

EasyIO 30P Series Controller

BACnet Protocol Implementation Conformance Statement

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BACnet Protocol Implementation Conformance Statement (PICS)

Date: 05 September 2017

Vendor Name: Soft Device Sdn. Bhd.

Product Name: EasyIO30P Bacnet Controller

Product Model Number: IO-30P-BN

IO-30S-BM

Applications Software Version: 2.3.0.27(IO-30P-BN)

2.0.5.26(IO-30S-BM)

Firmware Revision: 2.0.02 BACnet Protocol Revision: 14

Product Description:

The EasyIO30P Series: 30 I/O 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, 8 relay-isolated digital outputs, 2 Pulse Width Modulation (PWM) outputs and 4 analog inputs (voltage or 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		
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-UTC-B	Device Management – UTCTimeSynchronization – B		
DM-RD-B	Device Management – ReinitializeDevice – B		
DM-OCD-B	Device Management – Object Creation and Deletion – B		



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Se	gmentation 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.

 $COV: Supports \ change \ of \ value \ (COV) \ reporting \\ \hspace{2.5cm} DC: Dynamically \ creatable \\$

DD : Dynamically deletable

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	DC/DD	Optional Properties Writable Properties	
Analog Input	\square		Description	Object_Name
			Device_Type	Present_Value(*)
			Reliability	Description
			COV_Increment	Device_Type
			_	Out_Of_Service
				COV_Increment
				Reliability(*)
Analog Output	$\overline{\mathbf{Q}}$		Description	Object Name
			Device_Type	Present_Value
			COV_Increment	Description
				Device_Type
				Out_Of_Service
				COV_Increment
				Relinquish_Default
Analog Value	$\overline{\mathbf{Q}}$	\square	Description	Present_Value
			COV_Increment	COV_Increment
Binary Input	$\overline{\mathbf{Q}}$		Description	Object_Name
			Device_Type	Present_Value(*)
			Inactive_Text	Out_Of_Service
		Active_Text	Description	
				Device_Type
				Polarity
				Inactive_Text
				Active_Text



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Binary Output	N		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		Ø	Description Inactive_Text Active_Text	Present_Value
Multi-state Value	Ø	Ø	State_Text	Present_Value
Device			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
☑ 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:



☐ ISO 10646 (UCS-2)

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Device Address Binding: Is static device binding supposlaves and certain other devices		•	ssary for two-way communication with MS/TP
☐ Annex H, BACnet Tunnel ☐ BACnet/IP Broadcast Man	ing Router over IP nagement Device (B)	BBMD)	ARCNET-Ethernet, Ethernet-MS/TP, etc. Devices? □ Yes □ No
Character Sets Supported: Indicating support for multip	le character sets does	s not impl	oly that they can all be supported simultaneously.
☑ ISO 10646 (UTF-8)	☐ IBM [™] /Microsoft [™]	™ DBCS	□ ISO 8859-1

☐ ISO 10646 (UCS-4) ☐ JIS X 0208