FieldServer Data Sheet – PROFIBUS DP Master Gateway FS-B3520-05 — Rev. 1.D

Overview

The FieldServer PROFIBUS DP Master gateway makes it easy for integrators to interface devices utilizing various building or industrial protocols to PROFIBUS DP Master 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-B3520-05 provides a wealth of features to enable data transfer between different devices and networks utilizing serial (RS-232 or RS-485), Ethernet, LonWorks and PROFIBUS DP Slave. The multiport design allows for serial-to-serial, serial-to-Ethernet, LonWorks and PROFIBUS DP 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.

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

- 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.

FieldServers are 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!

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 protect
2 x RS-485 serial connectors galvanically isolated
with ESD protection
1 x RJ45 RS-232 system port

PROFIBUS DP – 1
PROFIBUS DP Master
Standard PROFIBUS connector
Auto baudrate
Can connect to 125 PROFIBUS DP Slaves, each
slave can handle 244 bytes input and 244 bytes output

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^{0}C (32-140^{0}F)
Relative humidity: 10-90% RH non-condensing

Other

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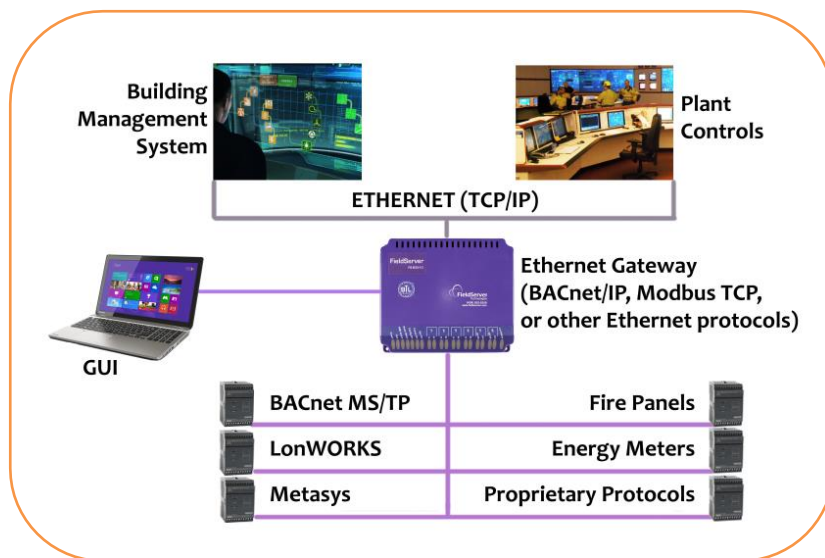
24 VAC (+/-10%) or 12-30 VDC

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
  - ✓ VESDA

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