

IAQPoint2

BACnet PICS

Revision History

Rev.	Date	Author	Description
1	March 16, 2011	Mike Grady	Initial draft
2	March 23, 2011	Danish I	Modified the initial draft. Added tables for supported objects, object properties and object list. Incorporated the changes approved during the telecom on March 18 th .
3	April 04, 2011	Danish I	Updated the PICS with object list and related information.
4	April 06, 2011	Danish I	Modified based upon the discussion with David Fisher from Polarsoft
5	April 08, 2011	Danish I	Reviewed and approved version in a discussion with Mike Grady, Kishore V, Amit. Updated the device profile to Smart Sensor after approval from Don Olson from Marketing.
6	April 14, 2011	Danish I	Removed Reliability property for Binary Outputs. Approved version after joint review between Marketing and Engineering.
7	May 22, 2012	Mike Grady	Corrections for Technical Manual
8	May 24, 2012	Danish I	Reviewed and Corrections Incorporated
9	Dec 18, 2012	Mike Grady	Reflect implementation as tested by BTL

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: 2012 Dec 12

Vendor Name: Honeywell International Inc

Product Name: IAQPoint2

Product Model Number: Sixteen variations of the product are offered:

- IAQ-WNC-D, IAQ-WNC-R-D, IAQ-WNC-TRH-D, IAQ-WNC-TRH-R-D,
- IAQ-WNV-D, IAQ-WNV-R-D, IAQ-WNV-TRH-D, IAQ-WNV-TRH-R-D,
- IAQ-DNC-D, IAQ-DNC-R-D, IAQ-DNC-TRH-D IAQ-DNC-TRH-R-D,
- IAQ-DNV-D, IAQ-DNV-R-D, IAQ-DNV-TRH-D, IAQ-DNV-TRH-R-D

Application Software Version: v1.05b4 **Firmware Revision:** v1.05b4 **BACnet Protocol Revision:** 7

Product Description: The IAQPoint2 smart sensor measures three indoor air quality parameters: carbon dioxide or volatile organic compounds, plus temperature and humidity. Both wall mount and duct mount versions are available with a customizable touchscreen. The IAQPoint2 facilitates energy efficiency, productivity, health and comfort by facilitating demand controlled ventilation.

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):

BIBB	Service
DS-RP-B	Data Sharing - ReadProperty-B
DS-RPM-B	Data Sharing - Read Property Multiple-B
DS-WP-B	Data Sharing - Write Property-B
DM-DDB-B	Dynamic Device Binding
DM-DOB-B	Dynamic Object Binding

Segmentation Capability:

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- 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
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service
- 3) List of the optional properties supported
- 4) List of all properties that are writable where not otherwise required by this standard
- 5) List of proprietary properties and for each its property identifier, datatype, and meaning
- 6) List of any property range restrictions

Object	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable beyond standard	Range Restrictions
device	N	N			
			description	description	1 - 50 characters, default "CO2 or VOC Sensor"
			location	location	1 - 22 characters, default "location"
			max_master	max_master	1 to 127, default 127
			max_info_frames		
analog_input 0	N	N			
			reliability		
				present_value	if CO2 sensor fitted 0 to 5000 ppm, else 0 to 100 %
				out_of_service	
				object_name	1 - 22 characters, default "GAS_RDG_AI"
analog_input 1	N	N			
			reliability		
				present_value	0 to 50 C or 32 to 122 F
				out_of_service	
				object_name	1 - 22 characters, default "TEMP_AI"
				units	Fahrenheit (64) or Celcius (62)
analog_input 2	N	N			
			reliability		
				present_value	0 to 100%

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				out_of_service	
				object_name	1 - 22 characters, default "RH_AI"
analog_value 3	N	N			
			reliability		
				present_value	if CO2 sensor fitted 400 to 5000 ppm, else 0 to 100 %
				object_name	1 - 22 characters, default "GAS_SPT_AV"
analog_value 4	N	N			
			reliability		
				present_value	if Celcius, 10 to 35 if Fahrenheit 50 to 95
				object_name	1 - 22 characters, default "TEMP_SPT_AV"
				units	Fahrenheit (64) or Celcius (62)
analog_value 5	N	N			
			reliability		
				present_value	0 to 100%
				object_name	1 - 22 characters, default "RH_SPT_AV"
binary_input 6	N	N			
			reliability		
				present_value	
				out_of_service	
				object_name	1 - 22 characters, default "IAQGOOD_BI"
binary_input 7	N	N			
				present_value	
				out_of_service	
				object_name	1 - 22 characters, default "OVDTIMER_BI"
binary_output 8	N	N			
			reliability		
				object_name	1 - 22 characters, default "RLY_DRV_BO"
binary_output 9	N	N			
			reliability		

				object_name	1 - 22 characters, default "OCC_DRV_BO"
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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.

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- ISO 10646 (UTF-8)
- ISO 10646 (UCS-2)

- IBM-/Microsoft- DBCS
- ISO 10646 (UCS-4)

- ISO 8859-1
- JIS X 0208

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

_____ This is not a gateway _____

