

# Distech Controls Building Controller PICS

## BACnet Protocol Implementation Conformance Statement

<b>Date</b>	July 25, 2017
<b>Vendor Name</b>	Distech Controls Inc.
<b>Product Name</b>	ECY-303 Series
<b>Product Model Number</b>	ECY-303
	ECY-303-M3
<b>Application Software Version</b>	1.8.17191.284
<b>Firmware Revision</b>	1.14.17191.1
<b>BACnet Protocol Revision</b>	Version 1, Revision 14

### Product Description:

The ECLYPSE Connected Equipment Controller is designed to satisfy the needs of a wide range of HVAC applications such as small and medium terminal applications. It integrates a control, automation and connectivity server, power supply, and I/O in one convenient package. It supports BACnet/IP communications and is a listed BACnet Building Controller (B-BC). In addition, the ECY-303-M3 model supports Modbus to connect to meters, Variable Frequency Drives, etc.

This programmable controller comes with an embedded web server that enables web-based application configuration and a visualization interface. It also features embedded scheduling, alarming, and logging. Control logic and graphic user interface can be customized as required for the application.

### BACnet Standardized Device Profile (Annex L):

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

**Additional BACnet Interoperability Building Blocks Supported (Annex K):**

**Required for B-BC Profile:**

<b>Application Service</b>	<b>BIBBS</b>
Data Sharing - ReadProperty - A	DS-RP-A
Data Sharing - ReadProperty - B	DS-RP-B
Data Sharing - ReadPropertyMultiple - A	DS-RPM-A
Data Sharing - ReadPropertyMultiple - B	DS-RPM-B
Data Sharing - WriteProperty - A	DC-WP-A
Data Sharing - WriteProperty - B	DC-WP-B
Data Sharing - WritePropertyMultiple - A	DS-WPM-A
Data Sharing - WritePropertyMultiple - B	DS-WPM-B
Trending - Automated Trend Retrieval - B	T-ATR-B
Trending - Viewing and Modifying Trends Internal - B	T-VMT-I-B
Alarm and Event - Notification - A	AE-N-A
Alarm and Event - Notification Internal - B	AE-N-I-B
Alarm and Event - Notification External - B	AE-N-E-B
Alarm and Event - Alarm and Event-ACK - B	AE-ACK-B
Alarm and Event - Information - B	AE-INFO-B
Alarm and Event-Enrollment Summary-B	AE-ESUM-B
Scheduling - External - B	SCHED-E-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-TimeSynchronization-B	DM-TS-B
Device Management - UTCTimeSynchronization - B	DM-UTC-B
Device Management - ReinitializeDevice - B	DM-RD-B
Device Management - Backup and Restore - B	DM-BR-B

**Not Required for B-BC Profile:**

<b>Application Service</b>	<b>BIBBS</b>
Scheduling - Internal - B	SCHED-I-B
Alarm and Event - Alarm Summary - B	AE-ASUM-B
Data Sharing - COV - A	DS-COV-A
Data Sharing - COV - B	DS-COV-B
Data Sharing - COV - Property - B	DS-COVP-B
Data Sharing - COV - Unsubscribed - A	DS-COVU-A
Data Sharing - COV - Unsubscribed - B	DS-COVU-B
Trending - Viewing and Modifying Trends External - B	T-VMT-E-B
Device Management - Automatic Time Synchronization - Initiate	DM-ATS-A
Device Management - Manual Time Synchronization - Initiate	DM-MTS-A
Device Management - List Manipulation - B	DM-LM-B
Device Management - Object Creation and Deletion - B	DM-OCD-B
Remote Device Management - Confirmed Private Transfer	N/A
Remote Device Management - Unconfirmed Private Transfer	N/A

## Standard Object Types Supported

The following is a list of the standard object types as define by the standard. The objects checked are currently supported by this product. See the section in this document for the supported object type for details.

- Accumulator
- Analog Input
- Analog Output
- Analog Value
- Averaging
- Binary Input
- Binary Output
- Binary Value
- Calendar
- Command
- Device
- Event Enrollment
- File
- Group
- Life Safety Point
- Life Safety Zone
- Loop
- Multistate Input
- Multistate Output
- Multistate Value
- Notification Class
- Program
- Pulse Converter
- Schedule
- Trend Log

## BACnet Analog Input (AI) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			R	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Device_Type		<input checked="" type="checkbox"/>		R	31	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Update_Interval		<input checked="" type="checkbox"/>		R	118	Update_Interval
Units	<input checked="" type="checkbox"/>			R	117	
Min_Pres_Value		<input checked="" type="checkbox"/>		R	69	
Max_Pres_Value		<input checked="" type="checkbox"/>		R	65	
Resolution		<input checked="" type="checkbox"/>		R	106	
COV_Increment		<input checked="" type="checkbox"/>		RW	22	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
High_Limit		<input checked="" type="checkbox"/>		RW	45	
Low_Limit		<input checked="" type="checkbox"/>		RW	59	
Deadband		<input checked="" type="checkbox"/>		RW	25	
Limit_Enable		<input checked="" type="checkbox"/>		RW	52	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Analog Output (AO) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			RW	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Device_Type		<input checked="" type="checkbox"/>		R	31	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Units	<input checked="" type="checkbox"/>			R	117	
Min_Present_Value		<input checked="" type="checkbox"/>		R	69	
Max_Present_Value		<input checked="" type="checkbox"/>		R	65	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Resolution		<input checked="" type="checkbox"/>		R	106	
Priority_Array	<input checked="" type="checkbox"/>			R	87	
Relinquish_Default	<input checked="" type="checkbox"/>			RW	104	
COV_Increment		<input checked="" type="checkbox"/>		RW	22	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
High_Limit		<input checked="" type="checkbox"/>		RW	45	
Low_Limit		<input checked="" type="checkbox"/>		RW	59	
Deadband		<input checked="" type="checkbox"/>		RW	25	
Limit_Enable		<input checked="" type="checkbox"/>		RW	52	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Analog Value (AV) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			RW	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Units	<input checked="" type="checkbox"/>			R	117	
Priority_Array		<input checked="" type="checkbox"/>		R	87	
Relinquish_Default		<input checked="" type="checkbox"/>		RW	104	
Min_Present_Value		<input checked="" type="checkbox"/>		RW	69	
Max_Present_Value		<input checked="" type="checkbox"/>		RW	65	
COV_Increment		<input checked="" type="checkbox"/>		RW	22	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
High_Limit		<input checked="" type="checkbox"/>		RW	45	
Low_Limit		<input checked="" type="checkbox"/>		RW	59	
Deadband		<input checked="" type="checkbox"/>		RW	25	
Limit_Enable		<input checked="" type="checkbox"/>		RW	52	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Binary Input (BI) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			R	85	
Description		<input checked="" type="checkbox"/>		RW	28	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Device_Type		<input checked="" type="checkbox"/>		R	31	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Polarity	<input checked="" type="checkbox"/>			R	84	
Inactive_Text		<input checked="" type="checkbox"/>		R	46	
Active_Text		<input checked="" type="checkbox"/>		R	4	
Change_Of_State_Time		<input checked="" type="checkbox"/>		R	16	
Change_Of_State_Count		<input checked="" type="checkbox"/>		RW	15	
Time_Of_State_Count_Reset		<input checked="" type="checkbox"/>		RW	115	
Elapsed_Active_Time		<input checked="" type="checkbox"/>		RW	33	
Time_Of_Active_Time_Reset		<input checked="" type="checkbox"/>		RW	114	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Alarm_Value		<input checked="" type="checkbox"/>		RW	6	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Binary Output (BO) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			RW	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Device_Type		<input checked="" type="checkbox"/>		R	31	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Polarity	<input checked="" type="checkbox"/>			R	84	
Inactive_Text		<input checked="" type="checkbox"/>		R	46	
Active_Text		<input checked="" type="checkbox"/>		R	4	
Change_Of_State_Time		<input checked="" type="checkbox"/>		R	16	
Change_Of_State_Count		<input checked="" type="checkbox"/>		RW	15	
Time_Of_State_Count_Reset		<input checked="" type="checkbox"/>		RW	115	
Elapsed_Active_Time		<input checked="" type="checkbox"/>		RW	33	
Time_Of_Active_Time_Reset		<input checked="" type="checkbox"/>		RW	114	
Minimum_Off_Time		<input checked="" type="checkbox"/>		RW	66	
Minimum_On_Time		<input checked="" type="checkbox"/>		RW	67	
Priority_Array		<input checked="" type="checkbox"/>		R	87	
Relinquish_Default		<input checked="" type="checkbox"/>		RW	104	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Feedback_Value		<input checked="" type="checkbox"/>		R	40	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List		<input checked="" type="checkbox"/>		R	371	



## BACnet Binary Value (BV) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			RW	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Inactive_Text		<input checked="" type="checkbox"/>		R	46	
Active_Text		<input checked="" type="checkbox"/>		R	4	
Change_Of_State_Time		<input checked="" type="checkbox"/>		R	16	
Change_Of_State_Count		<input checked="" type="checkbox"/>		RW	15	
Time_Of_State_Count_Reset		<input checked="" type="checkbox"/>		RW	115	
Elapsed_Active_Time		<input checked="" type="checkbox"/>		RW	33	
Time_Of_Active_Time_Reset		<input checked="" type="checkbox"/>		RW	114	
Minimum_Off_Time		<input checked="" type="checkbox"/>		RW	66	
Minimum_On_Time		<input checked="" type="checkbox"/>		RW	67	
Priority_Array		<input checked="" type="checkbox"/>		R	87	
Relinquish_Default		<input checked="" type="checkbox"/>		RW	104	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Alarm_Value		<input checked="" type="checkbox"/>		RW	6	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List		<input checked="" type="checkbox"/>		R	371	

### BACnet Calendar Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			R	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Date_List	<input checked="" type="checkbox"/>			RW	23	
Time_To_Next_State			<input checked="" type="checkbox"/>	R	1001	
Next_State			<input checked="" type="checkbox"/>	R	1002	
Property_List	<input checked="" type="checkbox"/>			R	371	

### Device Object

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			RW	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
System_Status	<input checked="" type="checkbox"/>			R	112	
Vendor_Name	<input checked="" type="checkbox"/>			R	121	
Vendor_Identifier	<input checked="" type="checkbox"/>			R	120	
Model_Name	<input checked="" type="checkbox"/>			R	70	
Firmware_Revision	<input checked="" type="checkbox"/>			R	44	
Application_Software_Version	<input checked="" type="checkbox"/>			R	12	
Location		<input checked="" type="checkbox"/>		RW	58	
Description		<input checked="" type="checkbox"/>		RW	28	
Protocol_Version	<input checked="" type="checkbox"/>			R	98	
Protocol_Revision	<input checked="" type="checkbox"/>			R	139	
Protocol_Services_Supported	<input checked="" type="checkbox"/>			R	97	
Protocol_Object_Types_Supported	<input checked="" type="checkbox"/>			R	96	
Object_List	<input checked="" type="checkbox"/>			R	76	
Max_APDU_Length_Accepted	<input checked="" type="checkbox"/>			R	62	
Segmentation_Supported	<input checked="" type="checkbox"/>			R	107	
Max_Segments_Accepted	<input checked="" type="checkbox"/>			R	167	
Local_Date		<input checked="" type="checkbox"/>		R	56	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Local_Time		<input checked="" type="checkbox"/>		R	57	
UTC_Offset		<input checked="" type="checkbox"/>		R	119	
Daylight_Savings_Status		<input checked="" type="checkbox"/>		R	24	
Apdu_Segment_Timeout		<input checked="" type="checkbox"/>		RW	10	
APDU_Timeout	<input checked="" type="checkbox"/>			RW	10	
Number_Of_APDU_Retries	<input checked="" type="checkbox"/>			RW	73	
Time_Synchronization_Recipients		<input checked="" type="checkbox"/>		RW	116	
Device_Address_Binding	<input checked="" type="checkbox"/>			R	30	
Database_Revision	<input checked="" type="checkbox"/>			R	155	
Configuration_Files		<input checked="" type="checkbox"/>		R	154	
Last_Restore_Time		<input checked="" type="checkbox"/>		R	157	
Backup_Failure_Timeout		<input checked="" type="checkbox"/>		RW	153	
Backup_Preparation_Time		<input checked="" type="checkbox"/>		RW	339	
Restore_Preparation_Time		<input checked="" type="checkbox"/>		RW	341	
Restore_Completion_Time		<input checked="" type="checkbox"/>		RW	340	
Backup_And_Restore_State		<input checked="" type="checkbox"/>		R	155	
Active_COV_Subscriptions		<input checked="" type="checkbox"/>		R	152	
Last_Restart_Reason		<input checked="" type="checkbox"/>		R	196	
Time_Of_Device_Restart		<input checked="" type="checkbox"/>		R	203	
Restart_Notification_Recipients		<input checked="" type="checkbox"/>		RW	202	
Utc_Time_Synchronization_Recipients		<input checked="" type="checkbox"/>		RW	206	
Max_Master		<input checked="" type="checkbox"/>		RW	64	
Max_Info_Frames		<input checked="" type="checkbox"/>		RW	63	
Time_Synchronization_Interval		<input checked="" type="checkbox"/>		RW	204	
Align_Intervals		<input checked="" type="checkbox"/>		RW	193	
Interval_Offset		<input checked="" type="checkbox"/>		RW	195	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### Event Enrollment Object

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Event_Type	<input checked="" type="checkbox"/>			R	37	
Notify_Type	<input checked="" type="checkbox"/>			RW	72	
Event_Parameters	<input checked="" type="checkbox"/>			RW	83	
Object_Property_Reference	<input checked="" type="checkbox"/>			RW	78	
Event_State	<input checked="" type="checkbox"/>			R	36	
Event_Enable	<input checked="" type="checkbox"/>			RW	35	
Acked_Transitions	<input checked="" type="checkbox"/>			R	0	
Notification_Class	<input checked="" type="checkbox"/>			RW	17	
Event_Time_Stamps	<input checked="" type="checkbox"/>			R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable	<input checked="" type="checkbox"/>			RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Reliability	<input checked="" type="checkbox"/>			R	103	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet File Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			R	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	
File_Type	<input checked="" type="checkbox"/>			R	43	
File_Size	<input checked="" type="checkbox"/>			R	42	
Modification_Date	<input checked="" type="checkbox"/>			R	71	
Archive	<input checked="" type="checkbox"/>			RW	13	
Read_Only	<input checked="" type="checkbox"/>			R	99	
File_Access_Method	<input checked="" type="checkbox"/>			R	41	
Property_List	<input checked="" type="checkbox"/>			R	371	

## BACnet Loop Object Type

Dynamically Creatable

Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			R	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Update_Interval		<input checked="" type="checkbox"/>		R	118	
Output_Units	<input checked="" type="checkbox"/>			R	82	
Manipulated_Variable_Reference	<input checked="" type="checkbox"/>			R	60	
Controlled_Variable_Reference	<input checked="" type="checkbox"/>			R	19	
Controlled_Variable_Value	<input checked="" type="checkbox"/>			R	21	
Controlled_Variable_Units	<input checked="" type="checkbox"/>			R	20	
Setpoint_Reference	<input checked="" type="checkbox"/>			R	109	
Setpoint	<input checked="" type="checkbox"/>			R	108	
Action	<input checked="" type="checkbox"/>			RW	2	
Proportional_Constant		<input checked="" type="checkbox"/>		RW	93	
Proportional_Constant_Units		<input checked="" type="checkbox"/>		R	94	
Integral_Constant		<input checked="" type="checkbox"/>		RW	49	
Integral_Constant_Units		<input checked="" type="checkbox"/>		R	50	
Derivative_Constant		<input checked="" type="checkbox"/>		RW	26	
Derivative_Constant_Units		<input checked="" type="checkbox"/>		R	27	
Bias		<input checked="" type="checkbox"/>		RW	14	
Maximum_Output		<input checked="" type="checkbox"/>		RW	61	
Minimum_Output		<input checked="" type="checkbox"/>		RW	68	
Priority_For_Writing	<input checked="" type="checkbox"/>			R	88	
LoopDeadband			<input checked="" type="checkbox"/>	RW	1011	
Saturation_Time			<input checked="" type="checkbox"/>	RW	1003	
COV_Increment		<input checked="" type="checkbox"/>		RW	22	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Ramp_Time			<input checked="" type="checkbox"/>	RW	1005	
Saturation_Time_Low_Limit_Enable			<input checked="" type="checkbox"/>	RW	1006	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Saturation_Time_High_Limit_Enable			<input checked="" type="checkbox"/>	RW	1007	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Error_Limit		<input checked="" type="checkbox"/>		RW	34	
Deadband		<input checked="" type="checkbox"/>		RW	25	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Multi-state Input (MSI) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			R	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Device_Type		<input checked="" type="checkbox"/>		R	31	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Number_of_States	<input checked="" type="checkbox"/>			R	74	
State_Text		<input checked="" type="checkbox"/>		R	110	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Alarm_Values		<input checked="" type="checkbox"/>		RW	7	
Fault_Values		<input checked="" type="checkbox"/>		RW	39	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### BACnet Multi-state Value (MSV) Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Present_Value	<input checked="" type="checkbox"/>			RW	85	
Description		<input checked="" type="checkbox"/>		RW	28	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Event_State	<input checked="" type="checkbox"/>			R	36	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Number_of_States	<input checked="" type="checkbox"/>			R	74	
State_Text		<input checked="" type="checkbox"/>		R	110	
Priority_Array		<input checked="" type="checkbox"/>		R	87	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Relinquish_Default		<input checked="" type="checkbox"/>		RW	104	
COV_Period			<input checked="" type="checkbox"/>	RW	1004	
COV_Min_Send_Time			<input checked="" type="checkbox"/>	RW	1000	
Time_Delay		<input checked="" type="checkbox"/>		RW	113	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Alarm_Values		<input checked="" type="checkbox"/>		RW	7	
Fault_Values		<input checked="" type="checkbox"/>		RW	39	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	72	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Time_Delay_Normal		<input checked="" type="checkbox"/>		RW	356	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List		<input checked="" type="checkbox"/>		R	371	

### BACnet Program Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	
Program_State	<input checked="" type="checkbox"/>			R	92	
Program_Change	<input checked="" type="checkbox"/>			RW	90	
Description_Of_Halt		<input checked="" type="checkbox"/>		R	29	
Reason_For_Halt		<input checked="" type="checkbox"/>		R	100	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	



Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Property_List	<input checked="" type="checkbox"/>			R	371	

### BACnet Notification Class Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	
Notification_Class	<input checked="" type="checkbox"/>			R	17	
Priority	<input checked="" type="checkbox"/>			RW	86	
Ack_Required	<input checked="" type="checkbox"/>			RW	1	
Recipient_List	<input checked="" type="checkbox"/>			RW	102	
Property_List	<input checked="" type="checkbox"/>			R	371	

### BACnet Schedule Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	
Present_Value	<input checked="" type="checkbox"/>			R	92	
Effective_Period	<input checked="" type="checkbox"/>			RW	32	
Weekly_Schedule		<input checked="" type="checkbox"/>		RW	123	
Exception_Schedule		<input checked="" type="checkbox"/>		RW	38	
Schedule_Default	<input checked="" type="checkbox"/>			RW	174	
List_Of_Object_Property_References	<input checked="" type="checkbox"/>			RW	54	
Priority_For_Writing	<input checked="" type="checkbox"/>			W	88	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Reliability		<input checked="" type="checkbox"/>		R	103	
Out_Of_Service	<input checked="" type="checkbox"/>			RW	81	
Time_To_Next_State			<input checked="" type="checkbox"/>	R	1001	
Next_State			<input checked="" type="checkbox"/>	R	1002	
Property_List	<input checked="" type="checkbox"/>			R	371	

### BACnet Trend Log Object Type

- Dynamically Creatable
- Dynamically Deletable

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Object_Identifier	<input checked="" type="checkbox"/>			R	75	
Object_Name	<input checked="" type="checkbox"/>			RW	77	
Object_Type	<input checked="" type="checkbox"/>			R	79	
Description		<input checked="" type="checkbox"/>		RW	28	
Enable	<input checked="" type="checkbox"/>			RW	133	
Start_Time		<input checked="" type="checkbox"/>		RW	142	
Stop_Time		<input checked="" type="checkbox"/>		RW	143	
Log_Device_Object_Property		<input checked="" type="checkbox"/>		RW	132	
Log_Interval		<input checked="" type="checkbox"/>		RW	134	
Cov_Resubscription_Interval		<input checked="" type="checkbox"/>		RW	128	
Client_Cov_Increment		<input checked="" type="checkbox"/>		RW	127	
Stop_When_Full	<input checked="" type="checkbox"/>			RW	144	

Property Name	Mandatory	Optional	Proprietary	RW	ID	Range
Buffer_Size	<input checked="" type="checkbox"/>			RW	126	
Log_Buffer	<input checked="" type="checkbox"/>			R	131	
Record_Count	<input checked="" type="checkbox"/>			RW	141	
Total_Record_Count	<input checked="" type="checkbox"/>			R	145	
Logging_Type	<input checked="" type="checkbox"/>			RW	197	
Align_Intervals		<input checked="" type="checkbox"/>		RW	193	
Interval_Offset		<input checked="" type="checkbox"/>		RW	195	
Trigger		<input checked="" type="checkbox"/>		RW	205	
Status_Flags	<input checked="" type="checkbox"/>			R	111	
Reliability		<input checked="" type="checkbox"/>		R	103	
Notification_Threshold		<input checked="" type="checkbox"/>		RW	137	
Records_Since_Notification		<input checked="" type="checkbox"/>		R	140	
Last_Notify_Record		<input checked="" type="checkbox"/>		R	173	
Event_State	<input checked="" type="checkbox"/>			R	36	
Notification_Class		<input checked="" type="checkbox"/>		RW	17	
Event_Enable		<input checked="" type="checkbox"/>		RW	35	
Acked_Transitions		<input checked="" type="checkbox"/>		R	0	
Notify_Type		<input checked="" type="checkbox"/>		RW	208	
Event_Time_Stamps		<input checked="" type="checkbox"/>		R	130	
Event_Message_Texts		<input checked="" type="checkbox"/>		R	351	
Event_Message_Texts_Config		<input checked="" type="checkbox"/>		RW	352	
Event_Detection_Enable		<input checked="" type="checkbox"/>		RW	353	
Event_Algorithm_Inhibit		<input checked="" type="checkbox"/>		RW	354	
Event_Algorithm_Inhibit_Ref		<input checked="" type="checkbox"/>		RW	355	
Property_List	<input checked="" type="checkbox"/>			R	371	

#### Segmentation Capability:

- Segmented Request supported Window size: 255
- Segmented Response supported Window size: 255

#### Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) \_\_\_\_\_
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 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: \_\_\_\_\_
- 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 - Routing configurations: Ethernet-IP, Ethernet-MS/TP, IP-MS/TP
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)  
Does the BBMD support registrations by Foreign Devices?  
 Yes  No

**Character Sets Supported:**

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

- |  |   |                                     |
|--|---|-------------------------------------|
| <input checked="" type="checkbox"/> UTF-8  | <input type="checkbox"/> IBM™/Microsoft™ DBCS | <input type="checkbox"/> ISO 8859-1 |
| <input type="checkbox"/> ISO 10646 (UCS-2) | <input type="checkbox"/> ISO 10646 (UCS-4)    | <input type="checkbox"/> JIS C 6226 |

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

Not applicable