

BACnet Protocol Implementation Conformance Statement

Product

Date:	7/11/2016	Vendor Name:	Magnum Energy Solutions
Product Name:	Room Operating Panel	Application Software V.:	n/a
Product Model Number:	Mx-RPW	Firmware Revision:	x.x.x.x
Product Description:	Temp./Occ/SP	BACnet Protocol Revision:	n/a

Vendor Information

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Product Description

Solar-powered, self-learning room sensor with LCD and smart communication management for measuring room temperature, independent generation of utilization time profiles and their continuous dynamic adjustment/optimization and for wireless transmission of measured values. Occupancy button for manually changing the comfort mode or economy mode status.

BACnet Standardized Device Profile (Annex L):

<input type="checkbox"/> BACnet Operator Workstation (B-OWS)	<input type="checkbox"/> BACnet Advanced Application Controller (B-AAC)
<input type="checkbox"/> BACnet Advanced Operator Workstation (B-AWS)	<input type="checkbox"/> BACnet Application Specific Controller (B-ASC)
<input type="checkbox"/> BACnet Operator Display (B-OD)	<input checked="" type="checkbox"/> BACnet Smart Sensor (B-SS)
<input type="checkbox"/> BACnet Building Controller (B-BC)	<input checked="" type="checkbox"/> BACnet Smart Actuator (B-SA)

BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B	Data Sharing, Read Property B
DS-RPM-B	Data Sharing, Read Property Multiple B
DS-WP-B	Data Sharing, Write Property B
DS-WPM-B	Data Sharing, Write Property Multiple B
DS-COV-B	Data Sharing, COV B
DS-COVP-B	Data Sharing, COVP N

Segmentation Capability:

<input checked="" type="checkbox"/> Able to transmit segmented messages	Window Size: 1515 bytes
<input checked="" type="checkbox"/> Able to receive segmented messages	Window Size: 1515 bytes

Standard Object Types Supported (Sensor):

Object	Optional Properties Supported	Writeable Properties	Property Range Restrictions
Analog Input Power status	Description	None	0 – 5.0 V
Analog Input Temperature set point (linear)	Description	None	0 – 40° C 32 – 104° F
Analog Input Temperature (linear)	Description	None	0 – 40° C 32 – 104° F
Analog Input Rel. Humidity (linear)	Description	None	0 – 100 %
Binary Input PIR Status	Description Inactive Text Active Text	None	Occupied Unoccupied
MultiStateInput Fan speed	Description	None	Off Low Medium High Auto
Analog Output {HeartBeat}	Description	Present Value	0 – 255 minutes
Analog Input {RSSI}	Description	none	0 – 255 dB
Binary Input {Signal}	Description Inactive Text Active Text Change State Time Change State Count Time State Count Reset	none	Invalid valid
MultiStateInput {Manufacturer}	Description	none	EnOcean Manufacturer List

Standard Object Types Supported (Actuator):

Object	Optional Properties Supported	Writeable Properties	Property Range Restrictions
Analog Output Temperature set point (linear)	Description Inactive Text Active Text	Present Value	0 – 40° C 32 – 104° F
MultiStateOutput Fan speed	Description Inactive Text Active Text	Present Value	Off Low Medium High Auto
MultiStateOutput Button activation	Description Inactive Text Active Text	Present Value	All button deactive F/C deactive up/down deactive Fan deactive All buttons active F/C active up/down active Fan active
MultiStateOutput OCC override	Description	Present Value	Normal Operation Override: occupied Override: unoccupied
Analog Output minimum temperature set point (linear)	Description	Present Value	0 – 40° C 32 – 104° F
Analog Output maximum temperature set point (linear)	Description	Present Value	0 – 40° C 32 – 104° F
MultiStateOutput {Msg.Selector}	Description	Present Value	1 – 8
BinaryOutput {Sending}	Description Inactive Text Active Text	Present Value	Send Suppress
MultiStateInput {Manufacturer}	Description	none	EnOcean Manufacturer List

Data Link Layer Options:

<input type="checkbox"/> BACnet IP, (Annex J)	<input type="checkbox"/> MS/TP slave (Clause 9)
<input type="checkbox"/> BACnet IP, (Annex J), Foreign Device	<input type="checkbox"/> Point-To-Point, EIA 232 (Clause 10)
<input type="checkbox"/> ISO 8802-3, Ethernet (Clause 7)	<input type="checkbox"/> Point-To-Point, modem
<input type="checkbox"/> ATA 878.1, 2.5 Mb. ARCNET (Clause 8)	<input type="checkbox"/> LonTalk, (Clause 11)
<input type="checkbox"/> ATA 878.1, EIA-485 ARCNET (Clause 8)	<input type="checkbox"/> BACnet/ZigBee (ANNEX O)
<input type="checkbox"/> MS/TP master (Clause 9)	<input checked="" type="checkbox"/> Other: EnOcean wireless

Device Address Binding:

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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Networking Options:

<input type="checkbox"/> Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.	
<input type="checkbox"/> Annex H, BACnet Tunneling Router over IP	
<input type="checkbox"/> BACnet/IP Broadcast Management Device (BBMD)	
Does the BBMD support registrations by Foreign Devices?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does the BBMD support network address translation?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Network Security Options:

<input type="checkbox"/> Non-secure Device - is capable of operating without BACnet Network Security
<input type="checkbox"/> Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
<input type="checkbox"/> Multiple Application-Specific Keys:
<input type="checkbox"/> Supports encryption (NS-ED BIBB)
<input type="checkbox"/> Key Server (NS-KS BIBB)

Character Sets Supported:

<input checked="" type="checkbox"/> ISO 10646 (UTF-8)	<input type="checkbox"/> IBM™/Microsoft™ DBCS	<input type="checkbox"/> ISO 8859-1
<input type="checkbox"/> ISO 10646 (UCS-2)	<input type="checkbox"/> ISO 10646 (UCS-4)	<input type="checkbox"/> JIS X 0208