

BACnet Protocol Implementation Conformance Statement

Date: 14.07.2017

Vendor Name: Ingenieurgesellschaft N.Hartleb mbH

Product:

Name	Model Number	Application Software Version	Firmware Version	BACnet Protocol Revision
BACnet-Gateway PICO	BACnGTW-PICO	1.50	1.50bxxx	1.14
BACnet-Gateway PICO KNX/EIB	BACnGTW-PICO-KNX	1.50	1.50bxxx	1.14

Product Description:

The BACnet Gateway is a communication gateway; it integrates standard and proprietary protocols and provides access to BACnet as a server.

BACnet Standardized Device Profile:

BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported:

(grey marked BIBBs are generally supported in firmware; at Application Software on request)

Data Sharing BIBBs

Data Sharing ReadProperty-BDS-RP-B
Data Sharing ReadPropertyMultiple-BDS-RPM-B
Data Sharing WriteProperty-BDS-WP-B
Data Sharing COV-Unsolicited-BDS-COVU-B

Device Management BIBBs

Device Management Dynamic Device Binding-BDM-DDB-B
Device Management Dynamic Object Binding-BDM-DOB-B
Device Management DeviceCommunicationControl-BDM-DCC-B
Device Management TimeSynchronization-BDM-TS-B
Device Management ReinitializeDevice-B.....DM-RD-B
Device Management Backup and Restore-BDM-BR-B

Segmentation Capability:

Segmentation requests supported N/A
Segmentation responses supported N/A

Standard Object Types Supported:

Object Type	PICO-Type	Dynamically Createable	Dynamically Deleteable
Analog Input	Standard, KNX	No	No
Analog Output	Standard, KNX	No	No
Analog Value	Standard, KNX	No	No
Binary Input	Standard, KNX	No	No
Binary Output	Standard, KNX	No	No
Binary Value	Standard, KNX	No	No
Device	Standard, KNX	No	No
File	Standard, KNX	No	No
Multistate Input	Standard, KNX	No	No
Multistate Output	Standard, KNX	No	No
Multistate Value	Standard, KNX	No	No
Integer Value	Standard, KNX	No	No
Program	Standard	No	No
Bitstring Value	Standard	No	No

Analog Input	
Optional Properties Supported	Writeable Properties
Description Reliability COV_Increment Profile_Name Notification_Class (used as COV switch)	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Units COV_Increment Notification_Class (0:COV disable, 1:COV enable)

Analog Output	
Optional Properties Supported	Writeable Properties
Description Reliability COV_Increment Profile_Name Notification_Class (used as COV switch) Current_Command_Priority	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Units COV_Increment Notification_Class (0:COV disable, 1:COV enable) Relinquish_Default

Analog Value	
Optional Properties Supported	Writeable Properties
Description	Object_Name (max. 64 Character)

Reliability	Present_Value
COV_Increment	Description (max. 64 Character)
Profile_Name	Out_Of_Service
Current_Command_Priority	Units
Priority_Array	COV_Increment
Relinquish_Default	Notification_Class (0:COV disable, 1:COV enable)
Notification_Class (used as COV switch)	Relinquish_Default

Binary Input	
Optional Properties Supported	Writeable Properties
Description	Object_Name (max. 64 Character)
Reliability	Present_Value
Profile_Name	Description (max. 64 Character)
Active_Text	Out_Of_Service
Inactive_Text	Polarity
Elapsed_Active_Time	Active_Text (max. 8 Character)
Time_Of_Active_Time_Reset	Inactive_Text (max. 8 Character)
Change_of_State_Time	Elapsed_Active_Time
Change_of_State_Count	Change_of_State_Count
Time_Of_State_Count_Reset	Notification_Class (0:COV disable, 1:COV enable)
Notification_Class (used as COV switch)	

Binary Output	
Optional Properties Supported	Writeable Properties
Description	Object_Name (max. 64 Character)
Reliability	Present_Value
Profile_Name	Description (max. 64 Character)
Active_Text	Out_Of_Service
Inactive_Text	Polarity
Elapsed_Active_Time	Active_Text (max. 8 Character)
Time_Of_Active_Time_Reset	Inactive_Text (max. 8 Character)
Change_of_State_Time	Elapsed_Active_Time
Change_of_State_Count	Change_of_State_Count
Time_Of_State_Count_Reset	Notification_Class (0:COV disable, 1:COV enable)
Current_Command_Priority	Relinquish_Default
Notification_Class (used as COV switch)	

Binary Value	
Optional Properties Supported	Writeable Properties
Description	Object_Name (max. 64 Character)
Reliability	Present_Value
Profile_Name	Description (max. 64 Character)
Active_Text	Out_Of_Service
Inactive_Text	Active_Text (max. 8 Character)
Elapsed_Active_Time	Inactive_Text (max. 8 Character)
Time_Of_Active_Time_Reset	Elapsed_Active_Time
Priority_Array	Change_of_State_Count
Relinquish_Default	Notification_Class (0:COV disable, 1:COV enable)
Change_of_State_Time	Relinquish_Default
Change_of_State_Count	

Time_Of_State_Count_Reset Current_Command_Priority Notification_Class (used as COV switch)	
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Device	
Optional Properties Supported	Writeable Properties
Location (max. 64 Character) Description Local_Time Local_Date UTC_Offset (used as global COV mode) Configuration_Files Backup_Failure_Timeout Last_Restore_Time Max_Master Max_Info_Frames Time_of_Device_Restart Status_Flags Notification_Class (used as COV switch)	* Object_Name (max. 64 Character) * Object_Identifier Instance: (default 247000 + MacAddr DIP-Switch) Description (max. 64 Character) UTC_Offset (COV 0: Off, 1:LocalNet,:GlobalNet) Max_Master (1..127) Max_Info_Frames (1..255) Notification_Class (0:COV disable, 1:COV enable)

** writing these properties will additionally save RAM config to EEPROM
 (like DM-BR-B, StartBackup procedure)*

File	
Optional Properties Supported	Writeable Properties
Description Profile_Name	

Multistate Input	
Optional Properties Supported	Writeable Properties
Description Reliability Profile_Name State_Text (only States 1..8, max. 8 Chars each) Notification_Class (used as COV switch)	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Notification_Class (0:COV disable, 1:COV enable)

Multistate Output	
Optional Properties Supported	Writeable Properties
Description Reliability Profile_Name State_Text (only States 1..8, max. 8 Chars each) Notification_Class (used as COV switch) Priority_Array Relinquish_Default Current_Command_Priority	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Notification_Class (0:COV disable, 1:COV enable)

Multistate Value	
Optional Properties Supported	Writeable Properties
Description Reliability Profile_Name State_Text (only States 1..8, max. 8 Chars each) Priority_Array Relinquish_Default Notification_Class (used as COV switch) Current_Command_Priority	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Notification_Class (0:COV disable, 1:COV enable) Relinquish_Default

Program	
Optional Properties Supported	Writeable Properties
Description (pBasic REM statement @ 1.Row, max. 64 Character) Reliability Profile_Name Reason_For_Halt Description_Of_Halt Program_Location (pBasic Call, max. 64 Character) Notification_Class (used as COV switch)	Program_Change Notification_Class (0:COV disable, 1:COV enable)

Bitstring Value (maximum size 16bit)	
Optional Properties Supported	Writeable Properties
Description Reliability Profile_Name Bit_Text (1..16, max. 16 chars each) Priority_Array Relinquish_Default Notification_Class (used as COV switch) Current_Command_Priority	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Notification_Class (0:COV disable, 1:COV enable) Relinquish_Default

Integer Value	
Optional Properties Supported	Writeable Properties
Description Reliability Profile_Name Priority_Array Relinquish_Default Notification_Class (used as COV switch) Current_Command_Priority	Object_Name (max. 64 Character) Present_Value Description (max. 64 Character) Out_Of_Service Notification_Class (0:COV disable, 1:COV enable) Relinquish_Default

Data Link Layer Options:

MS/TP Master: 4800, 9600, 19200, 38400, 57600, 76800, 115200, 230400

Device Address Binding:

Static device address binding is not supported

Networking Options:

N/A

Character Sets Supported:

ANSI X3.4 / UTF8

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

- Modbus Master RTU RS232/RS485
- KNX/EIB TP
- other RS232/RS485 Protocols OEM
- CAN Bus Interface OEM
- SPI Interface OEM
- onchip integrated DIOs, AIOs OEM