FieldPoP™
Device Cloud

FieldServer
IIoT Gateways and Routers

Multi-Protocol IIoT Solutions
for Integrators and Solution Providers
The Multi-Protocol IIoT Gateway and Cloud Solution

Remote and 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. Sierra Monitor’s FieldServer family of gateways, routers, and explorers, along with the FieldPoP™ device cloud, enables integrators and solution providers to complete their projects without surprises.

**Remote Connectivity and Support:** FieldServer products can seamlessly connect to Sierra Monitor’s own FieldPoP device cloud or to other popular IoT application platforms such as ThingWorx. Secure remote connectivity enables the integrator 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 FieldPoP device cloud serve as the perfect IIoT on-ramp from the facility to the solution provider’s applications.

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**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

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**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 the integrator to connect virtually any device to any other system.

Given the popularity of BACnet in building automation, integrators should take advantage of Sierra Monitor’s leading portfolio of BACnet gateways, BACnet routers, and the BACnet Explorer NG. 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. The BACnet Explorer NG is a total reinvention of traditional BACnet explorers. It is a revolutionary product based on Wi-Fi and cloud technologies that integrators and installers can use to validate device and network commissioning, and also to monitor the network subsequently, locally or remotely.
FieldServer and FieldPoP: 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.

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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 FieldPoP device cloud. Additionally, FieldServer products include adapters and APIs that allow the solution provider to connect to popular IoT application platforms like ThingWorx 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 200,000 Sierra Monitor’s 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. Sierra Monitor’s 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

Multi-protocol support in any gateway
Cost-effective implementation

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 200,000 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 and FieldPoP: For All Your Integration Needs

**Wired**
- QuickServer Gateway
- Multiport Gateway
- EZ Gateway
- BACnet Router
  - Up to 10,000 points
  - Local applications for diagnostics and configuration
  - Supports 140+ protocols
  - Ability to run several protocols simultaneously
  - BACnet BTL Certified, LonMark Certified, TUV and CE approved
  - FieldPoP-Enabled

**Wireless**
- ProtoAir™ (Wi-Fi)
- ProtoAir™ (Cellular)
  - Up to 1,000 points
  - Local applications for diagnostics and configuration
  - Supports 140+ protocols
  - Available ports: Wi-Fi, Cellular, Ethernet, RS-485
  - FCC compliant, TUV and CE approved
  - FieldPoP-Enabled

**Network Exploration**
- BACnet Explorer NG
  - Discover, test, and debug BACnet/IP and BACnet MS/TP networks and devices
  - Local applications for exploring, logging, diagnostics, and configuration
  - Supports BBMD
  - Available ports: Wi-Fi, Cellular, Ethernet, RS-485
  - FCC compliant, TUV and CE approved
  - FieldPoP-Enabled

**Cloud**
- FieldPoP™ Device Cloud
  - Secure remote access to field devices through a FieldServer’s local applications
  - Field data extraction for monitoring and logging
  - Device and user management
  - Real-time notifications through emails and SMS texts
  - 3rd party cloud platform integration through FieldPoP REST API

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**Contact Us**

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