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BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

RT RTX

Produal

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BACnet protocol implementation conformance statement

Date	07.05.2024
Vendor name	Produal Oy (Vendor ID: 783)
Product name	Room Transmitter
Product model number	RT, RTX
Application software version	1.1.0.51
Firmware version	1.1.0.51
Product description	HVAC transmitter / controller
BACnet protocol revision	23

BACnet standardized device profile (Annex L)

BACnet Application Specific Controller (B-ASC)

Supported BACnet interoperability building blocks (Annex K)

- Data Sharing-ReadProperty (DS-RP-B)
- Data Sharing-WriteProperty (DS-WP-B)
- Data Sharing-ReadPropertyMultiple (DS-RPM-B)
- Data Sharing-WritePropertyMultiple (DS-WPM-B)
- Data Sharing-ChangeOfValue (DS-COV-B)
- Device Management-DynamicDeviceBindings (DM-DDB-B)
- Device Management-DynamicObjectBinding (DM-DOB-B)
- Device Management-DeviceCommunicationControl (DM-DCC-B)
- Device Management-ReinitializeDevice (DM-RD-B)

Segmentation capability

- Segmentation requests are not supported.
- Segmentation responses are not supported.

Supported standard object types

Device object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Object name
- Object identifier

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

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- N/A

Proprietary properties

- N/A

Property value range restrictions

- N/A

Binary input object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Out_Of_Service

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Property value range restrictions

- N/A

Binary value object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Out_Of_Service

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Property value range restrictions

- N/A

Analog input object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Out_Of_Service

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Property value range restrictions

Present_value:

ID	Object name	Values	Resolu-tion	Units
0	*TEMPERATURE*	*-1000...1000*	*0.1*	*degrees-celsius (62) / degrees-fahrenheit (64)*
1	*HUMIDITY*	*0...100*	*1.0*	*percent-relative-humidity (29)*
2	*CO2*	*0...10000*	*1.0*	*parts-per-million (96)*
3	*TVOC*	*0...10000*	*1.0*	*micrograms-per-cubic-meter (219)*
5	*EXT-IN-VOLTAGE*	*0...10*	*0.001*	*volts (5)*
6	*EXT-IN-RESISTANCE*	*0...30000*	*0.1*	*ohms (4)*
8	*EXT-IN-TEMPERATURE*	*-1000...1000*	*0.1*	*degrees-celsius (62) / degrees-fahrenheit (64)*
9	*EXT-IN-HUMIDITY*	*0...100*	*1.0*	*percent-relative-humidity (29)*
10	*EXT-IN-CO2*	*0...10000*	*1.0*	*parts-per-million (96)*
11	*EXT-IN-VOC*	*0...10000*	*1.0*	*micrograms-per-cubic-meter (219)*

Analog value object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Out_Of_Service

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Property value range restrictions

Present_value:

ID	Object name	Values	Reso-lution	Units	Default
13	OUTPUT1-VOLTAGE	0...10	0.001	volts (5)	0
14	OUTPUT2-VOLTAGE	0...10	0.001	volts (5)	0
15	OUTPUT3-VOLTAGE	0...10	0.001	volts (5)	0
16	OUTPUT4-VOLTAGE	0...10	0.001	volts (5)	0
17	EXT-INT-TEMP-AVERAGE	-1000...1000	0.1	degrees-celsius (62) / degrees-fahrenheit (64)	0
18	DEW-POINT	-1000...1000	0.1	degrees-celsius (62) / degrees-fahrenheit (64)	0
21	ABSOLUTE-HUMIDITY	0...100	1.0	grams-per-cubic-meter (217)	0
22	MIXING-RATIO	0...100	0.1	grams-per-kilogram (210)	0
23	ENTHALPY	0...1000	0.1	kilojoules-per-kilogram (125)	0
24	VOC-TVOC-PPB	0...10000	1.0	parts-per-billion (97)	0
25	VOC-CO2-EQV-PPM	0...10000	1.0	parts-per-million (96)	0
26	VOC-AQI	1...5	1.0	no-units (95)	0
28	PULSE-COUNTER	0...4294967295	1.0	no-units (95)	0
36	INSTALLATION-QUALITY-SCORE	1...4	1.0	no-units (95)	0
1000	BUS-TEMPORARY-OVERDRIVE-TIMER	0...1440	1.0	minutes (72)	0
1001	BUS-TEMPORARY-OVERDRIVE-SELECTION	0...65535	1.0	no-units (95)	0
1002	BUS-EXTERNAL-INPUT-POWER	0...100	0.01	percent (98)	0
1003	BUS-CONTROLLER-INPUT-T	-1000...1000	0.1	degrees-celsius (62) / degrees-fahrenheit (64)	0
1004	BUS-CONTROLLER-INPUT-RH	0...100	0.01	percent-relative-humidity (29)	0
1005	BUS-CONTROLLER-INPUT-CO2	0...10000	1.0	parts-per-million (96)	0
1006	BUS-CONTROLLER-INPUT-CO2-VOC	0...10000	1.0	micrograms-per-cubic-meter (219)	0
1007	BUS-CONTROLLER-SETPOINT-T	-1000...1000	0.1	degrees-celsius (62) / degrees-fahrenheit (64)	0
1008	BUS-CONTROLLER-SETPOINT-RH	0...100	0.01	percent-relative-humidity (29)	0
1009	BUS-CONTROLLER-SETPOINT-CO2	0...10000	1.0	parts-per-million (96)	0

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ID	Object name	Values	Reso-lution	Units	Default
1010	*BUS-CONTROLLER-SETPOINT-VOC*	*0...10000*	*1.0*	*micrograms-per-cubic-meter (219)*	*0*
1012	*BUS-OUTPUT1-POWER*	*0...100*	*0.01*	*percent (98)*	*0*
1013	*BUS-OUTPUT2-POWER*	*0...100*	*0.01*	*percent (98)*	*0*
1014	*BUS-OUTPUT3-POWER*	*0...100*	*0.01*	*percent (98)*	*0*
1015	*BUS-OUTPUT4-POWER*	*0...100*	*0.01*	*percent (98)*	*0*

Multi state value object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- Out_Of_Service
- State_Text

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Property value range restrictions

Present_value:

ID	Object name	Values	State text	Default
72	*VOC sensor detailed status*	*1...4*	1. Operating normally 2. Warm-up sequence 3. Initial start-up 4. No valid output	*1*
1017	*Led color*	*1...8*	1. Off 2. Red 3. Green 4. Blue 5. Yellow 6. Cyan 7. Purple 8. White	*1*

Network port object

Dynamically creatable using the CreateObject service?

- No

Dynamically deletable using the DeleteObject service?

- No

Supported optional properties

- N/A

Writable properties that are not otherwise required by the standard

- N/A

Conditionally writable properties that are not otherwise required by the standard

- N/A

Proprietary properties

- N/A

Data link layer options

- MS/TP master (Clause 9), baud rates: 9600/14400/19200/38400/57600/76800/115200 bps

Device address binding

Is static device binding supported?

- No

Networking options

- N/A

Character sets supported

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

- ISO 10646 (UTF-8)

Network security options

- Non-secure device - is capable of operating without BACnet Network security.

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