

June 2017

# Enterprise Buildings Integrator R500 Protocol Implementation Conformance Statement (PICS)

Topic: BACnet Protocol Implementation  
Conformance Statement (PICS)  
Date: June 2017  
Version 1  
Applicable Products Honeywell Enterprise Buildings Integrator

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# Honeywell Enterprise Buildings Integrator

## BACnet Protocol Implementation Conformance Statement

**Date:** 15 June 2017

**Vendor ID:** 17

**Vendor Name:** Honeywell International, Inc.

**Product Name:** Honeywell Enterprise Buildings Integrator™

**Product Model Number:** R500

**Applications Software Version:** 1012.0.0

**Firmware Revision:** R500.1

**BACnet Protocol Revision:** 1.12

### Product Description:

Honeywell Enterprise Buildings Integrator™ BACnet Workstation.

Note: this product cannot be used to modify BACnet objects on sites requiring UL Classification.

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)

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

<b>Data Sharing</b>	Data Sharing - ReadProperty-A	DS-RP-A
	Data Sharing - ReadProperty-B	DS-RP-B
	Data Sharing - ReadPropertyMultiple-A	DS-RPM-A
	Data Sharing - WriteProperty-A	DS-WP-A
	Data Sharing - WriteProperty-B	DS-WP-B
	Data Sharing - WritePropertyMultiple-A	DS-WPM-A
	Data Sharing - COV-A	DS-COV-A
	Data Sharing - COVP-A	DS-COVP-A
	Data Sharing - COV-Unsubscribed-A	DS-COVU-A
	Data Sharing - View-A	DS-V-A
	Data Sharing - Advanced View-A	DS-AV-A
	Data Sharing - Modify-A	DS-M-A
	Data Sharing - Advanced Modify - A	DS-AM-A
<b>Alarm &amp; Event Management</b>	Alarm and Event - Notification-A	AE-N-A
	Alarm and Event - ACK-A	AE-ACK-A

	Alarm and Event - Alarm Summary View-A	AE-AS-A
	Alarm and Event - LifeSafety - A	AE-LS-A
	Alarm and Event Management - View Notifications-A	AE-VN-A
	Alarm and Event Management - Advanced View Notifications-A	AE-AVN-A
	Alarm and Event Management - View and Modify-A	AW-VM-A
	Alarm and Event Management - Advanced View and Modify-A	AE-AVM-A
	Alarm and Event Management - Alarm Summary View-A	AE-AS-A
	Alarm and Event Management - Event Log View-A	AE-ELV-A
	Alarm and Event Management - Event Log View and Modify-A	AE-ELVM-A
<b>Scheduling</b>	Scheduling - Advanced View and Modify-A	SCHED-AVM-A
	Scheduling - View and Modify-A	SCHED-VM-A
	Scheduling - Weekly Schedule-A	SCHED-WS-A
<b>Trending</b>	Trending - Automated Trend Retrieval-A	T-ATR-A
	Trending - Automated Multiple Value Retrieval-A	T-AMVR-A
	Trending - View-A	T-V-A
	Trending - Advanced View and Modify-A	T-AVM-A
	Trending - Archival-A	T-A-A
<b>Device &amp; Network Management</b>	Device Management - Dynamic Device Binding-A	DM-DDB-A
	Device Management - Dynamic Device Binding-B	DM-DDB-B
	Device Management - Dynamic Object Binding-A	DM-DOB-A
	Device Management - Dynamic Object Binding-B	DM-DOB-B
	Device Management - Device Communication Control-A	DM-DCC-A
	Device Management - TimeSynchronization-A	DM-TS-A
	Device Management - UTCTimeSynchronization-A	DM-UTC-A
	Device Management - ReinitializeDevice-A	DM-RD-A
	Device Management - Backup and Restore-A	DM-BR-A
	Device Management - Restart-A	DM-R-A
	Device Management - List Manipulation-A	DM-LM-A
	Device Management - Object Creation and Deletion-A	DM-OCD-A
	Network Management - Connection Establishment-A	NM-CE-A
	Device Management - Automated Network Mapping-A	DM-ANM-A
	Device Management - Automatic Device Mapping-A	DM-ADM-A
	Device Management - Automatic Time Synchronization-A	DM-ATS-A
	Device Management - Manual Time Synchronization-A	DM-MTS-A

**Segmentation Capability:**

Able to transmit segmented messages  yes  no Window Size 16  
 Able to receive segmented messages  yes  no Window Size 16

**Standard Object Types Supported:**

**Device Object:**

Dynamically creatable? No  
 Dynamically deletable? No

Property	Required	Required by BIBB	Optional	Writable
Object_Identifier	✓			
Object_Name	✓			
Object_Type	✓			
System_Status	✓			
Vendor_Name	✓			
Vendor_Identifier	✓			
Model_Name	✓			
Firmware_Revision	✓			
Application_Software_Version	✓			
Location			✓	
Description			✓	
Protocol_Version	✓			
Protocol_Revision	✓			
Protocol_Services_Supported	✓			
Protocol_Object_Types_Supported	✓			
Object_List	✓			
Max_APDU_Length_Accepted		✓		
Segmentation_Supported		✓		
Max_Segments_Accepted		✓		
Local_Time		✓		
Local_Date		✓		
UTC_Offset		✓		
Daylight_Savings_Status		✓		
APDU_Segment_Timeout		✓		
APDU_Timeout	✓			
Number_Of_APDU_Retries	✓			
Time_Synchronization_Recipients		✓		✓
Device_Address_Binding	✓			
Database_Revision	✓			
Backup_Failure_Timeout	✓			✓
UTC_Time_Synchronization_Recipients		✓		✓
Time_Synchronization_Interval		✓		✓
Align_Intervals		✓		✓
Interval_Offset		✓		✓

**Data Link Layer Options:**

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), 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): \_\_\_\_\_

- 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/network(s) that the gateway supports:**

Not a gateway  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**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)

## Object Types Viewable and Modifiable from EBI

Object type	Viewable	Modifiable
Analog Input	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analog Output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analog Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Input	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Calendar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Command	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Device	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Enrollment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Loop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi State Input	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi State Output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notification Class	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Schedule	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Averaging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi State Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trend Log	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Life Safety Point	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Life Safety Zone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Accumulator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pulse Converter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Log	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Global Group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trend Log Multiple	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Load Control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Structured View	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Access Door	<input type="checkbox"/>	<input type="checkbox"/>
Access Credential	<input type="checkbox"/>	<input type="checkbox"/>
Access Point	<input type="checkbox"/>	<input type="checkbox"/>
Access Rights	<input type="checkbox"/>	<input type="checkbox"/>
Access User	<input type="checkbox"/>	<input type="checkbox"/>
Access Zone	<input type="checkbox"/>	<input type="checkbox"/>
Credential Data Input	<input type="checkbox"/>	<input type="checkbox"/>
Network Security	<input type="checkbox"/>	<input type="checkbox"/>
Bitstring Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Characterstring Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Pattern Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Date Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Datetime Pattern Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Datetime Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Integer Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Large Analog Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Octetstring Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Positive Integer Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Time Pattern Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Time Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>