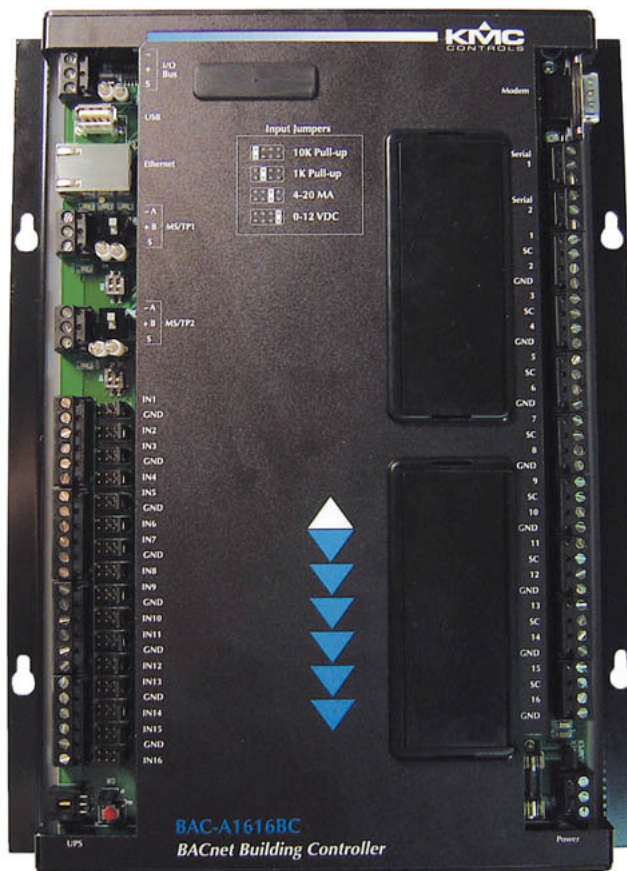


Protocol Implementation Conformance Statement (Normative)

# BACnet Protocol Implementation Conformance Statement

## For the BAC-A1616BC BACnet Building Controller (B-BC)



**BACnet Protocol Implementation Conformance Statement  
(BACnet Testing Laboratories Version)**

**Date:** 3 April 2009

**Vendor Name:** KMC Controls

**Product Name:** BACnet BAC-A1616BC Building Controller

**Product Model Number:** BAC-A1616BC

**Applications Software Version:** N/A

**Firmware Revision:** E1.2.0.8

**BACnet Protocol Revision:** 135-2004

**Product Description:**

The BAC-A1616BC BACnet Building Controller (B-BC) combines a high-performance, native BACnet direct digital controller and a BACnet router that is a BACnet (IP) Broadcast Management Device (BBMD). It provides web server capability and expandable I/O in a native BACnet device.

As part of a complete interoperable building automation system, this 16x16 B-BC provides precise monitoring and control of connected points. I/O expansion modules (that can be mounted up to 100 feet away) provide the B-BC with a maximum total of 128 inputs and 72 outputs.

As a router, the B-BC can route traffic between two MS/TP ports, one BACnet PTP (point-to-point) port, four (logical) BACnet IP ports, and one (logical) BACnet Ethernet port (BACnet IP and BACnet Ethernet are logical ports on the Ethernet physical port). It supports BACnet IP foreign device registration and BBMD, supports PTP modem communications, and performs IP packet assembling/disassembling (PAD) routing for up to four BACnet IP PAD networks.

As a web server, it offers the capability for remote monitoring and configuration from a web browser. Configure I/Os, set-up objects, and monitor points via a browser and/or (via Ethernet) TotalControl.

**List all BACnet Interoperability Building Blocks supported (see Annex K in BACnet 2001):**

AE-ACK-B, AE-ASUM-B, AE-ESUM-B, AE-INFO-B, AE-N-I-B, DM-LM-B, DM-BR-B, DM-DCC-B, DM-DDB-A, DM-DDB-B, DM-DOB-A, DM-DOB-B, DM-OCD-B, DM-RD-B, DM-TS-B, DM-UTC-B, DS-COV-B, DS-COVP-B, DS-COVU-B, DS-RP-A, DS-RP-B, DS-RPM-A, DS-RPM-B, DS-WP-A, DS-WP-B, DS-WPM-B, NM-CE-A, NM-RC-B, SCHED-E-B, SCHED-I-B, T-ATR-B, T-VMT-I-B

**Which of the following device binding methods does the product support? (check one or more)**

- Send Who-Is, receive I-Am (BIBB DM-DDB-A)
- Receive Who-Is, send I-Am (BIBB DM-DDB-B)
- Send Who-Has, receive I-Have (BIBB DM-DOB-A)
- Receive Who-Has, send I-Have (BIBB DM-DOB-B)
- Manual configuration of recipient device's network number and MAC address
- None of the above

BTL Product Testing and Listing Program Application Form

**Standard Object Types Supported:**

<b>OBJECT</b>	<b>CREATABLE</b>	<b>DELETABLE</b>	<b>OPTIONAL PROPERTIES</b>
Analog Input	Yes	Yes	COV_Increment, Description, Device_Type, and Update_Interval
Analog Output	Yes	Yes	COV_Increment, Description, and Device_Type
Analog Value	Yes	Yes	COV_Increment, Description, Priority_Array, and Relinquish_Default
Binary Input	Yes	Yes	Active_Text, Description, Device_Type, and Inactive_Text
Binary Output	Yes	Yes	Active_Text, Description, Device_Type, Inactive_Text, Minimum_Off_Time, and Minimum_On_Time
Binary Value	Yes	Yes	Active_Text, Description, Inactive_Text, Priority_Array, Relinquish_Default, Minimum_Off_Time, and Minimum_On_Time
Calendar	Yes	Yes	Description
Device	No	No	Active_COV_Subscriptions, APDU_Segment_Timeout, Backup_Failure_Timeout, Configuration_Files, Daylight_Savings_Status, Description, Last_Restore_Time, Local_Date, Local_Time, Location, Max_Master, Max_Info_Frames, Max_Segments_Accepted, and UTC_Offset
File	No	No	Description
Loop	Yes	Yes	Bias, COV_Increment, Derivative_Constant, Derivative_Constant_Units, Description, Integral_Constant, Integral_Constant_Units, Maximum_Output, Minimum_Output, Proportional_Constant, Proportional_Constant_Units, and Update_Interval
Notification	Yes	Yes	Description
Program	Yes	Yes	Description, Description_Of_Halt, Instance_Of, Program_Location, and Reason_For_Halt
Schedule	Yes	Yes	Description, Exception_Schedule, and Weekly_Schedule
Trend	Yes	Yes	Client_COV_Increment, COV_Resubscription_Interval, Description, Log_DeviceObjectProperty, Log_Interval, Start_Time, and Stop_Time
Accumulator	Yes	Yes	Description, Device_Type, Limit_Monitoring_Interval, and Pulse_Rate
Event Enrollment	Yes	Yes	Description
Multi-state Value	Yes	Yes	Description, Priority_Array, Relinquish_Default, and State_Text

**Data Link Layer Options (check all that are supported):**

- BACnet IP, (Annex J)
  - Able to register as a Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) \_\_\_\_\_
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
- MS/TP slave (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): 9600, 19200, 38400
- Point-To-Point, modem, (Clause 10), baud rate(s): 9600, 19200, 38400
- LonTalk, (Clause 11), medium: \_\_\_\_\_
- Other: \_\_\_\_\_

**Networking Options (check all that are supported):**

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.:  
BACnet IP, Ethernet 8802.3, MS/TP, PTP \_\_\_\_\_
- Annex H.3, BACnet Tunneling Router over UDP/IP
- BACnet/IP Broadcast Management Device (BBMD)  
Does the BBMD support registrations by Foreign Devices?  Yes  No

**Segmentation Capability (check all that apply):**

- Able to transmit segmented messages                      Window Size 10
- Able to receive segmented messages                      Window Size 10

**Character Sets Supported (check all that apply):**

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

- ANSI X3.4                       IBM™/Microsoft™ DBCS                       ISO 8859-1
- ISO 10646 (UCS-2)                       ISO 10646 (ICS-4)                       JIS C 6226

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

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**Include any addition information about the product's BACnet capabilities relevant to interoperability:**

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