EAGLE Controller	PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)	CENTRA LINE by Honeywell

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Date: 08-Mar-2018
Vendor Name: Honeywell International Inc.
Product Name: EAGLE
Product Model Numbers:
CLEA2000B01, CLEA2000B21, CLEA2000B31
CLEA2014B01, CLEA2014B21, CLEA2014B31
CLEA2014B02, CLEA2014B22, CLEA2014B32
CLEA2026B01, CLEA2026B21, CLEA2026B31

Applications Software Version: Depends on the application built with CARE 10
Firmware Revision: 12-02-04 (download package 4-02-01)
BACnet Protocol Revision: 1.12 (ASHRAE 135-2010)

Product Description
The "EAGLE" controller is a general purpose, freely programmable building automation controller. It uses BACnet/IP and BACnet/MSTP communication with other controllers and with operator workstations.

BACnet Standardized Device Profile (Annex L)
☐ BACnet Operator Workstation (B-OWS)
☑ 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)

Data Sharing

DS-RP-A	Read Property-A
DS-RP-B	Read Property-B
DS-RPM-A	Read Property Multiple-A
DS-RPM-B	Read Property Multiple-B
DS-WP-A	Write Property-A
DS-WP-B	Write Property-B
DS-WPM-B	Write Property Multiple-B
DS-COV-A	Change of Value-A
DS-COV-B	Change of Value-B
DS-COVP-B	Change of Value of Properties-B (supported only for following properties: Program_State, Record_Count, Records_Since_Notify, Limit_Enable, Out_Of_Service, Event_State, Reliability, High_Limit Low_Limit)

Alarm and Event Management

AE-N-I-B	Alarm & Event Notification Internal-B
AE-ACK-B	Alarm & Event Acknowledgement-B
AE-INFO-B	Alarm & Event Information-B
AE-ESUM-B	Alarm & Event-Enrollment-Summary-B
AE-ASUM-B	Alarm Summary (for compatibility with older workstations)-B

Scheduling

SCHED-I-B	Scheduling Internal-B
SCHED-E-B	Scheduling External-B

Trending

T-VMT-I-B	Viewing & Modifying Trend Internal-B
T-ATR-B	Automated Trend Retrieval-B

Device Management

DM-DDB-A	Dynamic Device Binding-A
DM-DDB-B	Dynamic Device Binding-B
DM-DOB-A	Dynamic Object Binding-A
DM-DOB-B	Dynamic Object Binding-B
DM-DCC-B	Device Communication Control-B
DM-PT-A	Private Transfer-A
DM-PT-B	Private Transfer-B
DM-TS-A	Time Synchronization-A
DM-TS-B	Time Synchronization-B
DM-UTC-B	Universal Time Synchronization-B
DM-RD-B	Reinitialize Device-B
DM-BR-B	Backup/Restore-B
DM-LM-B	List Manipulation-B
DM-OCD-B	Object Create & Delete-B
DM-R-B	Restart-Notification B
NM-CE-A	Connection Establishment-A
NM-RC-B	Router Configuration-B

Standard Object Types Supported

Object Type	Dynamically creatable	Dynamically deletable
Analog Input		
Analog Output		
Analog Value		
Binary Input		
Binary Output		
Binary Value		
Calendar	Yes	Yes
Device		
Event Enrolment		
File		
Loop		
Multistate Input		
Multistate Output		
Multistate Value		
Notification Class		
Program		
Pulse Converter		
Schedule	Yes	Yes
Trendlog	Yes	Yes

General Limits

- Object_Name size = 64 characters
- Description size = 132 characters
- Password size for Device Communication Control = 20 characters
  (BACnet Password = User Name + ':' + Password)

Analog Input

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	0
Present_Value	R [1]	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	Possible unreliable conditions are: NO_SENSOR, OPEN_LOOP (for internal temperature sensors) OPEN_LOOP (for 2.110V inp.) UNRELIABLE_OTHER (for external IOs)
Out_Of_Service	R	W	
Update_Interval	O		
Units	R	R	
Min _Pres_Value	O	W	
Max_Pres_Value	O	W	
Resolution	O	R	
COV_Increment	O [2]	W	
Time_Delay	O [3]	W	
Time_Delay_Normal	O		
Notification_Class	O [3]	W	
High_Limit	O [3]	W	
Low_Limit	O [3]	W	
Deadband	O [3]	W	
Limit_Enable	O [3]	W	
Event_Enable	O [3]	W	
Acked_Transitions	O [3]	R	
Notify_Type	O [3]	W	
Event_Time_Stamps	O [3]	R	
Profile_Name	O	R	17-XLWEB2-AI
Read_Access_Level	P	R	P512, Unsigned8
Write_Access_Level	P	R	P513, Unsigned8
Color_Map	P	R	P522, Unsigned8
Safety_Value	P	R	P760, REALor NULL (NULL means remain)
Terminal_PV	P	R	P765, CharacterString only for built-in inputs
Sensor_Offset	P	W	P761, REAL not for LON inputs

[1] This property is required to be writable when Out_Of_Service is TRUE.
[2] This property is required if the object supports COV reporting.
[3] These properties are required if the object supports intrinsic reporting.

Analog Output

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	1
Present_Value	W	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Units	R	R	
Min_Pres_Value	O	W	
Max_Pres_Value	O	W	
Resolution	O	R	
Priority_Array	R	R	
Relinquish_Default	R	W	
COV_Increment	O [1]	W	
Time_Delay	O [2]	W	
Time_Delay_Normal	O [2]		
Notification_Class	O [2]	W	
High_Limit	O [2]	W	
Low_Limit	O [2]	W	
Deadband	O [2]	W	
Limit_Enable	O [2]	W	
Event_Enable	O [2]	W	
Acked_Transitions	O [2]	R	
Notify_Type	O [2]	W	
Event_Time_Stamps	O [2]	R	
Profile_Name	O	R	17-XLWEB2-AO
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	
Safety_Position	P	W	P759 REAL or NULL (NULL means remain)
Terminal_PV	P	R	P765 CharacterString only for built-in outputs
Time_To_Open	P	W	P762 Unsigned16 (sec)
Time_To_Close	P	W	P763 Unsigned16 (sec)
Direct_Reverse	P	R	P766 Enumerated (0=Direct, 1=Reverse, 255=DirNul) only for Panelbus or built-in outputs

[1] This property is required if the object supports COV reporting.
[2] These properties are required if the object supports intrinsic reporting.

Analog Value

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	2
Present_Value	R [4]	W	
Description	O	W	
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Units	R	R	
Priority_Array	O [1]	R	
Relinquish_Default	O [1]	W	
COV_Increment	O [2]	W	
Time_Delay	O [3]	W	
Time_Delay_Normal	O [3]		
Notification_Class	O [3]	W	
High_Limit	O [3]	W	
Low_Limit	O [3]	W	
Deadband	O [3]	W	
Limit_Enable	O [3]	W	
Event_Enable	O [3]	W	
Acked_Transitions	O [3]	R	
Notify_Type	O [3]	W	
Event_Time_Stamps	O [3]	R	
Profile_Name	O	R	17-XLWEB2-AV
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
EOH_EOV_Optimization_Flag	P	R	P515 BOOLEAN
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	P732 Unsigned(1..17)
DP_Is_Setpoint	P	R	P624 BOOLEAN

[1] If Present_Value is commandable, then both of these properties shall be present.
[2] This property is required if the object supports COV reporting.
[3] These properties are required if the object supports intrinsic reporting.
[4] If Present_Value is commandable, then it is required to be writable. This property is required to be writable when Out_Of_Service is TRUE.

Binary Input

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	3
Present_Value	R [1]	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Polarity	R	R	
Inactive_Text	O [2]	R	
Active_Text	O [2]	R	
Change_Of_State_Time	O [3]	R	
Change_Of_State_Count	O [3]	R	
Time_Of_State_Count_Reset	O [3]	R	
Elapsed_Active_Time	O [4]	R	
Time_Of_Active_Time_Reset	O [4]	R	
Time_Delay	O [5]	W	
Time_Delay_Normal	O [5]		
Notification_Class	O [5]	W	
Alarm_Value	O [5]	W	
Event_Enable	O [5]	W	
Acked_Transitions	O [5]	R	
Notify_Type	O [5]	W	
Event_Time_Stamps	O [5]	R	
Profile_Name	O	R	17-XLWEB2-BI
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
Color_Map	P	R	P522 Unsigned8
Safety_Value	P	R	P760 BinaryPV or NULL (NULL means remain)
Terminal_PV	P	R	P765 CharacterString only for built-in inputs

[1] This property is required to be writable when Out_Of_Service is TRUE.
[2] If one of the optional properties Inactive_Text or Active_Text is present, then both of these properties shall be present.
[3] If one of the optional properties Change_Of_State_Time, Change_Of_State_Count, or Time_Of_State_Count_Reset is present, then all of these properties shall be present.
[4] If one of the optional properties Elapsed_Active_Time or Time_Of_Active_Time_Reset is present, then both of these properties shall be present.
[5] These properties are required if the object supports intrinsic reporting.

Binary Output

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	4
Present_Value	W	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Polarity	R	R	
Inactive_Text	O [1]	R	
Active_Text	O [1]	R	
Change_Of_State_Time	O [2]	R	
Change_Of_State_Count	O [2]	R	
Time_Of_State_Count_Reset	O [2]	R	
Elapsed_Active_Time	O [3]	R	
Time_Of_Active_Time_Reset	O [3]	R	
Minimum_Off_Time	O		
Minimum_On_Time	O		
Priority_Array	R	R	
Relinquish_Default	R	W	
Time_Delay	O [4]	W	If Feedback_Value is present
Time_Delay_Normal	O [4]		If Feedback_Value is present
Notification_Class	O [4]	W	If Feedback_Value is present
Feedback_Value	O [4]	W	
Event_Enable	O [4]	W	If Feedback_Value is present
Acked_Transitions	O [4]	R	If Feedback_Value is present
Notify Type	O [4]	W	If Feedback_Value is present
Event_Time_Stamps	O [4]	R	If Feedback_Value is present
Profile_Name	O	R	17-XLWEB2-BO *or* 17-XLWEB2-BO_NOAL
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
EOH_EOV_Optimization_Flag	P	R	P515 BOOLEAN
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	P732 Unsigned(1..17)
Safety_Position	P	W	P759 BACnetBinaryPV or NULL (NULL means remain)
Terminal_PV	P	R	P765 CharacterString only for built-in outputs

[1] If one of the optional properties Inactive_Text or Active_Text is present, then both of these properties shall be present.
[2] If one of the optional properties Change_Of_State_Time, Change_Of_State_Count, or Time_Of_State_Count_Reset is present, then all of these properties shall be present.
[3] If one of the optional properties Elapsed_Active_Time or Time_Of_Active_Time_Reset is present, then both of these properties shall be present.
[4] These properties are required if the object supports intrinsic reporting.

Binary Value

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	5
Present_Value	R [1]	W	
Description	O	W	
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Inactive_Text	O [2]	R	
Active_Text	O [2]	R	
Change_Of_State_Time	O [3]	R	
Change_Of_State_Count	O [3]	R	
Time_Of_State_Count_Reset	O [3]	R	
Elapsed_Active_Time	O [4]	R	
Time_Of_Active_Time_Reset	O [4]	R	
Minimum_Off_Time	O		
Minimum_On_Time	O		
Priority_Array	O [5]	R	
Relinquish_Default	O [5]	W	
Time_Delay	O [6]	W	
Time_Delay_Normal	O [6]		
Notification_Class	O [6]	W	
Alarm_Value	O [6]	W	
Event_Enable	O [6]	W	
Acked_Transitions	O [6]	R	
Notify_Type	O [6]	W	
Event_Time_Stamps	O [6]	R	
Profile_Name	O	R	17-XLWEB2-BV
Read_Access_Level	p	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
EOH_EOV_Optimization_Flag	P	R	P515 BOOLEAN
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	P732 Unsigned(1..17)
DP_Is_Setpoint	P	R	P624 BOOLEAN

[1] If Present_Value is commandable, then it is required to be writable. This property is required to be writable when Out_Of_Service is TRUE.

[2] If one of the optional properties Inactive_Text or Active_Text is present, then both of these properties shall be present.

[3] If one of the optional properties Change_Of_State_Time, Change_Of_State_Count, or Time_Of_State_Count_Reset is present, then all of these properties shall be present.

[4] If one of the optional properties Elapsed_Active_Time or Time_Of_Active_Time_Reset is present, then both of these properties shall be present.

[5] If Present_Value is commandable, then both of these properties shall be present.

[6] These properties are required if the object supports intrinsic reporting.

Calendar
Creatable, Deletable

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	W	
Object_Type	R	R	6
Description	O	W	
Present_Value	R	R	
Date_List	R	W	
Profile_Name	O	R	17-XLWEB2-CAL
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8

Device

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	8
System_Status	R	R	
Vendor_Name	R	R	"Honeywell International Inc. "
Vendor_Identifier	R	R	17
Model_Name	R	R	"Eagle"
Firmware_Revision	R	R	"12-02-04"
Application_Software_Version	R	R	
Location	O	R	
Description	O	R	
Protocol_Version	R	R	1
Protocol_Revision	R	R	12
Protocol_Services_Supported	R	R	
Protocol_Object_Types_Supported	R	R	
Object_List	R	R	
Structured_Object_List	O		
Max_APDU_Length_Accepted	R	R	
Segmentation_Supported	R	R	
Max_Segments_Accepted	O [1]	R	
VT_Classes_Supported	O [2]		
Local_Time	O [3,4]	R	
Local_Date	O [3,4]	R	
UTC_Offset	O [4]	R	
Daylight_Saving_Status	O [4]	R	
APDU_Segment_Timeout	O [1]	R	
APDU_Timeout	R	R	
Number_Of_APDU_Retries	R	R	
Max_Master	O [6]	R	
Max_Info_Frames	O [6]	R	
Device_Address_Binding	R	R	
Database_Revision	R	R	
Configuration_Files	O [7]	R	
Last_Restore_Time	O [7]	R	
Backup_Failure_Timeout	O [8]	W	
Backup_Preparation_Time	O	R	1 sec
Restore_Preparation_Time	O	R	1 sec
Restore_Completion_Time	O	R	45 sec

Backup_And_Restore_State	O	R	
Active_COV_Subscriptions	O [9]	R	
Slave_Proxy_Enable	O [10]		
Manual_Slave_Address_Binding	O [10]		
Auto_Slave_Discovery	O [11]		
Slave_Address_Binding	O [12]		
Last_Restart_Reason	O [13]	R	
Time_Of_Device_Restart	O [13]	R	
Restart_Notification_Recipients	O [13]	W	
UTC_Time_Synchronization_Recipients	O [5]		
Time_Synchronization_Interval	O [14]		
Align_Intervals	O [14]		
Interval_Offset	O [14]		
Profile_Name	O	R	17-XLWEB2-DEV2
IP_Address	P	R	P516 CharacterString
Project_Name	P	R	P523 CharacterString
Time_Of_Last_ Restart	P	R	P524 BACnetDateTime For compatibility: a copy of Time_Of_Device_Restart
Alarm_Email_State	P	R	P527 Enumeration
Test_Email_State	P	R	P528 Enumeration
Last_Email_Status	P	R	P529 Enumeration
Number_Of_Points_In_Alarm	P	R	P612 Unsigned
Who_Is_Who_Has_Range_Min	P	W	P613 Unsigned
Who_Is_Who_Has_Range_Max	P	W	P614 Unsigned
Licensing_Status	P	R	P615 Integer
Contr_MAC_Addr	P	R	P616 CharacterString Ethernet MAC address
Contr_MAC_Addr2	P	R	P622 CharacterString Ethernet MAC address
Contr_Family_Name	P	R	P617 CharacterString "Universal BACnet Controllers"
Contr_OS_Number	P	R	P618 CharacterString
Contr_Date_Code	P	R	P619 CharacterString calendar week / year
Manufacturing_Location	P	R	P620 CharacterString
Unique_Contr_ID	P	R	P621 CharacterString
Object_Synch_Version	P	R	P623 CharacterString "2.0.0"
Object_Synch_Cycle_Time	P	R	P625 Unsigned
Alarm_Synch_Cycle_Time	P	R	P626 Unsigned

[1] Required if segmentation of any kind is supported.

[2] If one of the properties VT_Classes_Supported or Active_VT_Sessions is present, then both of these properties shall be present. Both properties are required if support for VT Services is indicated in the PICS.

[3] If the device supports the execution of the TimeSynchronization service, then these properties shall be present.

[4] If the device supports the execution of the UTCTimeSynchronization service, then these properties shall be present.

[5] If this property is present, then Time_Synchronization_Interval, Align_Intervals and Interval_Offset shall be present. If present, this property shall be writable.

[6] These properties are required if the device is an MS/TP master node.

[7] These properties are required if the device supports the backup and restore procedures.

[8] This property must be present and writable if the device supports the backup and restore procedures.

[9] This property is required if the device supports execution of either the SubscribeCOV or SubscribeCOVProperty service.

[10] This property shall be present and writable if the device is capable of being a Slave-Proxy device.

[11] This property shall be present if the device is capable of being a Slave-Proxy device that implements automatic discovery of slaves.

[12] This property shall be present if the device is capable of being a Slave-Proxy device.

[13] These properties are required if the device supports the restart procedure as described in Clause 19.3.

[14] If either Time_Synchronization_Recipients or UTC_Time_Synchronization_Recipients is present, then this property shall be present and writable.

Event Enrollment

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	9
Description	O	W	
Event_Type	R	R	
Notify_Type	R	W	
Event_Parameters	R	W	Event Type must not be changed
Object_Property_Reference	R	R	
Event_State	R	W	
Event_Enable	R	W	
Acked_Transitions	R	R	
Notification_Class	R	W	
Event_Time_Stamps	R	R	
Profile_Name	O	R	17-XLWEB2-EE
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8

File (Configuration)

This file is referenced by the device's property Configuration_Files.
It contains the application configuration and is used in Backup/Restore procedure.

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	FILE, 10
Object_Name	R	R	__FL_Application
Object_Type	R	R	10
Description	O	W	
File_Type	R	R	
File_Size	R [1]	R	
Modification_Date	R	R	
Archive	W	W	
Read_Only	R	R	
File_Access_Method	R	R	
Record_Count	O [2]		
Profile_Name	O	R	17-XLWEB2-FL_CONF_V

[1] If the file size can be changed by writing to the file, and File_Access_Method is STREAM_ACCESS, then this property shall be writable.
[2] This property shall be present only if File_Access_Method is RECORD_ACCESS. If the number of records can be changed by writing to the file, then this property shall be writable.

File

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	10
Description	O	W	
File_Type	R	R	
File_Size	R [1]	R	
Modification_Date	R	R	
Archive	W	W	
Read_Only	R	R	TRUE
File_Access_Method	R	R	
Record_Count	O [2]		
Profile_Name	O	R	17-XLWEB2-FL

[1] If the file size can be changed by writing to the file, and File_Access_Method is STREAM_ACCESS, then this property shall be writable.
[2] This property shall be present only if File_Access_Method is RECORD_ACCESS. If the number of records can be changed by writing to the file, then this property shall be writable.

Loop

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	12
Present_Value	R	R	
Description	O	W	
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Update_Interval	R	R	
Output_Units	R	R	
Manipulated_Variable_Reference	R	R	
Controlled_Variable_Reference	R	R	
Controlled_Variable_Value	R	R	
Controlled_Variable_Units	R	R	
Setpoint_Reference	R	R	
Setpoint	R	R	
Action	R	R	
Proportional_Constant	O [1]	W	
Proportional_Constant_Units	O [1]	R	
Integral_Constant	O [2]	W	
Integral_Constant_Units	O [2]	R	sec
Derivative_Constant	O [3]	W	
Derivative_Constant_Units	O [3]	R	sec
Bias	O	W	
Maximum_Output	O	W	
Minimum_Output	O	W	
Priority_For_Writing	R	W	
COV_Increment	O [4]	W	
Time_Delay	O [5]	W	
Notification_Class	O [5]	W	
Error_Limit	O [5]	W	
Deadband	O [5]	W	
Event_Enable	O [5]	R	
Acked_Transitions	O [5]	R	
Notify_Type	O [5]	R	
Event_Time_Stamps	O [5]	R	
Profile_Name	O	R	17-XLWEB2-LOOP
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
(internal)	P	R	P722 Boolean

[1] If one of these optional properties is present, then both of these properties shall be present.
[2] If one of these optional properties is present, then both of these properties shall be present.
[3] If one of these optional properties is present, then both of these properties shall be present.
[4] This property is required if the object supports COV reporting.
[5] These properties are required if the object supports intrinsic reporting.

Multistate Input

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	13
Present_Value	R [1]	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O [2]	R	
Out_Of_Service	R	W	
Number_Of_States	R	R	
State_Text	O	R	
Time_Delay	O [3]	W	
Time_Delay_Normal	O [3]		
Notification_Class	O [3]	W	
Alarm_Values	O [3]	W	
Fault_Values	O [3]	W	
Event_Enable	O [3]	W	
Acked_Transitions	O [3]	R	
Notify_Type	O [3]	W	
Event_Time_Stamps	O [3]	R	
Profile_Name	O	R	17-XLWEB2-MI
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
Color_Map	P	R	P522 Unsigned8
Safety_Value	P	R	P760 Unsigned or NULL (NULL means remain)
Terminal_PV	P	R	P765 CharacterString only for built-in inputs

[1] This property is required to be writable when Out_Of_Service is TRUE.
[2] This property shall be required if Fault_Values is present.
[3] These properties are required if the object supports intrinsic reporting.

Multistate Output

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	14
Present_Value	W	W	
Description	O	W	
Device_Type	O		
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Number_Of_States	R	R	
State_Text	O	R	
Priority_Array	R	R	
Relinquish_Default	R	W	
Time Delay	O [1]	W	If Feedback_Value is present
Time_Delay_Normal	O [1]		If Feedback_Value is present
Notification Class	O [1]	W	If Feedback_Value is present
Feedback Value	O [1]	R	
Event_Enable	O [1]	W	If Feedback_Value is present
Acked_Transitions	O [1]	R	If Feedback_Value is present
Notify_Type	O [1]	W	If Feedback_Value is present
Event_Time_Stamps	O [1]	R	If Feedback_Value is present
Profile_Name	O	R	17-XLWEB2-MO *or* 17-XLWEB2-MO_NOAL
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
EOH_EOV_Optimization_Flag	P	R	P515 BOOLEAN
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	P732 Unsigned(1..17)
Safety_Position	P	W	P759 Unsigned or NULL NULL means remain
Terminal_PV	P	R	P765 CharacterString only for built-in outputs

[1] These properties are required if the object supports intrinsic reporting.

Multistate Value

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	19
Present_Value	R [1]	W	
Description	O	W	
Status_Flags	R	R	
Event_State	R	R	
Reliability	O [2]	R	
Out_Of_Service	R	W	
Number_Of_States	R	R	
State_Text	O	R	
Priority_Array	O [3]	R	
Relinquish_Default	O [3]	W	
Time_Delay	O [4]	W	
Time_Delay_Normal	O [4]		
Notification_Class	O [4]	W	
Alarm_Values	O [4]	W	
Fault_Values	O [4]	W	
Event_Enable	O [4]	W	
Acked_Transitions	O [4]	R	
Notify_Type	O [4]	W	
Event_Time_Stamps	O [4]	R	
Profile_Name	O	R	17-XLWEB2-MV
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8
EOH_EOV_Optimization_Flag	P	R	P515 BOOLEAN
Color_Map	P	R	P522 Unsigned8
Currently_Active_Priority	P	R	P732 Unsigned(1..17)
DP_Is_Setpoint	P	R	P624 BOOLEAN

[1] If Present_Value is commandable, then it is required to also be writable. This property is required to be writable when Out_Of_Service is TRUE.
[2] This property shall be required if Fault_Values is present.
[3] If Present_Value is commandable, then both of these properties shall be present.
[4] These properties are required if the object supports intrinsic reporting.

Notification Class

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	15
Description	O	W	
Notification_Class	R	R	
Priority	R	W	
Ack_Required	R	W	
Recipient_List	R	W	
Profile_Name	O	R	17-XLWEB2-NC

Program

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	16
Program_State	R	R	
Program_Change	W	W	
Reason_For_Halt	O [1]	R	
Description_Of_Halt	O [1]	R	
Program_Location	O	R	
Description	O	W	
Instance_Of	O	R	
Status_Flags	R	R	
Reliability	O		
Out_Of_Service	R	W	FALSE
Profile_Name	O	R	17-XLWEB2-PROG
Time_Of_Last_Start	P	R	P527 BACnetDateTime
Time_Of_Last_Stop	P	R	P528 BACnetDateTime

[1] If one of the optional properties Reason_For_Halt or Description_Of_Halt is present, then both of these properties shall be present.

Pulse Converter

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	24
Description	O	W	
Present_Value	R [1]	W	
Input_Reference	O	R	Present if combination of Pulse Converter and Accumulator
Status_Flags	R	R	
Event_State	R	R	
Reliability	O	R	
Out_Of_Service	R	W	
Units	R	R	
Scale_Factor	R	R	
Adjust_Value	W	W	
Count	R	R	
Update_Time	R	R	
Count_Change_Time	R [2]	R	
Count_Before_Change	R [2]	R	
COV_Increment	O [3]	W	
COV_Period	O [3]	W	
Notification_Class	O [4]	W	
Time_Delay	O [4]	W	
Time_Delay_Normal	O [4]		
High_Limit	O [4]	W	
Low_Limit	O [4]	W	
Deadband	O [4]	W	
Limit_Enable	O [4]	W	
Event_Enable	O [4]	W	
Acked_Transitions	O [4]	R	
Notify_Type	O [4]	W	
Event_Time_Stamps	O [4]	R	
Profile_Name	O	R	17-XLWEB2-PLC
Terminal_PV	P	R	P765 CharacterString only for built-in inputs

[1] This property is required to be writable when Out_Of_Service is TRUE.
[2] These properties are required if Count_Before_Change is writable.
[3] These properties are required if the object supports COV reporting.
[4] These properties are required if the object supports intrinsic reporting.

Schedule

Creatable, Deletable

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	W	
Object_Type	R	R	17
Present_Value	R	R	
Description	O	W	
Effective_Period	R	W	
Weekly_Schedule	O [1]	W	
Exception_Schedule	O [1]	W	
Schedule_Default	R	W	
List_Of_Object_Property_References	R	R	
Priority_For_Writing	R	W	
Status_Flags	R	W	
Reliability	R	R	
Out_OF_Service	R	W	
Profile_Name	O	R	17-XLWEB2-SCH
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8

[1] At least one of these properties is required.

Once a schedule has a Schedule_Default or Values in Weekly_Scherdule or Exception_Schedule of a certain data type, then only values of this type can be written.

Schedules are restricted to Present_Value properties of BI, BO, BV, AI, AO, AV, MI, MO, MV, Pulse Converter and Enable properties of Trendlogs.

Trend Log

Creatable, Deletable

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	W	
Object_Type	R	R	20
Description	O	W	
Enable	W	W	
Start_Time	O [1,2]	W	
Stop_Time	O [1,2]	W	
Log_DeviceObjectProperty	O [1]	R	
Log_Interval	O [1,3]	W	
COV_Resubscription_Interval	O	R	
Client_COV_Increment	O	W	
Stop_When_Full	R	W	
Buffer_Size	R	W	Must be > 10 and < 10000
Log_Buffer	R	R	
Record_Count	W	W	
Total_Record_Count	R	R	
Notification_Threshold	O [4]	W	
Records_Since_Notification	O [4]	R	
Last_Notify_Record	O [4]	R	
Event_State	R	R	
Notification_Class	O [4]	W	
Event_Enable	O [4]	W	
Acked_Transitions	O [4]	R	
Notify_Type	O [4]	W	
Event_Time_Stamps	O [4]	R	
Profile_Name	O	R	17-XLWEB2-TL
Logging_Type	R	R	POLLED or COV
Align_Intervals	O [5]		
Internal_Offset	O [5]		
Status_Flags	R	R	
Read_Access_Level	P	R	P512 Unsigned8
Write_Access_Level	P	R	P513 Unsigned8

[1] These properties are required to be present if the monitored property is a BACnet property.
[2] If present, these properties are required to be writable.
[3] If present, this property is required to be writable when Logging_Type has the value POLLED or the value COV.
Also, if present this property is required to be read-only if Logging_Type has the value TRIGGERED.
[4] These properties are required to be present if the object supports intrinsic reporting.
[5] These properties are required to be present if the object supports clock-aligned logging.

Proprietary Objects Supported

Object Type
BACnet Statistics
BACnet/MSTP Statistics
LON Statistics
Input Reference
Output Reference
FlagPoint
ControlLoop
User Access Rights

BACnet Statistics

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	__BACnetStatistics
Object_Type	R	R	134
Profile_Name		R	17-XLWEB2-BACSTAT
BACnet_Statistics		W: write any value to reset statistics	P663, Array of Unsigned Error Codes
Diagnostic		R	P677 CharacterString Some measures as text
Seconds_Since_Reset		R	P745 Unsigned Seconds since last reset of statistics

Example for the property "Diagnostic":
host: 192.168.200.32,
mask: 255.255.255.0,
gateway: 192.168.200.1
started: 2011-11-22 08:12:48
protocol: BACnet/IP
LEN(s): 0 (1970-01-01 00:00:00)
SEN(s): 0
LCCN(s): 0 (1970-01-01 00:00:00)
SCCN(s): 0
SUCN(s): 0
RCCN(s): 0
RUCN(s): 22
COV subs: 0
init COV/min: 0
exec COV/min: 0
BBMD: 0

LEN = Lost Event Notifications
SEN = Sent Event Notifications
LCCN = Lost Confirmed COV Notifications
SCCN = Sent Confirmed COV Notifications
SUCN = Sent Unconfirmed COV Notifications
RCCN = Received Confirmed COV Notifications
RUCN = Received Unconfirmed COV Notifications
COV subs = COV subscriptions
init COV/min = initiated COV notifications per minute
exec COV/min = executed COV notifications per minute
BBMD = 1 if device performs as BACnet Broadcast Management Device

BACnet/MSTP Statistics

Writing to any of the proprietary properties resets the statistics.

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	__BACnetMSTP#Statistics
Object_Type	R	R	
Profile_Name		R	17-XLWEB2-MSTPSTAT
Header_CRC_Errors		R	P746 Unsigned
Data_CRC_Errors		R	P747 Unsigned
Delayed_Responses		R	P748 Unsigned
No_Response		R	P749 Unsigned
Avrg_Token_Rotation_Time		R	P750 Unsigned In msec
Traffic_Load		R	P751 Unsigned
Next_Station		R	P752 Unsigned(0..127) The MAC address of the next station to pass the token on
Sent_Bytes		R	P753 Unsigned
Received_Bytes		R	P754 Unsigned
Sent_Frames		R	P755 Unsigned
Received_Frames		R	P756 Unsigned
Sent_Tokens		R	P757 Unsigned
Lost_Tokens		R	P758 Unsigned

LON Statistics

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	__LONStatistics
Object_Type	R	R	133
Profile_Name		R	17-XLWEB2-LONSTAT
LON_Statistics		R	P662
Seconds_Since_Reset		R	P745 Unsigned Seconds since last reset of statistics

Input Reference

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	136
Out_Of_Service		R	81 Boolean
Present_Value		R	85 Any May be Boolean Unsigned Real
Reliability		R	103 Possible unreliable conditions are: UNRELIABLE_OTHER
Status_Flags		R	111
Units		R	117
Profile_Name		R	17-XLWEB2-RI
Read_Access_Level		R	P512 Unsigned8
Write_Access_Level		R	P513 Unsigned8
Startup_Value		R	P521 Any
Update_Interval		W	P525 Real

Output References

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	135
Out_Of_Service		W	81 Boolean
Present_Value		R	85 Any May be Boolean Unsigned Real Null (relinquish)
Priority_For_Writing		R	
Reliability		R	103 Possible unreliable conditions are: UNRELIABLE_OTHER
Status_Flags		R	111
Profile_Name		R	17-XLWEB2-RO
Read_Access_Level		R	P512 Unsigned8
Write_Access_Level		R	P513 Unsigned8
Startup_Value		R	P521 Any
Update_Interval		W	P525 Real
Send_On_Delta		W	P526 Real

Flag Point

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	Flag_...
Object_Type	R	R	137
Profile_Name		R	17-XL_WEB_FP
Present_Value		R	Property 85, any type

Control Loop

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	
Object_Type	R	R	130
Description		R	P28 CharacterString
Profile_Name		R	17-XL_WEB_CL
Read_Access_Level		R	P512 Unsigned8
Write_Access_Level		R	P513 Unsigned8
Last_Execution_Time		R	P532 Unsigned
Update_interval_Adaption_Enable		R	P533 BOOLEAN
CL_Priority_For_Writing		R	P534 Signed

User Access Rights

Property name	R=Required O=Optional P=Proprietary	Supported (R=Read, W=Write, empty = not supported)	Property ID, Range, Data Type; other remarks
Object_Identifier	R	R	
Object_Name	R	R	__AccessRights
Object_Type	R	R	131
Level_For_Chg_Del_Calendars		R	P692 Unsigned8
Level_For_Chg_Del_Schedules		R	P693 Unsigned8
Level_For_Chg_Del_Trendlogs		R	P694 Unsigned8
Level_For_View_Diagnostics		R	P695 Unsigned8
Level_For_Vie_Comm_Settings		R	P696 Unsigned8
Level_For_Chg_Comm_Settings		R	P697 Unsigned8
Level_For_Star/Stop_Control Program		R	P698 Unsigned8
Level_For_Download		R	P699 Unsigned8
Level_For_View_Cntrl_Loop_Speed		R	P700 Unsigned8
Level_For_Chg_Cntrl_Loop_Speed		R	P701 Unsigned8
Level_For_Chg_Clock_Settings		R	P702 Unsigned8
Level_For_Chg_Del_Fast_Access_List		R	P703 Unsigned8
Level_For_Chg_Del_Users		R	P704 Unsigned8
currently unused		R	P705 Unsigned8
Level_For_Chg_Email_Addr		R	P706 Unsigned8
Profile_Name		R	17-XLWEB2-UAR

Segmentation Capability

☑ Segmented requests supported   Window Size 16_____
☑ Segmented responses supported   Window Size 16_____

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, RS-485 ARCNET (Clause 8), baud rate(s) _____
☑ MS/TP master (Clause 9), baud rate(s): 9600, 38400, 57600, 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 - 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

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

The human interface device, supports the following subsets of characters and languages:

MIBenum	Character Set	Languages covered
3	ANSI X3.4 ISO 8859-1 ISO 10646	English
4	ISO 8859-1 ISO 10646	Afrikaans, Albanian, Basque, Breton, Catalan, Danish, (Dutch), English, Faroese, (French), Galician, German, Icelandic, Irish, Italian, Kurdish, Luxembourgish, Norwegian (Bokmål and Nynorsk), Occitan, Portuguese, Rhaeto-Romanic, Scottish Gaelic, Spanish, Swahili, Swedish, Walloon
2012	ISO 10646	Danish
26	ISO 10646	French
62	ISO 10646	Hungarian
2010	ISO 10646	Croatian, Czech, Hungarian, Polish, Romanian, Slovak, and Slovenian
2047	ISO 10646	Turkish
10	ISO 10646	Greek
2046	ISO 10646	Russian, Bulgarian, Macedonian, Serbian, Ukrainian