



**SEM3 – Siemens Embedded Micro Metering Module
BACnet Protocol Implementation Conformance Statement
(PICS)
Product Discription V1.1**

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1 SEM3 – Siemens Embedded Micro Metering Module

Date	: 8 th May 2017
Vendor name	: Siemens Industry, Inc., Energy Management division, Low Voltage and Products
Vendor Id	313
Product name	: SEM3 – Siemens Embedded Micro Metering Module
Product model number	: <i>US2:SEM3CONTROLLER</i>
BACnet protocol version	: 14
Application software version	: 2.3.8.AG
Firmware revision	: 1.8

1.1 Product description

Siemens Embedded Micro Metering Module (SEM3) is a modular metering solution for energy monitoring, data analysis and sub-billing applications.

1.2 BACnet standardized device profile (Annex L)

<input type="checkbox"/>	BACnet Advanced Workstation	(B-AWS)
<input type="checkbox"/>	BACnet Operator Workstation	(B-OWS)
<input type="checkbox"/>	BACnet Operator Display	(B-OD)
<input type="checkbox"/>	BACnet Building Controller	(B-BC)
<input type="checkbox"/>	BACnet Advanced Application Controller	(B-AAC)
<input type="checkbox"/>	BACnet Application Specific Controller	(B-ASC)
<input checked="" type="checkbox"/>	BACnet Smart Sensor	(B-SS)
<input type="checkbox"/>	BACnet Smart Actuator	(B-SA)

1.3 BACnet interoperability building blocks supported (Annex K)

Data sharing

<input type="checkbox"/>	Data Sharing – Read Property-A	DS-RP-A
<input checked="" type="checkbox"/>	Data Sharing – Read Property-B	DS-RP-B
<input type="checkbox"/>	Data Sharing – Read Property Multiple-A	DS-RPM-A
<input type="checkbox"/>	Data Sharing – Read Property Multiple-B	DS-RPM-B
<input type="checkbox"/>	Data Sharing – Write Property-A	DS-WP-A
<input checked="" type="checkbox"/>	Data Sharing – Write Property-B	DS-WP-B
<input type="checkbox"/>	Data Sharing – Write Property Multiple-A	DS-WPM-A
<input type="checkbox"/>	Data Sharing – Write Property Multiple-B	DS-WPM-B
<input type="checkbox"/>	Data Sharing – Change of Value -A	DS-COV-A
<input checked="" type="checkbox"/>	Data Sharing – Change of Value -B	DS-COV-B
<input type="checkbox"/>	Data Sharing – Change of Value Property -A	DS-COVP-A
<input type="checkbox"/>	Data Sharing – Change of Value Property -B	DS-COVP-B
<input type="checkbox"/>	Data Sharing – Change of Value-Unsolicited-A	DS-COVU-A
<input type="checkbox"/>	Data Sharing – Change of Value-Unsolicited-B	DS-COVU-B
<input type="checkbox"/>	Data Sharing – View-A	DS-V-A
<input type="checkbox"/>	Data Sharing – Advanced View-A	DS-AV-A
<input type="checkbox"/>	Data Sharing – Modify-A	DS-M-A
<input type="checkbox"/>	Data Sharing – Advanced Modify-A	DS-AM-A

Alarm and event management

<input type="checkbox"/>	Alarm and Event – Notification-A	AE-N-A
<input checked="" type="checkbox"/>	Alarm and Event – Notification Internal-B	AE-N-I-B
<input type="checkbox"/>	Alarm and Event – Notification External-B	AE-N-E-B
<input type="checkbox"/>	Alarm and Event – ACK-A	AE-ACK-A
<input checked="" type="checkbox"/>	Alarm and Event – ACK-B	AE-ACK-B
<input type="checkbox"/>	Alarm and Event – Alarm Summary-B	AE-ASUM-B
<input type="checkbox"/>	Alarm and Event – Enrollment Summary-B	AE-ESUM-B
<input checked="" type="checkbox"/>	Alarm and Event – Information-B	AE-INFO-B
<input type="checkbox"/>	Alarm and Event – Life Safety-A	AE-LS-A
<input type="checkbox"/>	Alarm and Event – Life Safety-B	AE-LS-B
<input type="checkbox"/>	Alarm and Event – View Notifications-A	AE-VN-A
<input type="checkbox"/>	Alarm and Event – Advanced View Notifications-A	AE-AVN-A
<input type="checkbox"/>	Alarm and Event – View and Modify-A	AE-VM-A
<input type="checkbox"/>	Alarm and Event – Advanced View and Modify-A	AE-AVM-A
<input type="checkbox"/>	Alarm and Event – Alarm Summary View-A	AE-AS-A
<input type="checkbox"/>	Alarm and Event – Event Log View-A	AE-ELV-A
<input type="checkbox"/>	Alarm and Event – Event Log View and Modify-A	AE-ELVM-A
<input type="checkbox"/>	Alarm and Event – Event Log Internal-B	AE-EL-I-B
<input type="checkbox"/>	Alarm and Event – Event Log External-B	AE-EL-E-B

Alarm and event management**Historical/Deprecated BIBBs**

<input type="checkbox"/>	Alarm and Event – Alarm Summary-A	AE-ASUM-A
<input type="checkbox"/>	Alarm and Event – Enrollment Summary-A	AE-ESUM-A
<input type="checkbox"/>	Alarm and Event – Information-A	AE-INFO-A

Scheduling

<input type="checkbox"/>	Scheduling – Internal-B	SCHED-I-B
<input type="checkbox"/>	Scheduling – External-B	SCHED-E-B
<input type="checkbox"/>	Scheduling – Advanced View Modify-A	SCHED-AVM-A
<input type="checkbox"/>	Scheduling – View Modify-A	SCHED-VM-A
<input type="checkbox"/>	Scheduling – Weekly Schedule-A	SCHED-WS-A
<input type="checkbox"/>	Scheduling – Weekly Schedule Internal-B	SCHED-WS-I-B
<input type="checkbox"/>	Scheduling – Readable-B	SCHED-R-B

Historical/Deprecated BIBBs

<input type="checkbox"/>	Scheduling – A	SCHED-A
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Trending

<input type="checkbox"/>	Trending – Viewing and Modifying Trends-A	T-VMT-A
<input type="checkbox"/>	Trending – Viewing and Modifying Internal-B	T-VMT-I-B
<input type="checkbox"/>	Trending – Viewing and Modifying External-B	T-VMT-E-B
<input type="checkbox"/>	Trending – Viewing and Modifying Multiple Values-A	T-VMMV-A
<input type="checkbox"/>	Trending – Viewing and Modifying Multiple Values Internal-B	T-VMMV-I-B
<input type="checkbox"/>	Trending – Viewing and Modifying Multiple Values External -B	T-VMMV-E-B
<input type="checkbox"/>	Trending – Automated Multiple Value Retrieval-A	T-AMVR-A
<input type="checkbox"/>	Trending – Automated Multiple Value Retrieval-B	T-AMVR-B
<input type="checkbox"/>	Trending – View-A	T-V-A
<input type="checkbox"/>	Trending – Advanced View and Modify-A	T-AVM-A
<input type="checkbox"/>	Trending – Archival-A	T-A-A
<input type="checkbox"/>	Trending – Automated Trend Retrieval-A	T-ATR-A
<input type="checkbox"/>	Trending – Automated Trend Retrieval-B	T-ATR-B

Historical/Deprecated BIBBs

<input type="checkbox"/>	Trending – Viewing and Modifying Trends-A	T-VMT-A
<input type="checkbox"/>	Trending – Viewing and Modifying Multiple Values-A	T-VMMV-A

Device management

<input checked="" type="checkbox"/>	Device Management – Dynamic Device Binding-A	DM-DDB-A
<input checked="" type="checkbox"/>	Device Management – Dynamic Device Binding-B	DM-DDB-B
<input type="checkbox"/>	Device Management – Dynamic Object Binding-A	DM-DOB-A
<input checked="" type="checkbox"/>	Device Management – Dynamic Object Binding-B	DM-DOB-B
<input type="checkbox"/>	Device Management – Device Communication Control-A	DM-DCC-A
<input type="checkbox"/>	Device Management – Device Communication Control-B	DM-DCC-B
<input type="checkbox"/>	Device Management – Private Transfer-A	DM-PT-A
<input type="checkbox"/>	Device Management – Private Transfer-B	DM-PT-B
<input type="checkbox"/>	Device Management – Text Message-A	DM-TM-A
<input type="checkbox"/>	Device Management – Text Message-B	DM-TM-B

Device management

<input type="checkbox"/>	Device Management – Time Synchronization-A	DM-TS-A
<input type="checkbox"/>	Device Management – Time Synchronization-B	DM-TS-B
<input type="checkbox"/>	Device Management – UTC Time Synchronization-A	DM-UTC-A
<input type="checkbox"/>	Device Management – UTC Time Synchronization-B	DM-UTC-B
<input type="checkbox"/>	Device Management – Reinitialize Device-A	DM-RD-A
<input type="checkbox"/>	Device Management – Reinitialize Device-B	DM-RD-B
<input type="checkbox"/>	Device Management – Backup and Restore-A	DM-BR-A
<input type="checkbox"/>	Device Management – Backup and Restore-B	DM-BR-B
<input type="checkbox"/>	Device Management – Restart-A	DM-R-A
<input type="checkbox"/>	Device Management – Restart-B	DM-R-B
<input type="checkbox"/>	Device Management – List Manipulation-A	DM-LM-A
<input type="checkbox"/>	Device Management – List Manipulation-B	DM-LM-B
<input type="checkbox"/>	Device Management – Object Creation and Deletion-A	DM-OCD-A
<input type="checkbox"/>	Device Management – Object Creation and Deletion-B	DM-OCD-B
<input type="checkbox"/>	Device Management – Virtual Terminal-A	DM-VT-A
<input type="checkbox"/>	Device Management – Virtual Terminal-B	DM-VT-B
<input type="checkbox"/>	Device Management – Automatic Network Mapping-A	DM-ANM-A
<input type="checkbox"/>	Device Management – Automatic Device Mapping-A	DM-ADM-A
<input type="checkbox"/>	Device Management – Automatic Time Synchronization-A	DM-ATS-A
<input type="checkbox"/>	Device Management – Manual Time Synchronization-A	DM-MTS-A

Network management

<input type="checkbox"/>	Network Management – Connection Establishment-A	NM-CE-A
<input type="checkbox"/>	Network Management – Connection Establishment-B	NM-CE-B
<input type="checkbox"/>	Network Management – Router Configuration-A	NM-RC-A
<input type="checkbox"/>	Network Management – Router Configuration-B	NM-RC-B

1.4 Standard object types supported

Object type	Supported	Can be created dynamically	Can be deleted dynamically
Analog Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analog Output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analog Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Binary Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Binary Output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Binary Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calendar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Command	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Device	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Event Enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
File	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-State Input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-State Output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notification Class	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Averaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-State Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trend Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Life-Safety-Point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Life-Safety-Zone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accumulator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulse-Converter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Event Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Global Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trend Log Multiple	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structured-View	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access Door	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(unassigned)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access Credential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access Point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access Rights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access Zone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential Data Input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Network Security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bitstring Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Characterstring Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Object type	Supported	Can be created dynamically	Can be deleted dynamically
Date Pattern Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Datetime Pattern Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Datetime Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integer Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Large Analog Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Octetstring Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Positive Integer Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time Pattern Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time Value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Analog Input

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input checked="" type="checkbox"/>	R	
Object_Name	<input checked="" type="checkbox"/>	R+W ¹	Max 9 Characters
Object_Type	<input checked="" type="checkbox"/>	R	
Present_Value	<input checked="" type="checkbox"/>	R	
Description	<input type="checkbox"/>		
Device_Type	<input type="checkbox"/>		
Status_Flags	<input checked="" type="checkbox"/>	R	
Event_State	<input checked="" type="checkbox"/>	R	
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input checked="" type="checkbox"/>	R	
Update_Interval	<input type="checkbox"/>		
Units	<input checked="" type="checkbox"/>	R	
Min_Pres_Value	<input type="checkbox"/>		
Max_Pres_Value	<input type="checkbox"/>		
Resolution	<input type="checkbox"/>		
COV_Increment	<input checked="" type="checkbox"/>	R+W ²	-999999 to 999999
Time_Delay	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
High_Limit	<input type="checkbox"/>		
Low_Limit	<input type="checkbox"/>		
Deadband	<input type="checkbox"/>		
Limit_Enable	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		
Property-list	<input checked="" type="checkbox"/>	R	

Notes:

Optional Properties:	COV_Increment
Proprietary Properties:	None
Property Range Restrictions:	¹ Object Name length should not be greater than 9 characters. ² COV_increment range is -999999 to 999999.

Analog Value

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input type="checkbox"/>		
Object_Name	<input type="checkbox"/>		
Object_Type	<input type="checkbox"/>		
Present_Value	<input type="checkbox"/>		
Description	<input type="checkbox"/>		
Status_Flags	<input type="checkbox"/>		
Event_State	<input type="checkbox"/>		
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input type="checkbox"/>		
Units	<input type="checkbox"/>		
Priority_Array	<input type="checkbox"/>		
Relinquish_Default	<input type="checkbox"/>		
COV_Increment	<input type="checkbox"/>		
Time_Delay	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
High_Limit	<input type="checkbox"/>		
Low_Limit	<input type="checkbox"/>		
Deadband	<input type="checkbox"/>		
Limit_Enable	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		

Binary Input

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input checked="" type="checkbox"/>	R	
Object_Name	<input checked="" type="checkbox"/>	R+W ¹	Max 9 Characters
Object_Type	<input checked="" type="checkbox"/>	R	
Present_Value	<input checked="" type="checkbox"/>	R+W ²	
Description	<input type="checkbox"/>		
Device_Type	<input type="checkbox"/>		
Status_Flags	<input checked="" type="checkbox"/>	R	
Event_State	<input checked="" type="checkbox"/>	R	
Reliability	<input checked="" type="checkbox"/>	R + W	
Out_Of_Service	<input checked="" type="checkbox"/>	R + W	
Polarity	<input checked="" type="checkbox"/>	R	
Inactive_Text	<input type="checkbox"/>		
Active_Text	<input type="checkbox"/>		
Change_Of_State_Time	<input type="checkbox"/>		
Change_Of_State_Count	<input type="checkbox"/>		
Time_Of_State_Count_Reset	<input type="checkbox"/>		
Elapsed_Active_Time	<input type="checkbox"/>		
Time_Of_Active_Time_Reset	<input type="checkbox"/>		
Time_Delay	<input checked="" type="checkbox"/>	R	
Notification_Class	<input checked="" type="checkbox"/>	R	
Alarm_Value	<input checked="" type="checkbox"/>	R	
Event_Enable	<input checked="" type="checkbox"/>	R	
Acked_Transitions	<input checked="" type="checkbox"/>	R	
Notify_Type	<input checked="" type="checkbox"/>	R	
Event_Time_Stamps	<input checked="" type="checkbox"/>	R	
Event_Message_Texts	<input checked="" type="checkbox"/>	R	
Event_Message_Texts_Config	<input checked="" type="checkbox"/>	R	
Event_Algorithm_Inhibit_Ref	<input checked="" type="checkbox"/>	R	
Event_Algorithm_Inhibit	<input checked="" type="checkbox"/>	R	
Time_Delay_Normal	<input checked="" type="checkbox"/>	R	
Profile_Name	<input type="checkbox"/>		
Event_Detection_Enable	<input checked="" type="checkbox"/>	R	
Property-list	<input checked="" type="checkbox"/>	R	

Notes:

Optional Properties:	<ul style="list-style-type: none"> Time_Delay Notification_Class Alarm_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps Event_Detection_Enable Event_Message_Texts_Config Event_Algorithm_Inhibit_Ref Event_Algorithm_Inhibit Time_Delay_Normal
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Proprietary Properties:	None
Property Range Restrictions:	¹ Object Name length should not be greater than 9 characters. ² Present_Value property is writable only when Out_Of_Service is TRUE

Binary Output

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input type="checkbox"/>		
Object_Name	<input type="checkbox"/>		
Object_Type	<input type="checkbox"/>		
Present_Value	<input type="checkbox"/>		
Description	<input type="checkbox"/>		
Status_Flags	<input type="checkbox"/>		
Event_State	<input type="checkbox"/>		
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input type="checkbox"/>		
Polarity	<input type="checkbox"/>		
Inactive_Text	<input type="checkbox"/>		
Active_Text	<input type="checkbox"/>		
Change_Of_State_Time	<input type="checkbox"/>		
Change_Of_State_Count	<input type="checkbox"/>		
Time_Of_State_Count_Reset	<input type="checkbox"/>		
Elapsed_Active_Time	<input type="checkbox"/>		
Time_Of_Active_Time_Reset	<input type="checkbox"/>		
Minimum_Off_Time	<input type="checkbox"/>		
Minimum_On_Time	<input type="checkbox"/>		
Priority_Array	<input type="checkbox"/>		
Relinquish_Default	<input type="checkbox"/>		
Time_Delay	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
Alarm_Value	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		

Binary Value

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input type="checkbox"/>		
Object_Name	<input type="checkbox"/>		
Object_Type	<input type="checkbox"/>		
Present_Value	<input type="checkbox"/>		
Description	<input type="checkbox"/>		
Status_Flags	<input type="checkbox"/>		
Event_State	<input type="checkbox"/>		
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input type="checkbox"/>		
Inactive_Text	<input type="checkbox"/>		
Active_Text	<input type="checkbox"/>		
Change_Of_State_Time	<input type="checkbox"/>		
Change_Of_State_Count	<input type="checkbox"/>		
Time_Of_State_Count_Reset	<input type="checkbox"/>		
Elapsed_Active_Time	<input type="checkbox"/>		
Time_Of_Active_Time_Reset	<input type="checkbox"/>		
Minimum_Off_Time	<input type="checkbox"/>		
Minimum_On_Time	<input type="checkbox"/>		
Priority_Array	<input type="checkbox"/>		
Relinquish_Default	<input type="checkbox"/>		
Time_Delay	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
Alarm_Value	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		

Device

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input checked="" type="checkbox"/>	R+W ¹	
Object_Name	<input checked="" type="checkbox"/>	R+W ²	Max. 19 Characters
Object_Type	<input checked="" type="checkbox"/>	R	
System_Status	<input checked="" type="checkbox"/>	R	
Vendor_Name	<input checked="" type="checkbox"/>	R	
Vendor_Identifier	<input checked="" type="checkbox"/>	R	
Model_Name	<input checked="" type="checkbox"/>	R	
Firmware_Revision	<input checked="" type="checkbox"/>	R	
Application_Software_Version	<input checked="" type="checkbox"/>	R	
Location	<input type="checkbox"/>		
Description	<input checked="" type="checkbox"/>	R+W ³	Max. 63 Characters
Protocol_Version	<input checked="" type="checkbox"/>	R	
Protocol_Revision	<input checked="" type="checkbox"/>	R	
Protocol_Services_Supported	<input checked="" type="checkbox"/>	R	
Protocol_Object_Types_Supported	<input checked="" type="checkbox"/>	R	
Object_List	<input checked="" type="checkbox"/>	R	
Structured_Object_List	<input type="checkbox"/>		
Max_APDU_Length_Accepted	<input checked="" type="checkbox"/>	R	
Segmentation_Supported	<input checked="" type="checkbox"/>	R	
Max_Segments_Accepted	<input type="checkbox"/>		
VT_Classes_Supported	<input type="checkbox"/>		
Active_VT_Sessions	<input type="checkbox"/>		
Local_Time	<input checked="" type="checkbox"/>	R	
Local_Date	<input checked="" type="checkbox"/>	R	
UTC_Offset	<input type="checkbox"/>		
Daylight_Savings_Status	<input type="checkbox"/>		
APDU_Segment_Timeout	<input type="checkbox"/>		
APDU_Timeout	<input checked="" type="checkbox"/>	R	
Number_Of_APDU_Retries	<input checked="" type="checkbox"/>	R	
List_Of_Session_Keys	<input type="checkbox"/>		
Time_Synchronization_Recipients	<input type="checkbox"/>		
Max_Master	<input checked="" type="checkbox"/>	R+W ⁴	1 to 127
Max_Info_Frames	<input checked="" type="checkbox"/>	R	
Device_Address_Binding	<input checked="" type="checkbox"/>	R	
Database_Revision	<input checked="" type="checkbox"/>	R	
Configuration_Files	<input type="checkbox"/>		
Last_Restore_Time	<input type="checkbox"/>		
Backup_Failure_Timeout	<input type="checkbox"/>		
Backup_Preparation_Time	<input type="checkbox"/>		
Restore_Preparation_Time	<input type="checkbox"/>		
Restore_Completion_Time	<input type="checkbox"/>		
Backup_And_Restore_State	<input type="checkbox"/>		
Active_COV_Subscriptions	<input checked="" type="checkbox"/>	R	

Properties	supported	Readable/ Writable	Range restrictions
Slave_Proxy_Enable	<input type="checkbox"/>		
Manual_Slave_Adress_Binding	<input type="checkbox"/>		
Auto_Slave_Discovery	<input type="checkbox"/>		
Slave_Address_Binding	<input type="checkbox"/>		
Last_Restart_Reason	<input type="checkbox"/>		
Time_Of_Device_Restart	<input type="checkbox"/>		
Restart_Notification_Recipients	<input type="checkbox"/>		
UTC_Time_Synchronization_Recipients	<input type="checkbox"/>		
Time_Synchronization_Interval	<input type="checkbox"/>		
Align_Intervals	<input type="checkbox"/>		
Interval_Offset	<input type="checkbox"/>		
Serial_Number	<input checked="" type="checkbox"/>	R	
Profile_Name	<input type="checkbox"/>		
Property-list	<input checked="" type="checkbox"/>	R	

Notes:

Optional Properties:	<p>For BACnet/IP following Optional properties are supported</p> <ol style="list-style-type: none"> Serial_Number, Active-COV-Subscriptions, Local_Time, Local_Date, Description <p>For BACnet/MS-TP, following properties are supported</p> <ol style="list-style-type: none"> Serial_Number, Max_Master, Max_Info_Frames, Active-COV-Subscriptions, Local_Time, Local_Date, Description
Proprietary Properties:	<p>5000, 5001, 5002, 5003, 5004, 5005, 5006, 5007</p> <p>For both BACNet/IP and BACnet/MS-TP, following Proprietary properties are supported.</p> <ol style="list-style-type: none"> Ipaddr_Proprietary, Gateway_Proprietary, Subnet_Mask_Proprietary, Voltage_Mode_Proprietary, Line_To_Line_Proprietary, Line_To_Neutral_Proprietary, Pt_Primary_Voltage_Proprietary, Pt_Secondary_Voltage_Proprietary
Property Range Restrictions:	<p>¹ Object Identifier's range is (0 - 4194302).</p> <p>² Object Name's length should not be greater than 19 characters.</p> <p>³ Description's length should not be greater than 63 characters.</p> <p>⁴ In BACNet/MSTP Max Master is writable and its range is (1 - 127).</p>

Multistate Value

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input type="checkbox"/>		
Object_Name	<input type="checkbox"/>		
Object_Type	<input type="checkbox"/>		
Present_Value	<input type="checkbox"/>		
Description	<input type="checkbox"/>		
Status_Flags	<input type="checkbox"/>		
Event_State	<input type="checkbox"/>		
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input type="checkbox"/>		
Number_Of_States	<input type="checkbox"/>		
State_Text	<input type="checkbox"/>		
Priority_Array	<input type="checkbox"/>		
Relinquish_Default	<input type="checkbox"/>		
Time_Delay	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
Alarm_Values	<input type="checkbox"/>		
Fault_Values	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		

Notification Class

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input checked="" type="checkbox"/>	R+W ¹	
Object_Name	<input checked="" type="checkbox"/>	R+W ²	Max.19 Characters
Object_Type	<input checked="" type="checkbox"/>	R	
Description	<input type="checkbox"/>		
Notification_Class	<input checked="" type="checkbox"/>	R	
Priority	<input checked="" type="checkbox"/>	R	
Ack_Required	<input checked="" type="checkbox"/>	R+W	
Recipient_List	<input checked="" type="checkbox"/>	R+W ³	
Property_List	<input checked="" type="checkbox"/>	R	
Profile_Name	<input type="checkbox"/>		

Notes:

Optional Properties:	None
Proprietary Properties:	None
Property Range Restrictions:	¹ Object Identifier's range is (0 - 4194302). ² Object Name length should not be greater than 19 characters. ³ Maximum 5 recipients are supported.

Schedule

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input type="checkbox"/>		
Object_Name	<input type="checkbox"/>		
Object_Type	<input type="checkbox"/>		
Present_Value	<input type="checkbox"/>		
Description	<input type="checkbox"/>		
Effective_Period	<input type="checkbox"/>		
Weekly_Schedule	<input type="checkbox"/>		
Exception_Schedule	<input type="checkbox"/>		
Schedule_Default	<input type="checkbox"/>		
List_Of_Object_Property_References	<input type="checkbox"/>		
Priority_For_Writing	<input type="checkbox"/>		
Status_Flags	<input type="checkbox"/>		
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input type="checkbox"/>		
Profile_Name	<input type="checkbox"/>		

Accumulator

Properties	supported	Readable/ Writable	Range restrictions
Object_Identifier	<input checked="" type="checkbox"/>	R	
Object_Name	<input checked="" type="checkbox"/>	R+W ¹	Max.19 Characters
Object_Type	<input checked="" type="checkbox"/>	R	
Present_Value	<input checked="" type="checkbox"/>	R	
Description	<input type="checkbox"/>		
Device_Type	<input type="checkbox"/>		
Status_Flags	<input checked="" type="checkbox"/>	R	
Event_State	<input checked="" type="checkbox"/>	R	
Reliability	<input type="checkbox"/>		
Out_Of_Service	<input checked="" type="checkbox"/>	R	
Scale	<input checked="" type="checkbox"/>	R+W ²	-999999 to 999999
Units	<input checked="" type="checkbox"/>	R+W ³	
Prescale	<input type="checkbox"/>		
Max_Pres_Value	<input checked="" type="checkbox"/>	R+W ⁴	
Value_Change_Time	<input type="checkbox"/>		
Value_Before_Change	<input type="checkbox"/>		
Value_Set	<input type="checkbox"/>		
Logging_Record	<input type="checkbox"/>		
Logging_Object	<input type="checkbox"/>		
Pulse_Rate	<input type="checkbox"/>		
High_Limit	<input type="checkbox"/>		
Low_Limit	<input type="checkbox"/>		
Limit_Monitoring_Interval	<input type="checkbox"/>		
Notification_Class	<input type="checkbox"/>		
Time_Delay	<input type="checkbox"/>		
Limit_Enable	<input type="checkbox"/>		
Event_Enable	<input type="checkbox"/>		
Acked_Transitions	<input type="checkbox"/>		
Notify_Type	<input type="checkbox"/>		
Event_Time_Stamps	<input type="checkbox"/>		
Event_Message_Texts	<input type="checkbox"/>		
Event_Message_Texts_Config	<input type="checkbox"/>		
Event_Message_Texts	<input type="checkbox"/>		
Event_Detection_Enable	<input type="checkbox"/>		
Event_Algorithm_Inhibit_Ref	<input type="checkbox"/>		
Event_Algorithm_Inhibit	<input type="checkbox"/>		
Time_Delay_Normal	<input type="checkbox"/>		
Reliability_Evaluation_Inhibit	<input type="checkbox"/>		
Property_List	<input checked="" type="checkbox"/>	R	

Notes:

Optional Properties:	None
Proprietary Properties:	None

Property Range Restrictions:	¹ Object Name length should not be greater than 19 characters. ² Scale Range is -999999 to 999999. ³ Supported Units are as below. GALLON (BACNet VAL - 83) CUBIC FEET (BACNet VAL - 79) LITERS (BACNet VAL - 82) CUBIC METERS (BACNet VAL - 80) THERM (BACNet VAL - 21) BTU (BACNet VAL - 20) CUBIC FOOT (Selected as Proprietary Unit value and BACNet VAL - 300) ⁴ Max_Pres_Value range is between 0 to 4294967295
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1.5 Segmentation capability

<input type="checkbox"/>	Able to transmit segmented messages	Window size	16
<input type="checkbox"/>	Able to receive segmented messages	Window size	16

1.6 Data Link Layer options

The simultaneously supported Data Link Layers of a product are listed with the product model number.

<input checked="" type="checkbox"/>	BACnet/IP, (Annex J)	
<input type="checkbox"/>	BACnet/IP, (Annex J), Foreign Device	
<input type="checkbox"/>	ISO 8802-3, Ethernet (Clause 7)	
<input type="checkbox"/>	ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)	
<input type="checkbox"/>	ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s)	
<input checked="" type="checkbox"/>	MS-TP master (Clause 9), baud rate(s)	: 9600 : 19200 : 38400 : 57600 : 76800 : 115200
<input type="checkbox"/>	MS-TP slave (Clause 9), baud rate(s)	: 9600 : 19200 : 38400 : 57600 : 76800 : 115200
<input type="checkbox"/>	Point-To-Point, EIA 232 (Clause 10), baud rate(s)	: 38400
<input type="checkbox"/>	Point-To-Point, modem, (Clause 10), baud rate(s)	: 38400
<input type="checkbox"/>	LonTalk, (Clause 11), medium	: TP/FT-10
<input type="checkbox"/>	Other	

Only one of the BACnet/IP or BACnet/MS-TP protocol is actively supported in run time. The selection is performed at start of the application configuration.

1.7 Device address binding

Is static device binding supported?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Device Address Binding Supported for a list of 5 devices only.

1.8 Networking options

<input type="checkbox"/>	Router, Clause 6 (remote management functionality/BACnet PTP)		
<input type="checkbox"/>	Annex H, BACnet Tunnelling Router over IP		
<input type="checkbox"/>	BACnet/IP Broadcast Management Device (BBMD) Number of BDT entries: Number of FDT entries:		
	Does the BBMD support registrations by foreign devices?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

1.9 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 (or ANSI X3.4)	<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