

ANNEX A - PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (NORMATIVE)
(This annex is part of this Standard and is required for its use.)

BACnet Protocol Implementation Conformance Statement

Date: December 1, 2014
Vendor Name: Electro Industries / GaugeTech
Product Name: Shark 50B, Shark 100B
Product Model Number: E170102, E141102
Application Software Version: v6.01
Firmware Revision: v2.02
BACnet Protocol Revision: 9

Product Description:

The Shark 50B/100B is an electric meter compatible with an existing BACnet Compliant Building Automation System. The Ethernet connection conforms to the BACnet/IP standard which is complemented by many network friendly features such as password-protected web-server browser-accessible based setup screens. Once a user is logged in configuration is easy. Defaults are well vetted. Once connected to the Building Automation Network, a BACnet client like the Cimetrics BACnet Explorer or OPC server, can look at the Shark 50B/100B meters as BACnet Devices. Meter data exposed to the BACnet network includes Power, Energy, Demand, MaxDemand, Power_Factor, Flow, Consumption, Current, Voltage, and Phase.

BACnet Standardized Device Profile (Annex L):

- BACnet Operator Workstation (B-OWS)
- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Display (B-OD)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

List all BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B, DS-RPM-B, DS-WP-B, DM-DDB-B

Segmentation Capability:

- Able to transmit segmented messages Window Size _____
- Able to receive segmented messages Window Size _____

Standard Object Types Supported:

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service - NO
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service - NO
- 3) List of the optional properties supported – see below

- 4) List of all properties that are writable where not otherwise required by this standard – n/a
- 5) List of all properties that are conditionally writable where not otherwise required by this standard –n/a
- 6) List of proprietary properties and for each its property identifier, datatype, and meaning –n/a
- 7) List of any property range restrictions – n/a

Object Type	Optional Properties Supported
Analog Input	Description, Device_Type, Reliability, Min_Pres_Value
Analog Value	Description
Binary Input	Description, Device_Type, Reliability, Inactive_Text, Active_Text, Change_of_State_Time, Change_of_State_Count, Time_of_State_Count_Reset,
Device	Description

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s): _____
- MS/TP slave (Clause 9), baud rate(s): _____
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
- Point-To-Point, modem, (Clause 10), baud rate(s): _____
- LonTalk, (Clause 11), medium: _____
- BACnet/ZigBee (ANNEX O)
- Other: _____

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) Yes No

Networking Options:

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
- Annex H, BACnet Tunneling Router over IP

- BACnet/IP Broadcast Management Device (BBMD)
Does the BBMD support registrations by Foreign Devices? Yes No
Does the BBMD support network address translation? Yes No

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- ISO 10646 (UTF-8) IBM Microsoft DBCS ISO 8859-1
 ISO 10646 (UCS-2) ISO 10646 (UCS-4) JIS X 0208

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports: Modbus/RTU *internally* - direct internal communication only.

Network Security Options:

- Non-secure Device - is capable of operating without BACnet Network Security
 Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
 Multiple Application-Specific Keys
 Supports encryption (NS-ED BIBB)