PBDP-1000 BACnet PICS

BACnet Protocol Implementation Conformance Statement (PICS)

Date: August 18, 2016
Vendor Name: ICC, Inc.
Product Name: PBDP-1000 Multiprotocol Profibus DP-V1 Gateway
Product Model Number: PBDP-1000
Applications Software Version: V5.200
Firmware Revision: V5.200
BACnet Protocol Revision: 12
Product Description:

The PBDP-1000 is a Profibus DP-V1 to RS-485 multiprotocol gateway. This product supports native BACnet, connecting directly to the MS/TP LAN using baud rates of 9600, 19200, 38400, 57600, 76800, and 115200. The device can be configured as a BACnet Client or as a BACnet Server.

BACnet Standard 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)

BACnet Interoperability Building Blocks Supported (Annex K):

☒ Data Sharing – ReadProperty-A (DS-RP-A)
☒ Data Sharing – ReadProperty-B (DS-RP-B)
☒ Data Sharing – ReadPropertyMultiple-B (DS-RPM-B)
☒ Data Sharing – WriteProperty-A (DS-WP-A)
☒ Data Sharing – WriteProperty-B (DS-WP-B)
☒ Data Sharing – WritePropertyMultiple-B (DS-WPM-B)
☒ Device Management – Dynamic Device Binding-A (DM-DDB-A)
☒ Device Management – Dynamic Device Binding-B (DM-DDB-B)
☒ Device Management – Dynamic Object Binding-B (DM-DOB-B)
☒ Device Management – DeviceCommunicationControl-B (DM-DCC-B)
☒ Device Management – ReinitializeDevice-B (DM-RD-B)

Segmentation Capability:

☐ Able to transmit segmented messages   Window Size _____
☐ Able to receive segmented messages   Window Size _____

Standard Object Types Supported:

Property	Object Type									
	Device	**Binary Input**	**Binary Output**	**Binary Value**	**Analog Input**	**Analog Output**	**Analog Value**	**Multi-state Input**	**Multi-state Output**	**Multi-state Value**
Object Identifier	R	R	R	R	R	R	R	R	R	R
Object Name	R	R	R	R	R	R	R	R	R	R
Object Type	R	R	R	R	R	R	R	R	R	R
System Status	R									
Vendor Name	R									
Vendor Identifier	R									
Model Name	R									
Firmware Revision	R									
App Software Revision	R									
Protocol Version	R									
Protocol Revision	R									
Services Supported	R									
Object Types Supported	R									
Object List	R									
Max APDU Length	R									
Segmentation Support	R									
APDU Timeout	W (10…65535)									
Number APDU Retries	W (0…10)									
Max Master	W (1…127)									
Max Info Frames	R									
Device Address Binding	R									
Database Revision	R									
Present Value		R	W	W	R	W	W	R	W	W
Status Flags		R	R	R	R	R	R	R	R	R
Event State		R	R	R	R	R	R	R	R	R
Reliability		R	R	R	R	R	R	R	R	R
Out-of-Service		R	R	R	R	R	R	R	R	R
Number of States								R	R	R
Units					R	R	R			
Priority Array			R	R		R	R		R	R
Relinquish Default			R	R		R	R		R	R
Polarity		R	R							
Inactive Text		R	R	R						
Active Text		R	R	R						

R – readable using BACnet services
W – readable and writable using BACnet services

Data Link Layer Options:

☐ BACnet IP, (Annex J)
☐ BACnet IP, (Annex J), Foreign Device
☐ ISO 8802-3, Ethernet (Clause 7)
☐ ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
☐ ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
☒ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 57600, 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: _____
☐ BACnet/ZigBee (ANNEX O)
☐ Other: _____

Device Address Binding:

Is static device binding supported? (This is currently for two-way communication with MS/TP slaves and certain other devices.)   ☒ Yes   ☐ No

Networking Options:

☐ Router, Clause 6 - List all routing configurations
☐ Annex H, BACnet Tunneling Router over IP
☐ BACnet/IP Broadcast Management Device (BBMD)
   Does the BBMD support registrations by Foreign Devices?   ☐ Yes ☐ No
   Does the BBMD support network address translation?   ☐ Yes ☐ No

Network Security Options:

☒ Non-secure Device - is capable of operating without BACnet Network Security
☐ Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
       ☐ Multiple Application-Specific Keys:
       ☐ Supports encryption (NS-ED BIBB)
       ☐ Key Server (NS-KS BIBB)

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

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

Refer to protocol-specific manuals for other supported protocols.