ENGLISH

BACnet Server

BACNET MS/TP SERVER GATEWAY FOR DAIKIN PICS DOCUMENT

Supplementary Information
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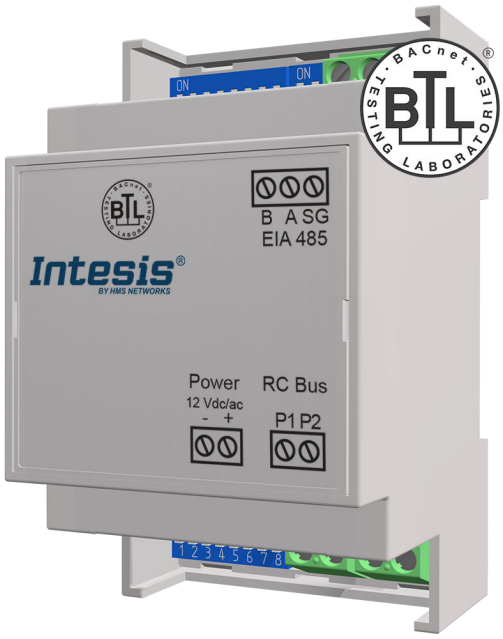

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1. BACnet Protocol Implementation Conformance Statement (PICS)

Date: 2023-01-01

Vendor Name: Intesis (HMS Industrial Networks SLU)

Product Name: Intesis IN485DAI001R000 Interface Series 2E

Product Model Number: IN485DAI001R000

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 Daikin Sky and VRV 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:

Daikin Sky and VRV 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 UserSetPoint_status RoomTemperature_status ErrorCode ErrorAddress OutdoorTemp_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 WaitInit_as_Master
Binary-Input	3	OnOff_status ErrorActive FilterSign ThermostatON VirtualTempActive
Binary-Output	4	OnOff_command FilterReset ErrorReset
Binary-Value	5	OccupacyContinuousCheck UnoccupiedDeadBandAction LockRemoteControl
Device	8	IN485DAI001R000
Multistate-Input	13	Mode_status FanSpeed_status AirDirectionUD_status ErrorCodeM
Multistate-Output	14	Mode_command FanSpeed_command AirDirectionUD_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