

### 1 BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

<b>Date</b>	May 2018
<b>BACnet Vendor Name</b>	Sierra Monitor Corporation
<b>BACnet Vendor ID</b>	37
<b>Product Name</b>	QuickServer, ProtoCessor, ProtoCarrier, ProtoNode, ProtoAir, EZ Gateway
<b>Product Model Number</b>	QuickServer (FS-QS-1XYZ), ProtoNode (FPC-NXY), ProtoCarrier (FPC-CXY), ProtoCessor FFP (FPC-FD2 + FPC-ED2), ProtoAir (FPA-XY4), EZ Gateway KNX to BACnet (FS-EZX-KNX-BAC), EZ Gateway M-Bus to Modbus & BACnet (FS-EZX-MBUS-MOD-BAC), EZ Gateway Modbus to BACnet (FS-EZX-MOD-BAC)
<b>Product Description</b>	This software product will provide bi-directional communication between various RTU, DCS, SCADA and PLC using most common protocols and a BACnet system. The FieldServer can perform protocol conversion (as opposed to routing) between the different BACnet Data Link Layer options. This is arranged by way of static mappings.
<b>Protocol Conversions</b>	See Sierra Monitor's list of protocol drivers to determine available protocol conversions.
<b>BACnet Protocol Version</b>	Version 1 Revision 16

#### 1.1 BACnet Standardized Device Profile (Annex L)

**NOTE: The FieldServer is a gateway device.**

- BACnet Application Specific Controller (B-ASC)

#### 1.2 BACnet Interoperability Building Blocks Supported (Annex K)

- K.1.1 BIBB - Data Sharing - ReadProperty-A (DS-RP-A)\*
- K.1.2 BIBB - Data Sharing - ReadProperty-B (DS-RP-B)
- K.1.3 BIBB - Data Sharing - ReadPropertyMultiple-A (DS-RPM-A) \*
- K.1.4 BIBB - Data Sharing - ReadPropertyMultiple-B (DS-RPM-B)
- K.1.7 BIBB - Data Sharing - WriteProperty-A (DS-WP-A)
- K.1.8 BIBB - Data Sharing - WriteProperty-B (DS-WP-B)
- K.1.9 BIBB - Data Sharing - WritePropertyMultiple-A (DS-WPM-A)\*
- K.1.10 BIBB - Data Sharing - WritePropertyMultiple-B (DS-WPM-B)
- K.1.11 BIBB - Data Sharing - COV-A (DS-COV-A)\*
- K.1.12 BIBB - Data Sharing - COV-B (DS-COV-B)
- K.2.2 BIBB - Alarm and Event-Notification Internal-B (AE-N-I-B)

- K.2.5 BIBB - Alarm and Event-ACK-B(AE-ACK-B)
- K.2.11 BIBB - Alarm and Event-Information-B (AE-INFO-B)
- K.4.2 BIBB - Trending – Viewing and Modifying Trends Internal-B (T-VMT-I-B)
- K.4.5 BIBB - Trending – Automated Trend Retrieval-B (T-ATR-B)
- K.5.1 BIBB - Device Management - Dynamic Device Binding-A (DM-DDB-A)
- K.5.2 BIBB - Device Management - Dynamic Device Binding-B (DM-DDB-B)
- K.5.3 BIBB - Device Management - Dynamic Object Binding-A (DM-DOB-A)\*
- K.5.4 BIBB - Device Management - Dynamic Object Binding-B (DM-DOB-B)
- K.5.6 BIBB - Device Management - DeviceCommunicationControl-B (DM-DCC-B)
- K.5.12 BIBB - Device Management - TimeSynchronization-B (DM-TS-B)
- K.5.16 BIBB - Device Management- ReinitializeDevice-B (DM-RD-B)
- K.5.20 BIBB - Device Management-Restart-B (DM-R-B)
- K.5.22 BIBB - Device Management – List Manipulation-B (DM-LM-B)
- K.5.38 BIBB - Network Management-BBMD Configuration-B (NM-BBMD-C-B)

\* Client functionality not part of B-ASC profile tested by BTL.

### 1.3 Segmentation Capability

None

### 1.4 Object Types and Optional Properties Supported

Object Type	Optional Properties Supported
<input checked="" type="checkbox"/> Device Object	Location Description UTC Offset Active COV Subscriptions Database Revision
<input checked="" type="checkbox"/> Analog Input	Reliability Description
<input checked="" type="checkbox"/> Analog Output	Reliability Description Max_Pres_Value Min_Pres_Value
<input checked="" type="checkbox"/> Analog Value	Reliability Description
<input checked="" type="checkbox"/> Binary Input	Reliability Description Active_Text Inactive_Text
<input checked="" type="checkbox"/> Binary Output	Reliability Description Active_Text Inactive_Text
<input checked="" type="checkbox"/> Binary Value	Reliability Description Active_Text Inactive_Text
<input checked="" type="checkbox"/> Multi State Input	Reliability Description State_Text
<input checked="" type="checkbox"/> Multi State Output	Reliability Description State_Text
<input checked="" type="checkbox"/> Multi State Value	Reliability Description State_Text
<input checked="" type="checkbox"/> Notification Class Object	
<input checked="" type="checkbox"/> Trend Log	Description Log_Interval
<input checked="" type="checkbox"/> Life Safety Point	Description

Object Type	Optional Writable Properties
<input checked="" type="checkbox"/> Device Object	Object_Name
<input checked="" type="checkbox"/> Analog Input	Object_Name
<input checked="" type="checkbox"/> Analog Output	Object_Name
<input checked="" type="checkbox"/> Analog Value	Object_Name
<input checked="" type="checkbox"/> Binary Input	Object_Name
<input checked="" type="checkbox"/> Binary Output	Object_Name
<input checked="" type="checkbox"/> Binary Value	Object_Name
<input checked="" type="checkbox"/> Multi State Input	Object_Name
<input checked="" type="checkbox"/> Multi State Output	Object_Name
<input checked="" type="checkbox"/> Multi State Value	Object_Name
<input checked="" type="checkbox"/> Notification Class Object	Object_Name
<input checked="" type="checkbox"/> Life Safety Point	Object_Name
<input checked="" type="checkbox"/> Trend Log	Object_Name

### 1.5 Unsupported Properties and Restrictions

- Does not support BACnet CreateObject
- Does not support BACnet DeleteObject
- Does not support any optional properties
- No additional writeable properties exist
- No proprietary properties exist
- No range restrictions exist
- Client Driver can only read Present Value property

### 1.6 Data Link Layer Options

<input checked="" type="checkbox"/> BACnet/IP, (Annex J)
<input checked="" type="checkbox"/> ANSI/ATA 878.1, 2.5 Mb, ARCNET (Clause 8)
<input checked="" type="checkbox"/> Point-to-Point, EIA 232 (Clause 10), baud rate up to 57.6 Kbps
<input checked="" type="checkbox"/> ISO 8802-3, Ethernet (Clause 7)
<input checked="" type="checkbox"/> MS/TP master (Clause 9), baud rate up to 76.8 Kbps
<input checked="" type="checkbox"/> MS/TP slave (Clause 9), baud rate up to 76.8 Kbps

### 1.7 Device Address Binding

Not supported

### 1.8 Networking Options

- Router, Clause 6 – List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
- Annex H, BACnet Tunneling Router over IP
- Annex H.2, Multiple “Virtual” BACnet Devices in a Single Physical Device
- BACnet/IP Broadcast Management Device (BBMD)
- Registrations by Foreign Devices

### 1.9 Character Sets Supported

Where support for multiple character sets is indicated, this does not imply that they can all be supported simultaneously.

- ISO 10646 (UTF-8) ANSI X3.4
- ISO 10646 (UCS-2)
- IBM/Microsoft DBCS
- ISO 10646 (ICS-4)
- ISO 8859-1
- JIS C

### 1.10 Non-BACnet Equipment/Networks Supported

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

- Modbus RTU
- Modbus TCP/IP
- LonWorks
- Metasys N2
- SNMP
- DNP 3.0 serial and Ethernet
- XML
- GE-EGD

- GE-SRTP
- OPC
- Allen Bradley DF1
- Allen Bradley CSP
- Canatal
- Carrier
- Caterpillar MSX
- ControlNet
- DataAire
- DeviceNet
- EST3 ECP
- EST QuickStart
- Fike Cheetah
- Gamewell-FCI
- GE-SNP
- JBus
- Lutron
- McQuay
- Mircom
- Notifier Fire Panels
- Profibus
- Russelectric
- Secutron
- Siemens Fire Safety
- Silent Knight
- SimplexGrinnell
- Spectronics
- Stulz
- TAC I/Net
- Veeder-Root