FieldServer Data Sheet - DeviceNet Master Gateway FS-B3521-05

Rev. 1.D

## **Overview**

The FieldServer DeviceNet Master gateway makes it easy for integrators to interface devices utilizing various building or industrial protocols to DeviceNet networks. 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-B3521-05 provides a wealth of features to enable data transfer between different devices and networks utilizing serial (RS-232 or RS-485), Ethernet, LonWorks and DeviceNet Master. The multiport design allows for serial-to-serial, serial-to-Ethernet, LonWorks and DeviceNet Master 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
- Boiler Controls
- Building Automation Systems
- Chillers
- Control Systems
- Distributed Control Systems
- Energy Management Systems
- Fire Alarm Panels
- Flowmeters
- Fume Hood Controllers
- Gas Panels
- Generators
- GUI (Graphical User Interface)
- IAQ Sensors

- Power Managers
- Power Systems
- Programmable Logic Controllers
- Temperature Controllers
- · Variable Frequency Drives
- Weigh Scales
- .... and more!

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## **Specifications**

#### **Field Connections**

### Ethernet Ports - 2

100 Base T RJ45 connector (auto sensing) with ESD protection

#### Serial Ports - 5

2 x RJ45 RS-232 galvanically isolated with ESD protection

2 x RS-485 serial connectors galvanically isolated with ESD protection

1 x RJ45 RS-232 system port

#### DeviceNet - 1

DeviceNet Master

Serial Terminal Port

125K, 250K, 500kbit/s

Up to 512 Bytes in each direction with each slave

#### LonWorks - 1

FTT-10 twisted pair

1000 Network variable capability

LonWorks service pin

### Auxiliary ports - 2

2 x USB ports

#### **LED Indicators**

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

Ethernet connection – Link OK, Tx/Rx communication activity

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

#### **Environment**

Operating temperature: 0-60°C (32-140°F)
Relative humidity: 10-90% RH non-condensing

#### Othor

Configuration/Diagnostic utilities Custom Configuration Services 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)

### **Power Requirements**

24V AC ( +/-10%) or 12-30V DC

### **Mounting Options**

Desktop, Wall, Panel Optional: DIN rail

#### **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** 











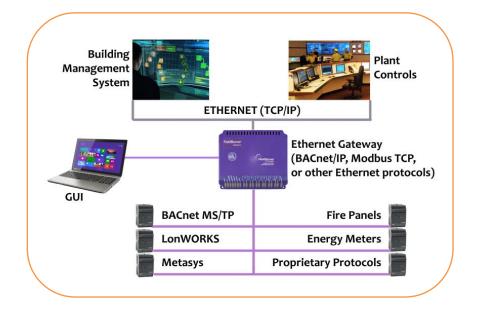








\*Specifications subject to change without notice



# **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