

# BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT



**Date:** November 26, 2018

**Vendor Name:** DENT Instruments

**Product Name:** PowerScout 48HD

**Product Model Numbers:** PS48HD

**Application Software Version:** 0.8.3 Firmware Revision: 1.018d BACnet Protocol Revision: 14

**Product Description:** Three phase ANSI C12.20-2010 Class 0.2 revenue grade power meter. Supports BACnet MS/TP, BACnet/IP, Modbus RTU, and Modbus TCP communication protocols.

## 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):

ReadProperty (DS-RP-B)	Execute
ReadPropertyMultiple (DS-RPM-B)	Execute
WriteProperty (DS-WP-B)	Execute
Who-Has (DM-DOB-B)	Execute
I-Have (DM-DOB-B)	Initiate
Who-Is (DM-DDB-B)	Execute
I-Am (DM-DDB-B)	Initiate

## Segmentation Capability:

- Able to transmit segmented messages Window Size \_\_\_\_\_
- Able to receive segmented messages Window Size \_\_\_\_\_

## Standard Object Types Supported:

### Device Object

Optional Properties	Writable Properties	Property Range Restrictions
	Object_Identifier	< 4194304
Description	Description	32 character maximum
Location	Location	32 character maximum
Max_Master	Max_Master	1-127
Max_Info_Frames	Max_Info_Frames	>= 1
	Object Name	32 character maximum

**Analog Input**

Optional Properties	Writable Properties	Property Range Restrictions

**Analog Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present_Value	Varies by object

**Binary Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present_Value	

**Analog Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present_Value	Varies by object

**Positive Integer Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present_Value	Varies by object

**Multi-state Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present_Value	Varies by object
State Text		

**BitString Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present Value	Varies by object

**CharacterString Value**

Optional Properties	Writable Properties	Property Range Restrictions
	Present Value	32 character maximum

**Structured View**

Optional Properties	Writable Properties	Property Range Restrictions
	Object Name	32 character maximum

**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): 9600, 19200, 38400, 57600, 76800, 115200
- 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

**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)
  - Key Server (NS-KS BIBB)

**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