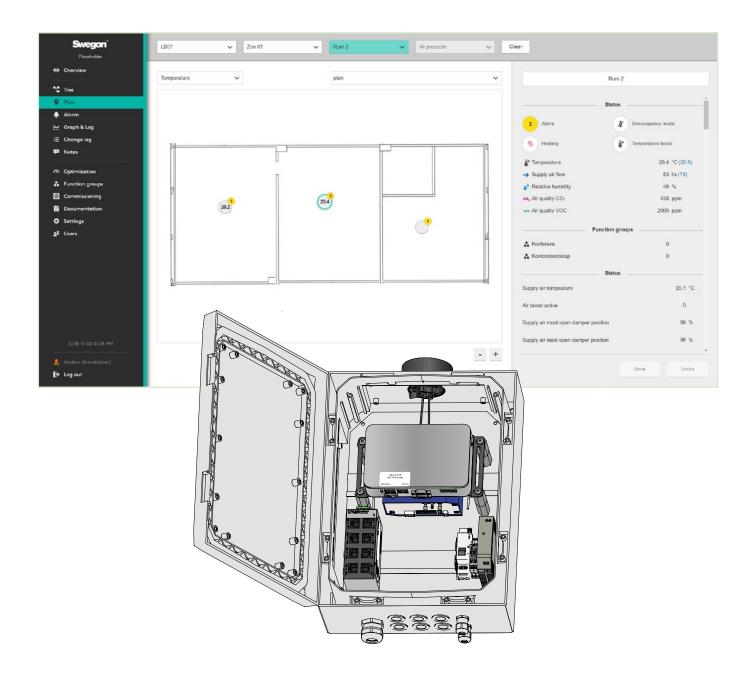


# Swegon SuperWISE II BACnet PICS

**BACnet Protocol Implementation Conformance Statement** 



# SuperWISE II -Communication unit to the WISE II system





# **Product description**

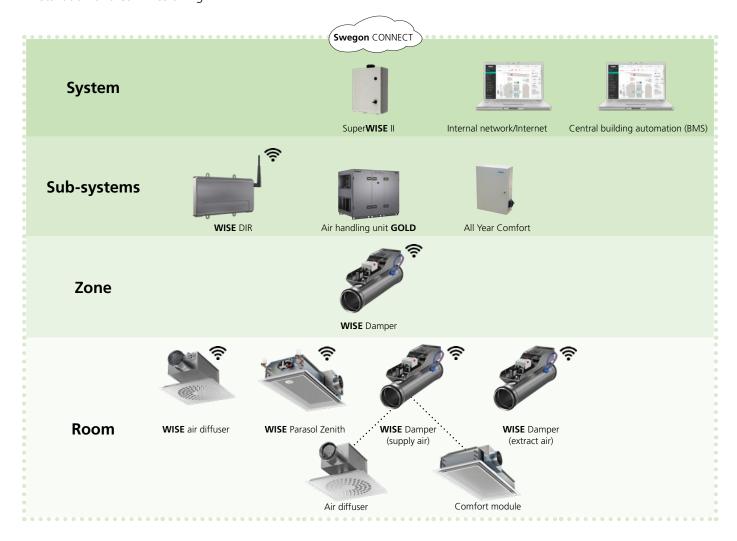
This BACnet driver is implemented in SuperWISE II PV 1.50 and provides the function of monitoring and operating the WISE system. The supported Data Link Layer Options are BACnet / IP.

Swegon's WISE system for demand-controlled indoor climate combines an optimal indoor climate with a minimum of energy consumption. WISE is based on a unique technology that forms a safe and flexible system that also simplifies each step of the way – from system selection and planning, to installation and commissioning. This makes it possible to satisfy the significantly greater demands made by our customers - be it environmental, net operating income or increased comfort requirements.

The WISE system comprises room products for both air and waterborne climate systems, all the requisite control equipment, as well as room units and sensors. All this is linked together to form an entirety via a unique patented system for wireless communications, which is self-healing and neither disturbs nor is disturbed by other equipment. It is encrypted for the highest safety level, which makes it a secure for sensitive environments such as hospitals and airports. Unique in terms of reliability and simplicity in installation and commissioning.

SuperWISE is the system's interface with an overview of the whole system with up to 30 air handling units. Here you'll find all requisite information, without it being complicated or confusing. The common platform manages multiple air handling units while there is considerable space for adaptation to each individual building. Virtual rooms make it easy to assign room associations and balance the ventilation flows, which gives unbeatable flexibility during rebuilding - without any difficulties.

SuperWISE, DIRECTORs and the air handling unit have a wired connection to each other via a permanent network. Each DIRECTOR manages a network consisting of zone and room products, and communicates wirelessly with all products in its network. All system accessories can have functions on both zone and room levels. The Swegon Connect cloud service permits remote connection for monitoring and support.



**Date:** May 22, 2019

**Vendor Name:** Swegon AB (Vendor-Identifier: 300)

**Product Name:** SuperWISE **Product Model Number:** 2

**Application Software Version:** 1.03 **Firmware Revision:** 1.0.16.2610 **BACnet Protocol Revision:** 14

### **Product Description:**

This BACnet driver is implemented in SuperWISE II PV 1.50 and provides the function of monitoring and operating the WISE II system. The supported Data Link Layer Options are BACnet / IP.

BAG	Cnet Standardized Device Profile (Annex L):
	BACnet Operator Workstation (B-OWS)
$\times$	BACnet Building Controller (B-BC)
	<b>BACnet Advanced Application Controller (B-AAC)</b>
	BACnet Application Specific Controller (B-ASC)
	BACnet Smart Sensor (B-SS)
	BACnet Smart Actuator (B-SA)
$\boxtimes$	BACnet Gateway (B-GW)

### List all BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing	DS-RP-A	Data Sharing-Read Property-A
	DS-RP-B	Data Sharing-Read Property-B
	DS-RPM-A	Data Sharing-Read Property Multiple-A
	DS-RPM-B	Data Sharing-Read Property Multiple-B
	DS-WP-A	Data Sharing-Write Property-A
	DS-WP-B	Data Sharing-Write Property-B
	DS-WPM-B	Data Sharing-Write Property Multiple-B
	DS-COV-B	Data Sharing-COV-B
	-	Execute Read-Range
Alarm & Event Management	AE-N-I-B	Alarm&Event-Notification Internal-B
	AE-ACK-B	Alarm&Event-Acknowledge Alarm-B
	AE-INFO-B	Alarm&Event-Event Information-B
	AE-ASUM-B	Alarm&Event-Alarm Summary-B
	AE-ESUM-B	Alarm&Event-Enrollment Summary -B
Scheduling	SCHED-I-B	Scheduling-Internal-B
	SCHED-E-B	Scheduling-External-B
Trending	T-VMT-I-B	Trending-Viewing and Modifying Trends Internal-B
	T-ATR-B	Trending-Automated Trend Retrieval-B
<b>Device Management</b>	DM-DDB-A	Device Management-Dynamic Device Binding-A
	DM-DDB-B	Device Management-Dynamic Device Binding-B
	DM-DOB-B	Device Management-Dynamic Object Binding-B
	DM-DCC-B	Device Management-Dynamic Communication Control-B
	DM-TS-B	Device Management-TimeSynchronization-B
	DM-UTC-B	Device Management-UTCTimeSynchronization-B
	DM-RD-B	Device Management-Reinitialize Device-B
	DM-R-B	Device Management-Restart-B
	DM-LM-B	Device Management-List Manipulation-B
	DM-OCD-B	Device management-Object Creation and Deletion
	DM-BR-B	Device Management-Backup and Restore-B
Network Management	NM-RC-B	Network Management-Router Configuration-B
Gateway	GW-VN-B	Gateway-Virtual Network - B



### **Standard Object Types Supported:**

The Create-Object and Delete-Object services are supported. Only event-Enrollment and Trend-Log object types can be dynamically created or deleted through these BACnet service requests.

"n/a" = not applicable / not implemented property.

"O" = indicates an optional property.

"R" = indicates that a property shall be supported and readable using BACnet services.

"W" = indicates that a property shall be supported, readable, and writable using BACnet services.

"WP" = indicates that a property shall be supported, readable, and writable using BACnet services and also the BACnet server shall store the property as persist.

### **Device Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
	Troporty Zututype	<b>Code Standard</b>	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
System_Status	BACnetDeviceStatus	R	R
Vendor_Name	CharacterString	R	R
Vendor_Identifier	Unsigned16	R	R
Model_Name	CharacterString	R	R
Firmware_Revision	CharacterString	R	R
Application_Software_Version	CharacterString	R	R
Location	CharacterString	0	R
Description	CharacterString	0	R
Protocol_Version	Unsigned	R	R
Protocol_Revision	Unsigned	R	R
Protocol_Services_Supported	BACnetServicesSupported	R	R
Protocol_Object_Types_Supported	BACnetObjectTypesSupported	R	R
Object_List	BACnetARRAY[N] of	R	R
	BACnetObjectIdentifier		
Structured_Object_List	BACnetARRAY[N] of	0	n/a
	BACnetObjectIdentifier		
Max_APDU_Length_Accepted	Unsigned	R	R
Segmentation_Supported	BACnetSegmentation	R	R
Max_Segments_Accepted	Unsigned	O <sup>1</sup>	R
VT_Classes_Supported	BACnetLIST of BACnetVTClass	$O^2$	n/a
Active_VT_Sessions	BACnetLIST of BACnetVTSession	$O^2$	n/a
Local_Time	Time	O <sup>3,4,15</sup>	R
Local_Date	Date	O <sup>3,4,15</sup>	R
UTC_Offset	INTEGER	O <sup>4</sup>	R
Daylight_Savings_Status	BOOLEAN	O <sup>4</sup>	R
APDU_Segment_Timeout	Unsigned	O <sup>1</sup>	R
APDU_Timeout	Unsigned	R	R
Number_Of_APDU_Retries	Unsigned	R	R
Time_Synchronization_Recipients	BACnetLIST of BACnetRecipient	O <sup>5</sup>	n/a
Max_Master	Unsigned(1127)	O <sub>6</sub>	n/a
Max_Info_Frames	Unsigned	O <sub>6</sub>	n/a
Device_Address_Binding	BACnetLIST of	D D	D
	BACnetAddressBinding	R	R
Database_Revision	Unsigned	R	R
Configuration_Files	BACnetARRAY[N] of	O <sup>7</sup>	R
	BACnetObjectIdentifier		



Last_Restore_Time	BACnetTimeStamp	O <sup>7</sup>	R
Backup_Failure_Timeout	Unsigned16	O8	W
Backup_Preparation_Time	Unsigned16	O <sup>16</sup>	R
Restore_Preparation_Time	Unsigned16	O <sup>16</sup>	R
Restore_Completion_Time	Unsigned16	O <sup>16</sup>	R
Backup_And_Restore_State	BACnetBackupState	O <sup>7</sup>	R
Active_COV_Subscriptions	BACnetLIST of	O <sup>9</sup>	R
	BACnetCOVSubscription		
Slave_Proxy_Enable	BACnetARRAY[N] of BOOLEAN	O <sup>10</sup>	n/a
Manual_Slave_Address_Binding	BACnetLIST of	O <sup>10,12</sup>	n/a
	BACnetAddressBinding		
Auto_Slave_Discovery	BACnetARRAY[N] of BOOLEAN	O <sup>10,11</sup>	n/a
Slave_Address_Binding	BACnetLIST of	O <sup>10,12</sup>	n/a
	BACnetAddressBinding		
Last_Restart_Reason	BACnetRestartReason	O <sup>13</sup>	R
Time_Of_Device_Restart	BACnetTimeStamp	O <sup>13</sup>	R
Restart_Notification_Recipients	BACnetLIST of BACnetRecipient	O <sup>17</sup>	WP
UTC_Time_Synchronization_	BACnetLIST of BACnetRecipient	O <sup>5</sup>	n/a
Recipients			
Time_Synchronization_Interval	Unsigned	O <sup>14</sup>	n/a
Align_Intervals	BOOLEAN	O <sup>14</sup>	n/a
Interval_Offset	Unsigned	O <sup>14</sup>	n/a
Serial_Number	CharacterString	0	R
Property_List	BACnetARRAY[N] of	R	R
	BACnetPropertyIdentifier		
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> These properties are required if, and shall be present only if, segmentation of any kind is supported.

<sup>&</sup>lt;sup>17</sup> This property is required if, and shall be present only if, the device supports execution of the restart procedure as described in Clause 19.3.



<sup>&</sup>lt;sup>2</sup> These properties are required if, and shall be present only if, the VT Services are supported.

<sup>&</sup>lt;sup>3</sup> If the device supports the execution of the TimeSynchronization service, then these properties shall be present.

<sup>&</sup>lt;sup>4</sup> If the device supports the execution of the UTCTimeSynchronization service, then these properties shall be present.

<sup>&</sup>lt;sup>5</sup> If present, this property shall be writable.

<sup>&</sup>lt;sup>6</sup> These properties are required if the device is an MS/TP master node.

<sup>&</sup>lt;sup>7</sup> These properties are required if, and shall be present only if, the device supports execution of the backup and restore procedures.

<sup>&</sup>lt;sup>8</sup> This property is required if, and shall be present only if, the device supports the backup and restore procedures. If present, this property shall be writable.

<sup>&</sup>lt;sup>9</sup> This property is required if, and shall be present only if, the device supports execution of either the SubscribeCOV or Subscribe-COVProperty service.

<sup>&</sup>lt;sup>10</sup> This property is required if, and shall be present only if, the device is capable of being a Slave-Proxy device.

<sup>&</sup>lt;sup>11</sup> This property is required if, and shall be present only if, the device is capable of being a Slave-Proxy device that implements automatic discovery of slaves.

<sup>&</sup>lt;sup>12</sup> This property shall be writable if the device is directly connected to an MS/TP network.

<sup>&</sup>lt;sup>13</sup> These properties are required if the device supports the restart procedure as described in Clause 19.3.

<sup>&</sup>lt;sup>14</sup> These properties are required if, and shall be present only if, Time\_Synchronization\_Recipients or UTC\_Time\_Synchronization\_Recipients is present. If present, these properties shall be writable.

<sup>&</sup>lt;sup>15</sup> These properties shall be present if the device is capable of tracking date and time.

<sup>&</sup>lt;sup>16</sup> These properties are required if, and shall be present only if, the device supports execution of the backup and restore procedures described in Clause 19.1 and cannot respond to subsequent communications within the minimum value it will accept in its APDU\_Timeout property.

### **Analog-Input Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
Troperty identifier	Troperty Datatype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	REAL	R <sup>1</sup>	R
Description	CharacterString	0	R
Device_Type	CharacterString	0	n/a
Status_Flags	BACnetStatusFlags	R	R
Event_State	BACnetEventState	R	R
Reliability	BACnetReliability	0	n/a
Out_Of_Service	BOOLEAN	R	W
Update_Interval	Unsigned	0	n/a
Units	BACnetEngineeringUnits	R	R
Min_Pres_Value	REAL	0	R
Max_Pres_Value	REAL	0	R
Resolution	REAL	0	R
COV_Increment	REAL	$O^2$	R
Time_Delay	Unsigned	O <sup>3,5</sup>	n/a
Notification_Class	Unsigned	O <sup>3,5</sup>	n/a
High_Limit	REAL	O <sup>3,5</sup>	n/a
Low_Limit	REAL	O <sup>3,5</sup>	n/a
Deadband	REAL	O <sup>3,5</sup>	n/a
Limit_Enable	BACnetLimitEnable	O <sup>3,5</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>3,5</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>3,5</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>3,5</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>3,5</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>4,5</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>5</sup>	n/a
Event_Detection_Enable	BOOLEAN	O <sup>3,5</sup>	n/a
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>5</sup>	n/a
Event_Algorithm_Inhibit	BOOLEAN	O <sup>5,6</sup>	n/a
Time_Delay_Normal	Unsigned	O <sup>5</sup>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	O <sup>7</sup>	n/a
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> This property is required to be writable when Out\_Of\_Service is TRUE.

<sup>&</sup>lt;sup>7</sup> If this property is present, then the Reliability property shall be present.



<sup>&</sup>lt;sup>2</sup> This property is required if, and shall be present only if, the object supports COV reporting.

<sup>&</sup>lt;sup>3</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>4</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>5</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>6</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

### **Analog-Output Object Type**

Property Identifier	Property Datatype	Conformance	Conformance	
Troperty identifier	Troperty Butatype	Code Standard	Code SuperWISE2	
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	R	
Object_Type	BACnetObjectType	R	R	
Present_Value	REAL	W	W	
Description	CharacterString	0	R	
Device_Type	CharacterString	0	n/a	
Status_Flags	BACnetStatusFlags	R	R	
Event_State	BACnetEventState	R	R	
Reliability	BACnetReliability	0	n/a	
Out_Of_Service	BOOLEAN	R	W	
Units	BACnetEngineeringUnits	R	R	
Min_Pres_Value	REAL	0	R	
Max_Pres_Value	REAL	0	R	
Resolution	REAL	0	R	
Priority_Array	BACnetPriorityArray	R	R	
Relinquish_Default	REAL	R	R	
COV_Increment	REAL	O <sup>1</sup>	R	
Time_Delay	Unsigned	O <sup>2,4</sup>	n/a	
Notification_Class	Unsigned	O <sup>2,4</sup>	n/a	
High_Limit	REAL	O <sup>2,4</sup>	n/a	
Low_Limit	REAL	O <sup>2,4</sup>	n/a	
Deadband	REAL	O <sup>2,4</sup>	n/a	
Limit_Enable	BACnetLimitEnable	O <sup>2,4</sup>	n/a	
Event_Enable	BACnetEventTransitionBits	O <sup>2,4</sup>	n/a	
Acked_Transitions	BACnetEventTransitionBits	O <sup>2,4</sup>	n/a	
Notify_Type	BACnetNotifyType	O <sup>2,4</sup>	n/a	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>2,4</sup>	n/a	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>3,4</sup>	n/a	
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>4</sup>	n/a	
Event_Detection_Enable	BOOLEAN	O <sup>2,4</sup>	n/a	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>4</sup>	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>4,5</sup>	n/a	
Time_Delay_Normal	Unsigned	O <sup>4</sup>	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	O <sub>6</sub>	n/a	
Property_List	BACnetARRAY[N] of	R	R	
	BACnetPropertyIdentifier			
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> This property is required if, and shall be present only if, the object supports COV reporting.



<sup>&</sup>lt;sup>2</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>3</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>4</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>5</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>6</sup> If this property is present, then the Reliability property shall be present.

### **Analog-Value Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
Troperty identifier	Troperty Datatype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	REAL	R <sup>4</sup>	W
Description	CharacterString	0	R
Status_Flags	BACnetStatusFlags	R	R
Event_State	BACnetEventState	R	R
Reliability	BACnetReliability	0	n/a
Out_Of_Service	BOOLEAN	R	W
Units	BACnetEngineeringUnits	R	R
Priority_Array	BACnetPriorityArray	O <sup>1</sup>	R
Relinquish_Default	REAL	O <sup>1</sup>	R
COV_Increment	REAL	O <sup>2</sup>	R
Time_Delay	Unsigned	O <sup>3,6</sup>	n/a
Notification_Class	Unsigned	O <sup>3,6</sup>	n/a
High_Limit	REAL	O <sup>3,6</sup>	n/a
Low_Limit	REAL	O <sup>3,6</sup>	n/a
Deadband	REAL	O <sup>3,6</sup>	n/a
Limit_Enable	BACnetLimitEnable	O <sup>3,6</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>3,6</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>3,6</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>3,6</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>3,6</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>5,6</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sub>6</sub>	n/a
Event_Detection_Enable	BOOLEAN	O <sup>3,6</sup>	n/a
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sub>6</sub>	n/a
Event_Algorithm_Inhibit	BOOLEAN	O <sup>6,7</sup>	n/a
Time_Delay_Normal	Unsigned	O <sub>6</sub>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	O <sub>8</sub>	n/a
Min_Pres_Value	REAL	0	R
Max_Pres_Value	REAL	0	R
Resolution	REAL	0	R
Property_List	BACnetARRAY[N] of	R	R
	BACnetPropertyIdentifier		
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> These properties are required if, and shall be present only if, Present\_Value is commandable.

<sup>&</sup>lt;sup>8</sup> If this property is present, then the Reliability property shall be present.



<sup>&</sup>lt;sup>2</sup> This property is required if, and shall be present only if, the object supports COV reporting.

<sup>&</sup>lt;sup>3</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>6</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>7</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

### **Binary-Input Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
Troperty lucinimes	Troperty Butterype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	BACnetBinaryPV	R <sup>1</sup>	R
Description	CharacterString	0	R
Device_Type	CharacterString	0	n/a
Status_Flags	BACnetStatusFlags	R	R
Event_State	BACnetEventState	R	R
Reliability	BACnetReliability	0	n/a
Out_Of_Service	BOOLEAN	R	W
Polarity	BACnetPolarity	R	W
Inactive_Text	CharacterString	O <sup>2</sup>	n/a
Active_Text	CharacterString	O <sup>2</sup>	n/a
Change_Of_State_Time	BACnetDateTime	O <sup>3</sup>	n/a
Change_Of_State_Count	Unsigned	O <sup>3</sup>	n/a
Time_Of_State_Count_Reset	BACnetDateTime	O <sup>3</sup>	n/a
Elapsed_Active_Time	Unsigned32	O <sup>4</sup>	n/a
Time_Of_Active_Time_Reset	BACnetDateTime	O <sup>4</sup>	n/a
Time_Delay	Unsigned	O <sup>5,7</sup>	n/a
Notification_Class	Unsigned	O <sup>5,7</sup>	n/a
Alarm_Value	BACnetBinaryPV	O <sup>5,7</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>5,7</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>5,7</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>5,7</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>5,7</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>6,7</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>7</sup>	n/a
Event_Detection_Enable	BOOLEAN	O <sup>5,7</sup>	n/a
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>7</sup>	n/a
Event_Algorithm_Inhibit	BOOLEAN	O <sup>7,8</sup>	n/a
Time_Delay_Normal	Unsigned	O <sup>7</sup>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	O <sub>9</sub>	n/a
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R
   Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> This property is required to be writable when Out\_Of\_Service is TRUE.



<sup>&</sup>lt;sup>2</sup> If one of the optional properties Inactive\_Text or Active\_Text is present, then both of these properties shall be present.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>6</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>7</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>8</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>9</sup> If this property is present, then the Reliability property shall be present.

### **Binary-Output Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
Troperty Identifier	Troperty butatype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	BACnetBinaryPV	W	W
Description	CharacterString	0	R
Device_Type	CharacterString	0	n/a
Status_Flags	BACnetStatusFlags	R	R
Event_State	BACnetEventState	R	R
Reliability	BACnetReliability	0	n/a
Out_Of_Service	BOOLEAN	R	W
Polarity	BACnetPolarity	R	W
Inactive_Text	CharacterString	O <sup>1</sup>	n/a
Active_Text	CharacterString	O <sup>1</sup>	n/a
Change_Of_State_Time	BACnetDateTime	O <sup>2</sup>	n/a
Change_Of_State_Count	Unsigned	$O^2$	n/a
Time_Of_State_Count_Reset	BACnetDateTime	O <sup>2</sup>	n/a
Elapsed_Active_Time	Unsigned32	O <sub>3</sub>	n/a
Time_Of_Active_Time_Reset	BACnetDateTime	O <sub>3</sub>	n/a
Minimum_Off_Time	Unsigned32	0	n/a
Minimum_On_Time	Unsigned32	0	n/a
Priority_Array	BACnetPriorityArray	R	R
Relinquish_Default	BACnetBinaryPV	R	R
Time_Delay	Unsigned	O <sup>4,6</sup>	n/a
Notification_Class	Unsigned	O <sup>4,6</sup>	n/a
Feedback_Value	BACnetBinaryPV	O <sup>4</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>4,6</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>4,6</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>4,6</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>4,6</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>5,6</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>6</sup>	n/a
Event_Detection_Enable	BOOLEAN	O <sup>4,6</sup>	n/a
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sub>6</sub>	n/a
Event_Algorithm_Inhibit	BOOLEAN	O <sup>6,7</sup>	n/a
Time_Delay_Normal	Unsigned	O <sup>6</sup>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	O <sub>8</sub>	n/a
Property_List	BACnetARRAY[N] of	R	R
	BACnetPropertyIdentifier		
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> If one of the optional properties Inactive\_Text or Active\_Text is present, then both of these properties shall be present.

<sup>&</sup>lt;sup>8</sup> If this property is present, then the Reliability property shall be present.



<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>5</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>6</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>7</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

### **Binary-Value Object Type**

Property Identifier	Property Datatype	Conformance	Conformance	
. roperty ruentine.	Troperty Datatype	Code Standard	Code SuperWISE2	
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	R	
Object_Type	BACnetObjectType	R	R	
Present_Value	BACnetBinaryPV	R <sup>1</sup>	W <sup>11</sup>	
Description	CharacterString	0	R	
Status_Flags	BACnetStatusFlags	R	R	
Event_State	BACnetEventState	R	R	
Reliability	BACnetReliability	0	n/a	
Out_Of_Service	BOOLEAN	R	W	
Inactive_Text	CharacterString	O <sup>2</sup>	n/a	
Active_Text	CharacterString	O <sup>2</sup>	n/a	
Change_Of_State_Time	BACnetDateTime	O <sup>3</sup>	n/a	
Change_Of_State_Count	Unsigned32	O <sup>3</sup>	n/a	
Time_Of_State_Count_Reset	BACnetDateTime	O <sup>3</sup>	n/a	
Elapsed_Active_Time	Unsigned32	O <sup>4</sup>	n/a	
Time_Of_Active_Time_Reset	BACnetDateTime	O <sup>4</sup>	n/a	
Minimum_Off_Time	Unsigned32	0	n/a	
Minimum_On_Time	Unsigned32	0	n/a	
Priority_Array	BACnetPriorityArray	O <sup>5</sup>	R <sup>12</sup>	
Relinquish_Default	BACnetBinaryPV	O <sup>5</sup>	R <sup>12</sup>	
Time_Delay	Unsigned	O <sup>6,8</sup>	WP <sup>13</sup>	
Notification_Class	Unsigned	O <sup>6,8</sup>	WP <sup>13</sup>	
Alarm_Value	BACnetBinaryPV	O <sup>6,8</sup>	WP <sup>13</sup>	
Event_Enable	BACnetEventTransitionBits	O <sup>6,8</sup>	WP <sup>13</sup>	
Acked_Transitions	BACnetEventTransitionBits	O <sup>6,8</sup>	R <sup>13</sup>	
Notify_Type	BACnetNotifyType	O <sup>6,8</sup>	WP <sup>13</sup>	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>6,8</sup>	R <sup>13</sup>	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>7,8</sup>	n/a	
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sub>8</sub>	n/a	
Event_Detection_Enable	BOOLEAN	O <sup>6,8</sup>	WP <sup>13</sup>	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sub>8</sub>	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>8,9</sup>	n/a	
Time_Delay_Normal	Unsigned	O <sup>8</sup>	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	O <sup>10</sup>	n/a	
Property_List	BACnetARRAY[N] of	R	R	
	BACnetPropertyIdentifier			
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.



<sup>&</sup>lt;sup>2</sup> If one of the optional properties Inactive\_Text or Active\_Text is present, then both of these properties shall be present.

- <sup>4</sup> 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.
- <sup>5</sup> These properties are required if, and shall be present only if, Present\_Value is commandable.
- <sup>6</sup> These properties are required if the object supports intrinsic reporting.
- <sup>7</sup> This property, if present, is required to be read-only.
- <sup>8</sup> These properties shall be present only if the object supports intrinsic reporting.
- <sup>9</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.
- <sup>10</sup> If this property is present, then the Reliability property shall be present.
- <sup>11</sup> Present-Value is writable only if respective instance of object doesn't support intrinsic alarm related properties.
- <sup>12</sup> Properties are present only if respective instance of object doesn't support intrinsic alarm related properties.
- <sup>13</sup> Properties are present only if respective instance of object supports intrinsic alarm.



# Calendar Object Type

Property Identifier	Property Datatype	Conformance	Conformance
Troperty identifier	Troperty Bututype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Description	CharacterString	0	R
Present_Value	BOOLEAN	R	R
Date_List	BACnetLIST of BACnetCalendarEntry	R	W <sup>1</sup>
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> DateList: max. 10 entries.



### **Multistate-Input Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
rioperty identifier	Troperty Bututype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	Unsigned	R <sup>1</sup>	R
Description	CharacterString	0	R
Device_Type	CharacterString	0	n/a
Status_Flags	BACnetStatusFlags	R	R
Event_State	BACnetEventState	R	R
Reliability	BACnetReliability	0	n/a
Out_Of_Service	BOOLEAN	R	W
Number_Of_States	Unsigned	R	R
State_Text	BACnetARRAY[N] of CharacterString	0	R
Time_Delay	Unsigned	O <sup>3,5</sup>	n/a
Notification_Class	Unsigned	O <sup>3,5</sup>	n/a
Alarm_Values	BACnetLIST of Unsigned	O <sup>3,5</sup>	n/a
Fault_Values	BACnetLIST of Unsigned	O <sup>7</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>3,5</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>3,5</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>3,5</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>3,5</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>4,5</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>5</sup>	n/a
Event_Detection_Enable	BOOLEAN	O <sup>3,5</sup>	n/a
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>5</sup>	n/a
Event_Algorithm_Inhibit	BOOLEAN	O <sup>5,6</sup>	n/a
Time_Delay_Normal	Unsigned	O <sup>5</sup>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	O <sup>7</sup>	n/a
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> This property is required to be writable when Out\_Of\_Service is TRUE.



<sup>&</sup>lt;sup>2</sup> Footnote removed.

<sup>&</sup>lt;sup>3</sup> These properties are required if the object supports intrinsic reporting.

 $<sup>^{4}\,</sup>$  This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>5</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>6</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>7</sup> If this property is present, then the Reliability property shall be present.

### **Multistate-Output Object Type**

Property Identifier	Property Datatype	Conformance	Conformance Code SuperWISE2	
Troperty identifier	Troperty Butatype	Code Standard		
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	R	
Object_Type	BACnetObjectType	R	R	
Present_Value	Unsigned	W	W	
Description	CharacterString	0	R	
Device_Type	CharacterString	0	n/a	
Status_Flags	BACnetStatusFlags	R	R	
Event_State	BACnetEventState	R	R	
Reliability	BACnetReliability	0	n/a	
Out_Of_Service	BOOLEAN	R	W	
Number_Of_States	Unsigned	R	R	
State_Text	BACnetARRAY[N] of CharacterString	О	R	
Priority_Array	BACnetPriorityArray	R	n/a	
Relinquish_Default	Unsigned	R	n/a	
Time_Delay	Unsigned	O <sup>1,3</sup>	n/a	
Notification_Class	Unsigned	O <sup>1,3</sup>	n/a	
Feedback_Value	Unsigned	O <sup>1</sup>	n/a	
Event_Enable	BACnetEventTransitionBits	O <sup>1,3</sup>	n/a	
Acked_Transitions	BACnetEventTransitionBits	O <sup>1,3</sup>	n/a	
Notify_Type	BACnetNotifyType	O <sup>1,3</sup>	n/a	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>1,3</sup>	n/a	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>2,3</sup>	n/a	
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sup>3</sup>	n/a	
Event_Detection_Enable	BOOLEAN	O <sup>1,3</sup>	n/a	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>3</sup>	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>3,4</sup>	n/a	
Time_Delay_Normal	Unsigned	O <sup>3</sup>	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	O <sup>5</sup>		
Property_List BACnetARRAY[N] of BACnetPropertyIdentifier		R	R	
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> These properties are required if the object supports intrinsic reporting.



<sup>&</sup>lt;sup>2</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>3</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>4</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>5</sup> If this property is present, then the Reliability property shall be present.

### **Multistate-Value Object Type**

Property Identifier	Property Datatype	Conformance	Conformance	
Troperty lacination	Cod		Code SuperWISE2	
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	R	
Object_Type	BACnetObjectType	R	R	
Present_Value	Unsigned	R <sup>1</sup>	W	
Description	CharacterString	0	R	
Status_Flags	BACnetStatusFlags	R	R	
Event_State	BACnetEventState	R	R	
Reliability	BACnetReliability	0	n/a	
Out_Of_Service	BOOLEAN	R	W	
Number_Of_States	Unsigned	R	R	
State_Text	BACnetARRAY[N] of CharacterString	0	R	
Priority_Array	BACnetPriorityArray	O <sup>3</sup>	R	
Relinquish_Default	Unsigned	O <sup>3</sup>	R	
Time_Delay	Unsigned	O <sup>4,6</sup>	n/a	
Notification_Class	Unsigned	O <sup>4,6</sup>	n/a	
Alarm_Values	BACnetLIST of Unsigned	O <sup>4,6</sup>	n/a	
Fault_Values	BACnetLIST of Unsigned	O <sub>8</sub>	n/a	
Event_Enable	BACnetEventTransitionBits	O <sup>4,6</sup>	n/a	
Acked_Transitions	BACnetEventTransitionBits	O <sup>4,6</sup>	n/a	
Notify_Type	BACnetNotifyType	O <sup>4,6</sup>	n/a	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>4,6</sup>	n/a	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>5,6</sup>	n/a	
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sub>6</sub>	n/a	
Event_Detection_Enable	BOOLEAN	O <sup>4,6</sup>	n/a	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sub>6</sub>	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>6,7</sup>	n/a	
Time_Delay_Normal	Unsigned	O <sub>6</sub>	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	O8	n/a	
Property_List	perty_List BACnetARRAY[N] of BACnetPropertyIdentifier		R	
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> 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.



<sup>&</sup>lt;sup>2</sup> Footnote removed.

<sup>&</sup>lt;sup>3</sup> These properties are required if, and shall be present only if, Present\_Value is commandable.

<sup>&</sup>lt;sup>4</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>5</sup> This property, if present, is required to be read-only.

<sup>&</sup>lt;sup>6</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>7</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>8</sup> If this property is present, then the Reliability property shall be present.

# **Notification Class Object Type**

Property Identifier Property Datatype		Conformance	Conformance
. reperty ruentime.		Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Description	CharacterString	0	R
Notification_Class	Unsigned	R	R
Priority	BACnetARRAY[3] of Unsigned	R	WP
Ack_Required	BACnetEventTransitionBits	R	WP
Recipient_List	BACnetLIST of BACnetDestination	R	WP <sup>1</sup>
Property_List	BACnetARRAY[N] of	R	R
	BACnetPropertyIdentifier		
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> Recipient-List: max. 10 entries.



### **Event Enrollment Object**

Property Identifier	Property Datatype	Conformance	Conformance	
Troperty lucitanies	Troperty Bututype	Code Standard	Code SuperWISE2	
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	WP	
Object_Type	BACnetObjectType	R	R	
Description	CharacterString	0	WP	
Event_Type	BACnetEventType	R	R	
Notify_Type	BACnetNotifyType	R	WP	
Event_Parameters	BACnetEventParameter	R	WP	
Object_Property_Reference	BACnetDeviceObjectPropertyReference	R	WP	
Event_State	BACnetEventState	R	R	
Event_Enable	BACnetEventTransitionBits	R	WP	
Acked_Transitions	BACnetEventTransitionBits	R	R	
Notification_Class	Unsigned	R	WP	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	R	R	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	0	n/a	
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	0	n/a	
Event_Detection_Enable	BOOLEAN	R	WP	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	0	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>2</sup>	n/a	
Time_Delay_Normal	Unsigned	0	n/a	
Status_Flags	BACnetStatusFlags	R	R	
Reliability	BACnetReliability	R	R	
Fault_Type	BACnetFaultType	O <sub>3</sub>	n/a	
Fault_Parameters	BACnetFaultParameter	O3	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	0	n/a	
Property_List BACnetARRAY[N] of		R	R	
	BACnetPropertyIdentifier			
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> Footnote removed.

<sup>&</sup>lt;sup>2</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

<sup>&</sup>lt;sup>3</sup> These properties are required if, and shall be present only if, the object supports fault algorithms other than NONE.

### Schedule Object Type

Property Identifier	Property Datatype	Conformance	Conformance
Troperty Identifier	Troperty Butatype	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Present_Value	Any	R	R
Description	CharacterString	0	R
Effective_Period	BACnetDateRange	R	WP
Weekly_Schedule	BACnetARRAY[7] of BACnetDailySchedule	O <sup>1</sup>	WP <sup>4</sup>
Exception_Schedule	BACnetARRAY[N] of BACnetSpecialEvent	O <sup>1</sup>	WP <sup>5</sup>
Schedule_Default	Any	R	WP
List_Of_Object_Property_	BACnetLIST of	R	WP <sup>6</sup>
References	BACnetDeviceObjectPropertyReference		
Priority_For_Writing	Unsigned(116)	R	WP
Status_Flags	BACnetStatusFlags	R	R
Reliability	BACnetReliability	R	R
Out_Of_Service	BOOLEAN	R	W
Event_Detection_Enable	BOOLEAN	O <sup>2,3</sup>	n/a
Notification_Class	Unsigned	O <sup>2,3</sup>	n/a
Event_Enable	BACnetEventTransitionBits	O <sup>2,3</sup>	n/a
Event_State	BACnetEventState	O <sup>2,3</sup>	n/a
Acked_Transitions	BACnetEventTransitionBits	O <sup>2,3</sup>	n/a
Notify_Type	BACnetNotifyType	O <sup>2,3</sup>	n/a
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>2,3</sup>	n/a
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>3</sup>	n/a
Event_Message_Texts_Config	BACnetARRAY[3] of CharacterString	O <sub>3</sub>	n/a
Reliability_Evaluation_Inhibit	BOOLEAN	0	n/a
Property_List	erty_List BACnetARRAY[N] of BACnetPropertyIdentifier		R
Profile_Name	CharacterString	0	n/a

<sup>&</sup>lt;sup>1</sup> At least one of these properties is required.



<sup>&</sup>lt;sup>2</sup> These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>3</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>4</sup> Weekly\_Schedule: max. 10 Time-Values per day.

<sup>&</sup>lt;sup>5</sup> Exception\_Schedule: max. 10 entries with 10 Time-Values each.

<sup>&</sup>lt;sup>6</sup> List\_Of\_Object\_Property\_references: max. 10 entries.

### **Trend Log Object Type**

Property Identifier	Property Datatype	Conformance	Conformance	
Troperty identifier	Troperty Bututype	Code Standard	Code SuperWISE2	
Object_Identifier	BACnetObjectIdentifier	R	R	
Object_Name	CharacterString	R	WP	
Object_Type	BACnetObjectType	R	R	
Description	CharacterString	0	WP	
Enable	BOOLEAN	W	WP	
Start_Time	BACnetDateTime	O <sup>1,2</sup>	WP	
Stop_Time	BACnetDateTime	O <sup>1,2</sup>	WP	
Log_DeviceObjectProperty	BACnetDeviceObjectPropertyReference	O8	WP	
Log_Interval	Unsigned	O <sup>1,3</sup>	WP	
COV_Resubscription_Interval	Unsigned	0	n/a	
Client_COV_Increment	BACnetClientCOV	0	WP	
Stop_When_Full	BOOLEAN	R	WP	
Buffer_Size	Unsigned32	R	R	
Log_Buffer	BACnetLIST of BACnetLogRecord	R	R	
Record_Count	Unsigned32	W	W	
Total_Record_Count	Unsigned32	R	R	
   Logging_Type	BACnetLoggingType	R	R	
Align_Intervals	BOOLEAN	O <sup>5</sup>	n/a	
Interval_Offset	Unsigned	O <sup>5</sup>	n/a	
Trigger	BOOLEAN	0	n/a	
Status_Flags	BACnetStatusFlags	0	n/a	
Reliability	BACnetReliability	0	R	
Notification_Threshold	Unsigned32	O <sup>4,7</sup>	WP	
Records_Since_Notification	Unsigned32	O <sup>4,7</sup>	R	
Last_Notify_Record	Unsigned32	O <sup>4,7</sup>	R	
Event_State	BACnetEventState	R	R	
Notification_Class	Unsigned	O <sup>4,7</sup>	WP	
Event_Enable	BACnetEventTransitionBits	O <sup>4,7</sup>	WP	
Acked_Transitions	BACnetEventTransitionBits	O <sup>4,7</sup>	R	
Notify_Type	BACnetNotifyType	O <sup>4,7</sup>	WP	
Event_Time_Stamps	BACnetARRAY[3] of BACnetTimeStamp	O <sup>4,7</sup>	R	
Event_Message_Texts	BACnetARRAY[3] of CharacterString	O <sup>7</sup>	n/a	
Event_Message_Texts_Config	_		n/a	
Event_Detection_Enable	BOOLEAN	O <sup>4,7</sup>	WP	
Event_Algorithm_Inhibit_Ref	BACnetObjectPropertyReference	O <sup>7</sup>	n/a	
Event_Algorithm_Inhibit	BOOLEAN	O <sup>7,9</sup>	n/a	
Reliability_Evaluation_Inhibit	BOOLEAN	O <sup>10</sup>	n/a	
Property_List	Property_List BACnetARRAY[N] of		R	
	BACnetPropertyIdentifier			
Profile_Name	CharacterString	0	n/a	

<sup>&</sup>lt;sup>1</sup> These properties are required if the monitored property is a BACnet property.

<sup>&</sup>lt;sup>10</sup> If this property is present, then the Reliability property shall be present.



If present, these properties are required to be writable.

If present, this properties are required to be writable.
 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.
 These properties are required if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>5</sup> These properties are required if, and shall be present only if, the object supports clock-aligned logging.

<sup>&</sup>lt;sup>6</sup> Footnote removed.

<sup>&</sup>lt;sup>7</sup> These properties shall be present only if the object supports intrinsic reporting.

<sup>&</sup>lt;sup>8</sup> This property is required if, and shall be present only if, the monitored property is a BACnet property.

<sup>&</sup>lt;sup>9</sup> Event\_Algorithm\_Inhibit shall be present if Event\_Algorithm\_Inhibit\_Ref is present.

### **Structured View Object Type**

Property Identifier	Property Datatype	Conformance	Conformance
Tropersy ruenamen	Troperty Dutately po	Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Description	CharacterString	0	R
Node_Type	BACnetNodeType	R	R
Node_Subtype	CharacterString	0	R
Subordinate_List  BACnetARRAY[N] of BACnetDeviceObjectReference		R	R
Subordinate_Annotations BACnetARRAY[N] of CharacterString		О	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R
Profile_Name	CharacterString	0	n/a

### File Object Type

Property Identifier	Property Datatype	Conformance	Conformance
,		Code Standard	Code SuperWISE2
Object_Identifier	BACnetObjectIdentifier	R	R
Object_Name	CharacterString	R	R
Object_Type	BACnetObjectType	R	R
Description	CharacterString	0	R
File_Type	CharacterString	R	R
File_Size	Unsigned	R <sup>1</sup>	R
Modification_Date	BACnetDateTime	R	R
Archive	BOOLEAN	R	W
Read_Only	BOOLEAN	R	R
File_Access_Method	BACnetFileAccessMethod	R	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R	R

<sup>&</sup>lt;sup>1</sup> 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.



Seg	mentation Capability:		
$\boxtimes$	Segmented requests supported	Window Size: 64	
$\boxtimes$	Segmented responses supported	Window Size: 64	
Date    Date	BACnet IP, (Annex J) BACnet IP, (Annex J), BACnet Broadcast Mana 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), 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 Point-To-Point, modem, (Clause 10), baud rate LonTalk, (Clause 11), medium Other	baud rate(s) e(s)	
ls st	vice Address Binding: tatic device binding supported? (This is currentle other devices.)	y necessary for two-way commu	nication with MS/TP slaves and cer-
	Yes No		
Net □ □ ⊠	tworking Options:  Router, Clause 6 - List all routing configuratio Annex H, BACnet Tunneling Router over IP BACnet/IP Broadcast Management Device (BB Does the BBMD support registrations by F	BMD)	net-MS/TP, etc.  □ No
Cha	aracter Sets Supported:		
	cating support for multiple character sets does	not imply that they can all be su	pported simultaneously.
$\boxtimes$	,	Microsoft DBCS	I ISO 8859-1
	ISO 10646 (UCS-2) □ ISO	10646 (UCS-4) □	JIS C 6226
	teway Options: s product is a communication gateway that sup	pports below non-BACnet equipn	nent's,
	WISE directors and radio devices se equipment's are mapped as BACnet Analog eway. This product uses virtual BACnet devices		n Swegon SuperWISE BACnet
	twork Security Options: cating support for multiple character sets does	not imply that they can all be su	pported simultaneously.
	Non-secure Device - is capable of operating w Secure Device - is capable of using BACnet No Multiple Application-Specific Keys Supports encryption (NS-ED BIBB) Key Server (NS-KS BIBB)	_	

