

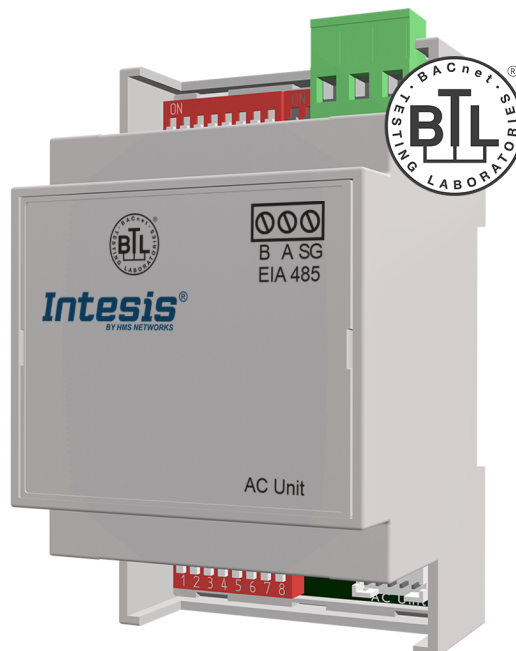
BACnet Server

BACNET MS/TP SERVER GATEWAY FOR PANASONIC PICS DOCUMENT

Supplementary Information

Version 1.0.0

Publication date 2023-11-08



Copyright © 2023 Intesis

Disclaimer

The information in this document is for informational purposes only. Please inform HMS Networks of any inaccuracies or omissions found in this document. HMS Networks disclaims any responsibility or liability for any errors that may appear in this document.

HMS Networks reserves the right to modify its products in line with its policy of continuous product development. The information in this document shall therefore not be construed as a commitment on the part of HMS Networks and is subject to change without notice. HMS Networks makes no commitment to update or keep current the information in this document.

The data, examples and illustrations found in this document are included for illustrative purposes and are only intended to help improve understanding of the functionality and handling of the product. In view of the wide range of possible applications of the product, and because of the many variables and requirements associated with any particular implementation, HMS Networks cannot assume responsibility or liability for actual use based on the data, examples or illustrations included in this document nor for any damages incurred during installation of the product. Those responsible for the use of the product must acquire sufficient knowledge in order to ensure that the product is used correctly in their specific application and that the application meets all performance and safety requirements including any applicable laws, regulations, codes and standards. Further, HMS Networks will under no circumstances assume liability or responsibility for any problems that may arise as a result from the use of undocumented features or functional side effects found outside the documented scope of the product. The effects caused by any direct or indirect use of such aspects of the product are undefined and may include e.g. compatibility issues and stability issues.

Table of Contents

1. BACnet Protocol Implementation Conformance Statement (PICS)	1
1.1. BACnet Standardized Device Profile (Annex L)	1
1.2. Segmentation Capability	1
1.3. Data Link Layer Options	1
1.4. Device Address Binding	1
1.5. Character Sets Supported	1
1.6. Gateway	1
2. BACnet Interoperability Building Blocks Supported (BIBBs)	2
2.1. Data Sharing BIBBs	2
2.2. Device Management BIBBs	2
3. Service Types	3
3.1. Supported Service Types	3
4. Objects	4
4.1. Supported Object Types	4

1. BACnet Protocol Implementation Conformance Statement (PICS)

Date: 2023-01-01

Vendor Name: Intesis (HMS Industrial Networks SLU)

Product Name: Intesis IN485PAN001I000 Interface Series 2E

Product Model Number: IN485PAN001I000

Application Software Version: 1.0.1.0

Firmware Revision: 15.0.0.0

BACnet Protocol Revision: 15

Product Description:

Provides a BACnet server B-ASC interface that brings BACnet connectivity to Panasonic Etherea/RAC air conditioning systems connected to the device. It provides BACnet MS/TP physical layers.

1.1. BACnet Standardized Device Profile (Annex L)

☒ BACnet Application Specific Controller (B-ASC)

Additional BACnet Interoperability Building Blocks Supported (Annex K): Reference of BIBBs List.

1.2. Segmentation Capability

Segmented request supported: ☐ No ☒ Yes Window Size 16

Segmented responses supported: ☐ No ☒ Yes Window Size 16

1.3. Data Link Layer Options

☒ MS/TP manager (Clause 9), baud rate(s): 9600, 19200, 38400, 57600, 76800, 115200

1.4. Device Address Binding

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

1.5. Character Sets Supported

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

☒ ISO 10646 (UTF-8)

1.6. Gateway

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

Panasonic Etherea/RAC air conditioning systems - BACnet MS/TP Gateway

2. BACnet Interoperability Building Blocks Supported (BIBBs)

2.1. Data Sharing BIBBs

BIBB Type		BACnet Service	Initiate	Execute
DS-RP-B	Data Sharing-ReadProperty-B	ReadProperty	☐	☒
DS-RPM-B	Data Sharing-ReadPropertyMultiple-B	ReadPropertyMultiple	☐	☒
DS-WP-B	Data Sharing-WriteProperty-B	WriteProperty	☐	☒
DS-WPM-B	Data Sharing-WritePropertyMultiple-B	WritePropertyMultiple	☐	☒
DS-COV-B	Data Sharing COV-B	SubscribeCOV	☐	☒
		ConfirmedCOVNotification	☒	☐
		UnconfirmedCOVNotification	☒	☐

2.2. Device Management BIBBs

BIBB Type		BACnet Service	Initiate	Execute
DM-DDB-B	Device Management - Dynamic Device Binding-B	Who-Is	☐	☒
		I-Am	☒	☐
DM-DOB-B	Device Management - Dynamic Object Binding-B	Who-Has	☐	☒
		I-Have	☒	☐
DM-DCC-B	Device Management - DeviceCommunicationControl-B	DeviceCommunicationControl	☐	☒
DM-RD-B	Device Management-ReinitializeDevice-B	ReinitializeDevice	☐	☒

3. Service Types

3.1. Supported Service Types

Service type	Service name	Supported
Alarm and Event Services	ConfirmedCOVNotification	Initiate
	SubscribeCOV	Execute
Object Access Services	ReadProperty	Execute
	ReadPropertyMultiple	Execute
	WriteProperty	Execute
	WritePropertyMultiple	Execute
Remote Device Management Services	DeviceCommunicationControl	Execute
	ReinitializeDevice	Execute
Unconfirmed Services	I-Am	Initiate
	I-Have	Initiate
	UnconfirmedCOVNotification	Initiate
	Who-Has	Execute
	Who-Is	Execute

4. Objects

4.1. Supported Object Types

Object type	ID	Management point
Analog-Input	0	SetPoint_status Room Temperature_status ErrorCode PowerConsumption OutdoorTemperature_status DIP_SW_S1_status DIP_SW_S2_status SerialNumber
Analog-Output	1	SetPoint_command RoomTemperature_command
Analog-Value	2	OnTimeCounter OccupiedCoolSetpoint OccupiedHeatSetpoint UnoccupiedCoolSetpoint UnoccupiedHeatSetpoint AccumulatedEnergy
Binary-Input	3	OnOff_status ErrorActive Powerful_status Quiet_status RoomFreezeProtection_status HumanActivity VirtualTempActive nanoeX_status nanoe-G_status
Binary-Value	5	OccupancyContinuousCheck UnoccupiedDeadBandAction LockRemoteControl
Device	8	IN485PAN001I000
Multistate-Input	13	Mode_status FanSpeed_status AirDirectionUD_status AirDirectionLR_status ErrorCodeM EcoMode_status
Multistate-Output	14	Mode_command FanSpeed_command AirDirectionUD_command AirDirectionLR_command EcoMode_command
Multistate-Value	19	Occupancy

Object type	ID
Analog-Input	0
Analog-Output	1
Analog-Value	2
Binary-Input	3
Binary-Output	4
Binary-Value	5
Device	8
Multistate-Input	13
Multistate-Output	14
Multistate-Value	19