approved by BTL to the latest level?

### Why FieldServer?

#### Industry leading implementation of 140+ different protocols

"Swiss Army knife" for an integrator and solution provider

#### Robust certified protocols

BACnet, Modbus, DNP, LonWorks

#### Intuitive and flexible configuration tools

Fast start-up—minimal commissioning time

#### Real-time network diagnostics

Commissioning Toolbox—rapid troubleshooting

#### "On-ramp" to the Industrial Internet of Things (IIoT) cloud

Integration with dashboards, analytics, and other cloud applications

#### World class technical support

Best practices from over 300,000 installed gateways

### Satisfied Customers

*"It was very easy to get the router up and running and communicating with the devices on the MS/TP side of the network and the WebCTRL software on the BACnet/IP side of the network. Within minutes I had configured the necessary parameters on the router's webserver configuration page and was seeing communications on both sides of the network without error."*

# FieldServer & MSA Grid: For All Your Integration Needs

## Wired



### QuickServer Gateway, EZ Gateway, BACnet Router

- Up to 5,000 points
- Local applications for diagnostics and configuration
- Supports 140+ protocols
- Ability to run several protocols simultaneously
- Available ports: Ethernet, RS-485, RS-232, LonWorks, KNX, and M-Bus
- BACnet BTL-Certified, LonMark-Certified, TUV- and CE-approved
- FieldServer Manager-enabled

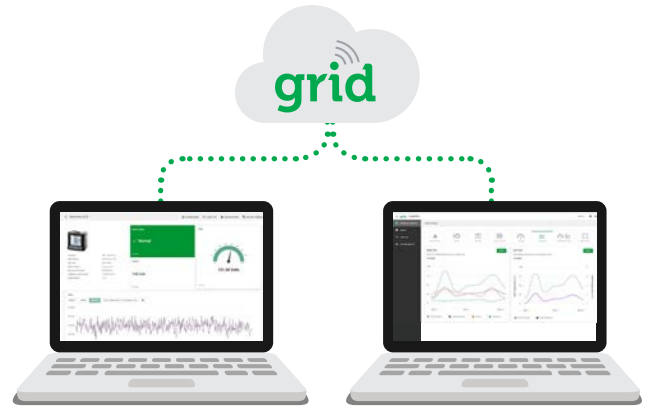
## Wireless



### ProtoAir™ (Wi-Fi), ProtoAir™ (Cellular) Wireless Gateway

- Up to 1,000 points
- Local applications for diagnostics and configuration
- Supports 140+ protocols
- Available ports: Wi-Fi, Cellular, Ethernet, RS-485
- FCC-compliant, UL- and CE-approved
- FieldServer Manager-enabled

## Cloud



### MSA Grid FieldServer Manager

- Tenant based architecture
- Remote notifications
- 3<sup>rd</sup> Party Cloud connections
- Remote monitoring
- Device Management

### MSA Grid FieldVEU

- View device data through secure portal
- Designed for OEMs
- Automatic dashboard creation
- Share dashboards with colleagues

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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