



RCA Series Controller

BACnet Protocol Implementation Conformance Statement

Version 1.1.00 June 2019

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BACnet Protocol Implementation Conformance Statement (PICS)

Date: 12 June 2019
Vendor Name: Matrix iControl Sdn. Bhd.
Product Name: RCA Series Controller
Product Model Number: RCA0664BV, RCA0660BV, RCA0624BV, RCA0620BV, RCA0210BL
Applications Software Version: BV0664-01.00, BV0660-01.00, BV0624-01.00, BV0620-01.00, BL0210-01.00
Firmware Revision: 1.14.02.5
BACnet Protocol Revision: 14

Product Description:

The RCA Series controllers are rugged, network centric and high-performance controllers for HVAC system. Moreover, these controllers support BACnet communication protocol that leverages the ASHRAE/ANSI Standard 135-2012 and BS EN ISO 16484-5:2014.

BACnet Standardized Device Profile (Annex L):

- BACnet Operator Workstation (B-OWS)
- 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):

| Supported BIBBs | BIBB Name |
|-----------------|--|
| DS-RP-B | Data Sharing – ReadProperty – B |
| DS-RPM-B | Data Sharing – ReadPropertyMultiple – B |
| DS-WP-B | Data Sharing – WriteProperty – B |
| DS-WPM-B | Data Sharing – WritePropertyMultiple – B |
| DS-COV-B | Data Sharing – COV – B |
| DM-DDB-B | Device Management – Dynamic Device Binding – B |
| DM-DOB-B | Device Management – Dynamic Object Binding – B |
| DM-DCC-B | Device Management – DeviceCommunicationControl – B |
| DM-TS-B | Device Management – TimeSynchronization – B |
| DM-RD-B | Device Management – ReinitializeDevice – B |
| SCHED-WS-I-B | Scheduling – Weekly Schedule – Internal - B |

Segmentation Capability:

- Segmented requests supported Window Size _____
- Segmented responses supported Window Size _____

Standard Object Types Supported:

Standard object types are supported and may be present in the device.

COV : Supports change of value (COV) reporting

There are no proprietary objects and no proprietary properties. There are no specific property range restrictions.

Standard object types are supported as listed:

Table 1.0 : Supported Objects

| Object Type | COV | Optional Properties | Writable Properties |
|---------------|-------------------------------------|--|--|
| Analog Input | <input checked="" type="checkbox"/> | Description Device_Type Reliability COV_Increment | Present_Value ¹ Description Device_Type Out_Of_Service COV_Increment Units |
| Analog Output | <input checked="" type="checkbox"/> | Description Device_Type COV_Increment | Present_Value Description Device_Type Out_Of_Service COV_Increment Relinquish_Default |
| Analog Value | <input checked="" type="checkbox"/> | Description COV_Increment ² | Present_Value ³ COV_Increment ² Units ³ |
| Binary Input | <input checked="" type="checkbox"/> | Description Device_Type Inactive_Text Active_Text | Present_Value ¹ Out_Of_Service Description Device_Type Polarity Inactive_Text Active_Text |
| Binary Output | <input checked="" type="checkbox"/> | Description Device_Type Inactive_Text Active_Text | Present_Value Description Out_Of_Service Polarity Inactive_Text Active_Text |

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|------------------------|-------------------------------------|--|--|
| | | | Device_Type Relinquish_Default |
| Binary Value | <input checked="" type="checkbox"/> | Description Inactive_Text Active_Text | Present_Value |
| Multi State Value | <input checked="" type="checkbox"/> | Description State_Text | Present_Value ³ |
| Device | <input type="checkbox"/> | Description Location Local_Time Local_Date Max_Master Max_Info_Frames Active_COV_Subscriptions | Object_Identifier Object_Name Description Location Local_Date Local_Time Max_Master Max_Info_Frames |
| Loop | <input checked="" type="checkbox"/> | Description Proportional_Constant Proportional_Constant_Units Integral_Constant Integral_Constant_Units Derivative_Constant Derivative_Constant_Units Maximum_Output Minimum_Output COV_Increment | Present_Value ¹ Out_Of_Service Proportional_Constant Integral_Constant Derivative_Constant COV_Increment |
| File | <input type="checkbox"/> | | Archive |
| Positive Integer Value | <input checked="" type="checkbox"/> | Description COV_Increment ² | Present_Value ³ COV_Increment ² |
| Schedule | <input checked="" type="checkbox"/> | Weekly_Schedule | Weekly_Schedule Present_Value ¹ Effective_Period Schedule_Default List_Of_Object_Property_References Out_Of_Service Priority_Of_Writing |
| Bitstring Value | <input checked="" type="checkbox"/> | Description Bit_Text | Present_Value ³ |

Note: 1 - Only writable when **Out_Of_Service** is **TRUE**
 2 - Only exists if the object instance supports COV reporting.
 3 - Only writable for selected object instance.



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): 9600, 19200, 38400, 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: _____
- 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

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