

BACnet Protocol Implementation Conformance Statement

Date: March 28, 2014
Vendor Name: Azbil Corporation
Vendor ID: 85
Product Name: Inflex BC
Product Model Number: WY5610W0010
BACnet Firmware Version: 1.0
BACnet Protocol Revision: Revision 12 (135-2010)

Product Description

Inflex BC is a multipurpose BACnet/IP controller designed to control building equipment, such as air handling unit (AHU). By sending the operation status to the B-OWS and by controlling the operation based on the commands sent from the B-OWS, the integrated control of the entire building can be executed. Inflex BC consists of a control unit, an I/O base unit and I/O modules. The number and types of the modules can be flexibly changed corresponding to the control or management to fit in various applications. Additionally, since the software to be installed can be freely edited, an optimum application for building equipment can be configured in terms of both the software and hardware.

BACnet Standardized Device Profile (Annex L)

- BACnet Operator Workstation (B-OWS)
- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Display (B-OD)
- 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)

BIBBs			Support
Data Sharing	DS-RP-A	ReadProperty-A	✓
	DS-RP-B	ReadProperty-B	✓
	DS-RPM-A	ReadPropertyMultipule-A	✓
	DS-RPM-B	ReadPropertyMultipule-B	✓
	DS-WP-A	WriteProperty-A	✓
	DS-WP-B	WriteProperty-B	✓
	DS-WPM-B	WritePropertyMultipule-B	✓
	DS-COV-A	COV-A	✓
	DS-COV-B	COV-B	✓
Alarm & Event	AE-N-I-B	Notification Internal-B	✓
	AE-ACK-B	ACK-B	✓
	AE-INFO-B	Information-B	✓
	AE-ESUM-B	Alarm-Summary-B	✓
	AE-ASUM-B	Enrollment-Summary-B	✓
Scheduling	SCHED-I-B	Scheduling-Internal-B	✓
	SCHED-E-B	Scheduling-External-B	✓
Trending	T-VMT-I-B	Viewing and Modifying Trends Internal-B	✓
	T-ATR-B	Automated Trend Retrieval-B	✓
Device & Network Management	DM-DDB-A	Dynamic Device Binding-A	✓
	DM-DDB-B	Dynamic Device Binding-B	✓
	DM-DOB-B	Dynamic Object Binding-B	✓
	DM-DCC-B	DeviceCommunicationControl-B	✓
	DM-TS-B	TimeSynchronization-B	✓
	DM-RD-B	ReinitializeDevice-B	✓
	DM-R-B	Restart-B	✓
	DM-BR-B	Backup and Restore-B	✓
	DM-LM-B	List Manipulation-B	✓
	DM-OCD-B	Object Creation and Deletion-B	✓

Segmentation Capability

- Able to transmit segmented messages Window Size 1
- Able to receive segmented messages Window Size 1

Standard Object Types Supported

■ Accumulator

Dynamically Creatable: No

Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Value_Change_Time Value_Before_Change Value_Set Pulse_Rate High_Limit Low_Limit Limit_Monitoring_Interval Limit_Enable Notification_Class Time_Delay Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value (conditional) Description Reliability (conditional) Out_Of_Service Value_Set High_Limit Low_Limit Limit_Monitoring_Interval Limit_Enable Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Analog Input

Dynamically Creatable: No

Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Resolution High_Limit Low_Limit Deadband Limit_Enable Notification_Class Time_Delay Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Description Out_Of_Service Present_Value (conditional) Reliability (conditional) High_Limit Low_Limit Deadband Limit_Enable Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Analog Output

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Max_Pres_Value Min_Pres_Value Resolution High_Limit Low_Limit Deadband Limit_Enable Notification_Class Time_Delay Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value Reliability (conditional) Description Out_Of_Service Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Analog Value

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability High_Limit Low_Limit Deadband Limit_Enable Notification_Class Time_Delay Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value Reliability (conditional) Description Out_Of_Service Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Binary Input

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Change_Of_State_Time Change_Of_State_Count Time_Of_State_Count_Reset Erapsed_Active_Time Time_Of_Active_Time_Reset Notification_Class Time_Delay Alarm_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object Name Description Out_Of_Service Present_Value (conditional) Reliability (conditional) Change_Of_State_Count Erapsed_Active_Time Notification_Class Alarm_Value Event_Enable Notify_Type

Proprietary Properties: n/a

■ Binary Output

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Change_Of_State_Time Change_Of_State_Count Time_Of_State_Count_Reset Erapsed_Active_Time Time_Of_Active_Time_Reset Notification_Class Feedback_Value Time_Delay Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Description Out_Of_Service Present_Value Reliability (conditional) Change_Of_State_Count Erapsed_Active_Time Time_Delay Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Binary Value

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability Change_Of_State_Time Change_Of_State_Count Time_Of_State_Count_Reset Erapsed_Active_Time Time_Of_Active_Time_Reset Notification_Class Time_Delay Alarm_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Description Out_Of_Service Present_Value Reliability (conditional) Change_Of_State_Count Erapsed_Active_Time Alarm_Value Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Calendar

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description	Object_Name Description Date_List

Proprietary Properties: n/a

■ Device

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Location Description Max_Segments_Accepted Local_Time Local_Date APDU_Segment_Timeout Configuration_Files Last_Restore_Time Backup_Failure_Timeout Backup_Preparation_Time Restore_Preparation_Time Restore_Completion_Time Active_COV_Subscriptions Time_Of_Device_Restart Last_Restart_Reason Restart_Notification_Recipients	Object_Name Location Description Backup_Failure_Timeout Restart_Notification_Recipients

Proprietary Properties: n/a

■ Multi-state Input

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability State_Text Notification_Class Time_Delay Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value (conditional) Reliability (conditional) Description Out_Of_Service Notification_Class Alarm_Values Event_Enable Notify_Type

Proprietary Properties: n/a

■ Multi-state Output

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability State_Text Time_Delay Notification_Class Feedback_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value Reliability (conditional) Description Out_Of_Service Time_Delay Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Multi-state Value

Dynamically Creatable: No
Dynamically Deletable: No

Optional Properties Supported	Writable Properties
Description Reliability State_Text Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event_Time_Stamp	Object_Name Present_Value Reliability (conditional) Description Out_Of_Service Alarm_Values Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

■ Notification Class

Dynamically Creatable: Yes
Dynamically Deletable: Yes

Optional Properties Supported	Writable Properties
Description	Object Name Description Priority Acked_Required Recipient_List

Proprietary Properties: n/a

■ Schedule

Dynamically Creatable: Yes
Dynamically Deletable: Yes

Optional Properties Supported	Writable Properties
Description Weekly_Schedule Exception_Schedule	Object_Name Present_Value (conditional) Description Effective_Period Weekly_Schedule Exception_Schedule Schedule_Default List_Of_Object_Property_References Priority_For_Writing Out_Of_Service

Proprietary Properties: n/a

■ Trend Log

Dynamically Creatable: Yes
Dynamically Deletable: Yes

Optional Properties Supported	Writable Properties
Description Start_Tome Stop_Time Log_DeviceObjectProperty Log_Inerval Notification_Threshold Records_Since_Notification Last_Notify_Record Notification_Class Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Object_Name Description Enable Start_Time Stop_Time Log_DeviceObjectProperty Log_Inerval Stop_When_Full Buffer_Size Record_Count Notification_Threshold Notification_Class Event_Enable Notify_Type

Proprietary Properties: n/a

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, EIA-485 ARCNET (Clause 8), baud rate(s) _____

- MS/TP master (Clause 9), baud rate(s): _____
- 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 necessary for two-way communication with MS/TP slaves and certain other devices.) Yes No

Networking Options:

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.:
- 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

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 non-BACnet equipment/network(s) that the gateway supports:

Azbil dedicated serial communication.

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)

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