Multi-Protocol IIoT Solutions for OEMs
Your On-Ramp to the Industrial Internet of Things (IIoT)

Access your products and data remotely and securely through the cloud

Original Equipment Manufacturers (OEMs) that target the facility management or smart buildings / smart cities market develop products and systems for heating, cooling, lighting, power generation, metering, flow, environment control, security, safety, and hundreds of other applications that improve comfort, productivity, and efficiency.

An OEM must have the ability to connect to and remotely manage their products so they can provide a superior level of proactive service and support to their customers. Often, OEMs sell through distribution channels and do not have visibility to where their products are sold or how they are used. Sierra Monitor’s FieldServer and FieldPoP™ IIoT solution allows OEMs to stay connected to their products by creating a virtual “cloud point of presence” for every physical product that they sell. Using the FieldServer and FieldPoP IIoT solution, OEMs can: register their sites with the FieldPoP portal, establish secure connectivity for access, identify and upload the desired product data points at the desired frequency, set up real-time alarm notifications, and connect their products in the field in real-time to cloud-based big data analytics platforms and other applications.

The FieldServer and FieldPoP IIoT solution enables “fog” based control strategies that implement some functionality and control in the cloud and some in the field. Also, an OEM often has to add functionality in the field for logging, trending, or monitoring that supplements their core product functionality. Being able to add such functions on the FieldServer IIoT gateway allows the OEM to reduce total system cost by eliminating the need for add-on data logging devices and Human Machine Interface (HMI) devices. The FieldServer gateway environment hosts a powerful “application engine”. Qualified OEMs can develop and add their own custom application software to the FieldServer IIoT gateway.
Multi-Protocol IIoT Gateway Solutions

Connect your products to any local BMS or SCADA system

OEMs need to respond to Requests for Proposals (RFPs) that often specify the automation and control protocols such as BACnet/IP, LonWorks, Ethernet/IP, Modbus TCP, SNMP, KNX, or N2 that the OEM's products must be compliant with in order to fit within the facility's overall control architecture. The OEMs that support the broadest range of protocols have access to the largest number of opportunities and have a competitive advantage over their peers.

In addition to supporting all standard “northbound” protocols and interfaces, FieldServer IIoT gateways also support the largest number of “southbound” standard and proprietary device protocols in the industry and can automatically identify and communicate with many devices. If we do not support an OEM's specific proprietary or legacy device protocol or data map, we will develop and implement that custom protocol driver and/or device profiles on the gateway to communicate with the OEM's products.

Flexible FieldServer OEM Options

FieldServer IIoT gateways are available in a variety of form factors that are OEM-appropriate. Whether it's using a gateway that can be embedded into an OEM device or offering another as a customer-ordered option from the OEM's catalog, Sierra Monitor has a FieldServer gateway that is the right fit for the OEM. Sierra Monitor's combination of FieldServer gateways and the FieldPoP device cloud is the OEM's perfect on-ramp to the IIoT.
OEM Engagement Process

With a track record of working closely and successfully with more than 200 top-tier OEMs, Sierra Monitor has refined its OEM engagement model to avoid surprises and to ensure quick time-to-market. Key steps include:

1. The OEM identifies the BMS or local management protocols of interest (if appropriate).
2. The OEM and the Sierra Monitor team identify cloud connectivity requirements based on how the OEM intends to use remote connectivity.
3. The Sierra Monitor team and the OEM determine which of the following FieldServer gateway form factors is appropriate for the project:
   a. A ProtoCessor that plugs directly into the OEM’s redesigned electronics board - or -
   b. A ProtoCarrier that is added on within the enclosure when the OEM is not ready to redesign their hardware - or -
   c. A ProtoNode that is assembled in its own mechanical package and mounts outside the enclosure.
4. The OEM provides the register list and data points that need to be translated to the local BMS protocol or mapped to the cloud.
5. Sierra Monitor creates a unique part number, which contains all configurations that have been developed for the OEM.
6. Sierra Monitor sets up an account for the OEM on the FieldPoP portal.
7. OEM receives test samples of all configurations/profiles that have been developed for their product line(s).
8. Sierra Monitor provides a 60 minute, phone-conference training to walk the OEM through the one-time startup/validation of the ProtoCessor, ProtoCarrier, or ProtoNode. Configurations must be validated before field installation.
9. The OEM connects the gateway to the FieldPoP cloud.
10. Sierra Monitor and the OEM determine whether to customize a “premium” package for FieldPoP connectivity.

Why Work With Us

Demonstrate Vision
IoT-empower your products and show superior value

Increase Revenue
Increase your product’s competitiveness and develop new service revenue streams

Reduce Time
Bring your new IoT-empowered products to market quickly

Reduce Cost
Minimize development risk and focus your resources on core functionality, not on communications

Satisfied Customers

"The ProtoNode stands a head above others in several ways, however where Sierra Monitor most impresses is in the technical service response team and their unprecedented service. Thank you for making a good product and for providing industry leading service to back it up in the field."

Contact Us

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