Overview

The FieldServer protocol gateway makes it easy for integrators to interface devices utilizing various building or industrial protocols. As the leading manufacturer of protocol gateways in the building automation industry, MSA Safety has developed the largest driver library in the industry and the widest range of gateways available, designed to meet the needs of system integrators.

The FS-B3510-05 provides a wealth of features to enable data transfer between different devices and networks utilizing serial (RS-232 or RS-485), Ethernet and LonWorks. The multiport design allows for serial-to-serial, serial-to-Ethernet and LonWorks interfaces. With a larger point count than any similar gateway, the FieldServer FS-B35 series provides a single device solution for your networking needs. The FieldServer is designed to meet a wide range of interface needs and it is easily configured as a master or a slave.

The FieldServer Toolkit with the updated browser-based interface makes it easy to find specific FieldServers on the network and provides a user-friendly method to determine status, network settings, node information, map descriptors and more. The interface also makes it easy to transfer files to update FieldServer in the field.

Configuration is easy, but if needed, configuration services are available from the MSA Safety support team. The proven FieldServer support team is recognized around the world for its knowledge of the many different protocols involved in building automation.

MSA Safety continuously strives to enhance our gateways and the latest FS-B35 series includes a major software upgrade, resulting in significant enhancements in performance, including:

- 40% higher point count capability – some protocols are major memory hogs, and the result is that they can slow down performance of any gateway. With the greater memory enhancement, the FS-B35 Series can easily handle all of the drivers extremely well.

- Memory utilization monitoring – the user is provided with application memory statistics (in both kB and as a percentage of the available memory) enabling optimal matching of device models and configurations to specific applications.

- Improved stability and performance under high loads – the new software enhances the operation making it more forgiving to configuration problems with fewer crashes when capacity limits are reached.

- USB firmware update – this allows the firmware or configuration of the FieldServer to be updated from a USB flash drive whenever it is inserted, enabling users to easily update firmware in the field. This is a great time saver if you have multiple FieldServers in the field.

FieldServer has the interoperability solution for:		
AC Controls	Fire Alarm Panels	Power Managers
Boiler Controls	Flowmeters	Power Systems
Building Automation Systems	Fume Hood Controllers	Programmable Logic Controllers
Chillers	Gas Panels	Temperature Controllers
Control Systems	Generators	Variable Frequency Drives
Distributed Control Systems	GUI (Graphical User Interface)	Weigh Scales
Energy Management Systems	IAQ Sensors	…. and more!

Specifications

Field Connections

Ethernet Ports – 2

100 BaseT RJ45 connector (auto MDIX and sensing) with ESD protection

Serial Ports – 5

2 x RJ45 RS-232 galvanically isolated with ESD protection

2 x RS-485 galvanically isolated with ESD protection

1 x RJ45 RS-232 system port

LonWorks – 1

FTT-10 twisted pair

1000 Network variable capability

LonWorks service pin

Auxiliary ports – 2

2 x USB ports

Expansion: Fieldbus connectors available for selected protocols

Mounting Options

Desktop, Wall, Panel Optional: DIN rail

Power requirements

24VAC (+/-10%) or 12-30VDC @ 12W

Other

Configuration/Diagnostic utilities

System has 1000 point capability

Physical Dimensions (WxDxH)

6.3 x 5.4 x 2.0 in.(16.0 x 13.7 x 5.0 cm)

2.5 lbs (1.5 Kg)

LED Indicators

Power, Run, System Error, Configuration Error, and Node Offline

Ethernet connection– Link OK, Tx/Rx communication activity

RS-232/RS-485 – Tx/Rx communication activity

LonWorks - Activity

Environment

Operating temp: 0-60^0 (32-140 ^{0}F)

Relative humidity: 10-90% non-condensing

Option

Memory upgrade for additional data points

Custom Configuration Service

Drivers

Drivers available for a wide range of Ethernet and social protocols

Approvals

CE and FCC Class B & C Part 15

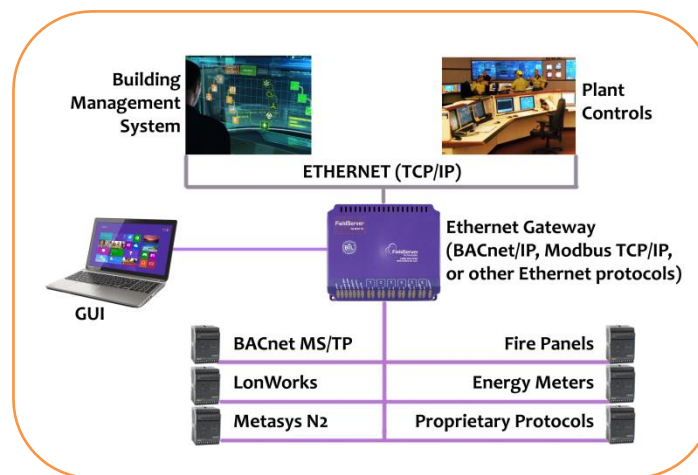**BTL Marked and LonMark Certified**

CSA Certified: UL916 Standard and CSA @ 22.2

Modbus and DNP 3.0 Tested

RoHS3 and WEE Compliant

GOST-R Certified

*Specifications subject to change without notice

Figure: Ethernet Gateway (BACnet/IP, Modbus TCP/IP, or other Ethernet protocols) connecting Building Management System, Plant Controls, GUI via ETHERNET (TCP/IP) to BACnet MS/TP, LonWorks, Metasys N2, Fire Panels, Energy Meters, Proprietary Protocols.

Drivers Available

- Allen Bradley DF1
- BACnet/IP
- BACnet MS/TP
- Carrier
- Caterpillar M5X
- Cisco EnergyWise
- ControlNet
- DataAire
- DeviceNet
- EtherNet/IP
- GE-SRTP
- Modbus RTU
- Modbus TCP/IP
- Point Six Wireless
- PROFIBUS
- SNMP
- Veeder-Root
- …. and more!
- Fire alarm panels for:
  - ✓ EST
  - ✓ Fike
  - ✓ Gamewell-FCI
  - ✓ Hochiki
  - ✓ Mircom
  - ✓ Notifier
  - ✓ Siemens
  - ✓ SimplexGrinnell
  - ✓ VESDA

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