



General Purpose Series IO Controller

BACnet Protocol Implementation Conformance Statement

Version 1.0.00 Jan 2019

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BACnet Protocol Implementation Conformance Statement (PICS)

Date: 18 January 2019

Vendor Name: Matrix iControl Sdn. Bhd.

Product Name: General Purpose Series IO Controller

Product Model Number: MGP1612B
MGP1612S
MGP1612B+
MGP1612S+
IO-30S-BM
IO-30P-BN

Applications Software Version: 2.3.0.27(MGP1612B)
2.3.0.27(MGP1612B+)
2.3.0.27(IO-30P-BN)
2.0.5.26(MGP1612S)
2.0.5.26(MGP1612S+)
2.0.5.26(IO-30S-BM)

Firmware Revision: 2.0.02

BACnet Protocol Revision: 14

Product Description:

The General Purpose Series IO Controllers are rugged, network centric, high performance multi-protocols Input/Output controllers to accommodate general and specific applications, featuring BACnet® RS485, IP and Ethernet protocols plus a built-in Web server for easy configuration. It comes with 8 universal inputs (voltage, current, resistance & temperature sensor input type selectable), 8 digital inputs, and 8 relay-isolated digital outputs and 4 analog outputs (voltage and current).

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

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Binary Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Description Device_Type Inactive_Text Active_Text	Object_Name Present_Value(*) Out_Of_Service Description Device_Type Polarity Inactive_Text Active_Text
Binary Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Description Device_Type Inactive_Text Active_Text Minimum_On_Time Minimum_Off_Time	Object_Name Present_Value Description Out_Of_Service Polarity Inactive_Text Active_Text Device_Type Minimum_On_Time Minimum_Off_Time Relinquish_Default
Binary Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Description Inactive_Text Active_Text	Present_Value
Multi-state Value	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	State_Text	Present_Value
Device	<input type="checkbox"/>	<input type="checkbox"/>	Description Location Local_Time Local_Date Max_Master Max_Info_Frames Active_COV_Subscriptions UTC_Offset Daylight_Saving_Status	Object_Identifier Object_Name Description Location Number_Of_APDU_Retries APDU_Timeout UTC_Offset Daylight_Saving_Status Local_Date Local_Time Max_Master Max_Info_Frames

Note: (*) - Only writable when **Out_Of_Service** is **TRUE**

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device



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- 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**
- 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