



SAUTER BACnet PICS

SAUTER modulo 5 ecos504/505

BACnet Protocol Implementation Conformance Statement

D100275255 - 07

Note:

This statement corresponds to the ANSI/ASHRAE 135-2020 release. Changes are taking place constantly, without prior notification.

Trademarks:

ASHRAE, ASHRAE BACnet are registered trademarks of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE)

BACnet is a trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE)

Other brand names or product names mentioned are trademarks and/or registered trademarks of the owners of the respective rights.

Legend:

This document contains tables with symbols and abbreviations for which the following legend applies:

<input checked="" type="checkbox"/>	yes, supported	<input type="checkbox"/>	no, not supported
-, n/a	not applicable	CC	Conformance Code
()	comments in parenthesis	R	Required Readable
W	Required Readable and Writable	O	(Conditionally) Optional
OC	Dynamic object creation	OD	Dynamic object deletion
OOS	Out-Of-Service writeable	COV	Change of value
CMD	Object commandable	IR/AR	Intrinsic / Algorithmic change reporting

Content

Content	3
I. BACnet Protocol Implementation Conformance Statement	5
I.1 SAUTER EY-modulo 5 Room Automation Controllers	5
I.1.1 BACnet Conformance Certificate (BCC)	5
I.1.2 Product Description	5
I.1.3 BACnet Standardized Device Profile (Annex L)	5
I.1.4 BACnet Interoperability Building Blocks (Annex K)	6
I.1.5 Segmentation Capability	7
I.1.6 Object Types	8
I.1.7 Data Link Layer Options	35
I.1.8 Device Address Binding	35
I.1.9 Networking Options	35
I.1.10 Character Sets	35
I.1.11 Communication Gateway	35

I. BACnet Protocol Implementation Conformance Statement

I.1 SAUTER EY-modulo 5 Room Automation Controllers

Date	February 2022
Vendor Name	Fr. Sauter AG (Vendor ID: 80)
Product Name	EY-modulo 5 Room Automation Controller
Product Model Number	All BACnet Room Automation Station ecos504 and ecos505: EY-RC504Fxxx¹ where xxx ¹ is 001, 011, 021, 041, 0C1, 0D1, 101, 202 EY-RC505Fxxx² where xxx ² is 031, 051, 061, 071, 081, 091, 0A1, 0B1, 0E1, 0F1, 0G1, 0H1, 0J1, 0K1
Applications Software Version	2.22 (CASE Engine Interface, Function Index)
Firmware Revision	V4.0.1 (BACnet Firmware)
BACnet Protocol Revision	Version 1, Revision 16

I.1.1 BACnet Conformance Certificate (BCC)

BACnet Profile	B-BC, B-LD, B-GW
Date	28 th Feb 2022
Test Report	21.080.002.002 (iHomeLab)
BTL-Listing	BTL-30832
Firmware	V4.0.1
Model	EY-RC504Fxxx ¹ EY-RC505Fxxx ²

I.1.2 Product Description

The SAUTER BACnet Room Automation Stations ecos504/505 from the family SAUTER modulo are programmable automation stations for common room automation control applications (e.g. room control, light, blinds, fan...). The software component on the controller is a BACnet Server and includes as well BACnet Client functionality for peer-to-peer communication with other BACnet devices. It has integrated BBMD and FD functionality.

The ecos504/505 are BACnet Building Controllers (B-BC) with integrated gateway capabilities to support fieldbus systems like SLC/RS-485, EnOcean via SLC/RS-485, KNX/TP1, DALI, SMI, Modbus/RTU+ASCII via RS-485 and M-Bus. Adding a software component allows to combine BACnet with MQTT to communicate with the IoT world.

I.1.3 BACnet Standardized Device Profile (Annex L)

- B-BC BACnet Building Controller
- B-LD BACnet Lighting Device
- B-GW BACnet Gateway

I.1.4 BACnet Interoperability Building Blocks (Annex K)

Supported BIBBs

Data Sharing-	BIBB	-A	-B
Read Property-	DS-RP-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Read Property Multiple-	DS-RPM-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Write Property-	DS-WP-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Write Property Multiple-	DS-WPM-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Change Of Value-	DS-COV-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Change Of Value Property-	DS-COVP-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Change Of Value Unsubscribed-	DS-COVU-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lighting Output-	DS-LO-	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Alarm and Event Management-	BIBB	-A	-B
Notification-	AE-N-	<input checked="" type="checkbox"/>	-
Notification-Internal-	AE-N-I-	-	<input checked="" type="checkbox"/>
Notification-External-	AE-N-E-	-	<input checked="" type="checkbox"/>
Acknowledge-	AE-ACK-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alarm Summary-	AE-ASUM-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Enrollment Summary-	AE-ESUM-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Information-	AE-INFO-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Event-Log-Internal-	AE-EL-I-	-	<input checked="" type="checkbox"/>
Event Log-External-	AE-EL-E-	-	<input checked="" type="checkbox"/>
Configurable Recipient Lists-	AE-CRL-	-	<input checked="" type="checkbox"/>

Scheduling-	BIBB	-A	-B
Internal-	SCHED-I-	-	<input checked="" type="checkbox"/>
External-	SCHED-E-	-	<input checked="" type="checkbox"/>

Trending-	BIBB	-A	-B
Viewing and Modifying Trends-Internal-	T-VMT-I-	-	<input checked="" type="checkbox"/>
Viewing and Modifying Trends-External-	T-VMT-E-	-	<input checked="" type="checkbox"/>
Automated Trend Retrieval-	T-ATR-	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Device Management- / Gateway-	BIBB	-A	-B
Dynamic Device Binding-	DM-DDB-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dynamic Object Binding-	DM-DOB-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Device Communication Control-	DM-DCC-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Time Synchronization	DM-TS-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
UTC Time Synchronization-	DM-UTC-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reinitialize Device-	DM-RD-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Backup and Restore-	DM-BR-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Restart-	DM-R-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
List Manipulation-	DM-LM-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Object Creation and Deletion-	DM-OCD-	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Device Management- / Gateway-	BIBB	-A	-B
Automatic Time Synchronization-	DM-ATS-	<input checked="" type="checkbox"/>	-
Embedded Objects-	GW-EO-	-	<input checked="" type="checkbox"/>

The table below consolidates all BIBBs required for B-BC, B-LD, B-GW profile as of Annex L. Supplementary BIBBs are in *italics*.

Data Sharing	Alarm & Event Management	Scheduling	Trending	Device & Network Management / Gateway
DS-RP-A, -B DS-RPM-A, -B DS-WP-A, -B DS-WPM-B <i>DS-COV-A, -B</i> <i>DS-COVP-B</i> <i>DS-COVU-A, -B</i> DS-LO-B	AE-N-I-B AE-ACK-B AE-INFO-B AE-CRL-B <i>AE-N-E-B</i> <i>AE-ESUM-B</i> <i>AE-ASUM-B</i> <i>AE-EL-I-B</i> <i>AE-EL-E-B</i> AE-N-A	SCHED-E-B <i>SCHED-I-B</i>	T-VMT-I-B T-ATR-B <i>T-VMT-E-B</i>	DM-DDB-A, -B DM-DOB-B DM-DCC-B DM-TS-B DM-UTC-B DM-RD-B DM-BR-B <i>DM-TS-A</i> <i>DM-UTC-A</i> <i>DM-ATS-A</i> <i>DM-LM-B</i> <i>DM-OCD-B</i> <i>DM-R-A, -B</i> GW-EO-B

I.1.5 Segmentation Capability

- Able to transmit segmented messages
- Able to receive segmented messages

Window Size: 16
Window Size: 16

I.1.6 Object Types

Standard and proprietary object types are supported and may be present in the device.

Note:

Present-Value and Reliability properties are writable when Out-Of-Service = True.

Standard and proprietary objects may support optional functionality (Overview):

Object Type	ID	OC	OD	CMD	OOS	COV	IR/AR
Analog Input	0	<input type="checkbox"/>	<input type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analog Output	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analog Value	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Input	3	<input type="checkbox"/>	<input type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Output	4	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary Value	5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Calendar	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-
Command	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	-
Device	8	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
Event Log	25	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>
Event Enrollment	9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>
File	10	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
Lighting Output	54	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
Loop	12	<input type="checkbox"/>	<input type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-State Input	13	<input type="checkbox"/>	<input type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-State Output	14	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-State Value	19	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notification Class	15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-
Positive Integer Value	48	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Program	16	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
Pulse Converter	24	<input type="checkbox"/>	<input type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Schedule	17	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	-	-
Structured View	29	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-
Trend Log	20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	<input checked="" type="checkbox"/>
IO Unit	384	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-

Some standard objects may have proprietary properties in addition (Clause 23). There are no specific property range restrictions except those within the system SAUTER modulo and the range restrictions of the BACnet Standard. Supported standard and proprietary objects may support the following optional and proprietary properties and in addition to the standard conformance code some writable properties:

I.1.6.1 Device Management

Device (DEV = 8)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
System-Status	R	<input checked="" type="checkbox"/>		
Vendor-Name	R	<input checked="" type="checkbox"/>		
Vendor-Identifier	R	<input checked="" type="checkbox"/>		
Model-Name	R	<input checked="" type="checkbox"/>		
Firmware-Revision	R	<input checked="" type="checkbox"/>		
Application-Software-Version	R	<input checked="" type="checkbox"/>		
Location	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Protocol-Version	R	<input checked="" type="checkbox"/>		
Protocol-Revision	R	<input checked="" type="checkbox"/>		
Protocol-Services-Supported	R	<input checked="" type="checkbox"/>		
Protocol-Object-Types-Supported	R	<input checked="" type="checkbox"/>		
Object-List	R	<input checked="" type="checkbox"/>		
Structured-Object-List	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Max-APDU-Length-Accepted	R	<input checked="" type="checkbox"/>		
Segmentation-Supported	R	<input checked="" type="checkbox"/>		
Max-Segments-Accepted	O	<input checked="" type="checkbox"/>		
Local-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(time sync service)
Local-Date	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(time sync service)
UTC-Offset	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-780..780 (configurable)
Daylight-Savings-Status	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(automatic DST)
APDU-Segment-Timeout	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
APDU-Timeout	R	<input checked="" type="checkbox"/>		
Number-Of-APDU-Retries	R	<input checked="" type="checkbox"/>		
Time-Synchronization-Recipients	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 recipients)
Device-Address-Binding	R	<input checked="" type="checkbox"/>		(up to 100 devices)
Database-Revision	R	<input checked="" type="checkbox"/>		
Configuration-Files	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Last-Restore-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Backup-Failure-Timeout	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Backup-Preparation-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Restore-Preparation-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Restore-Completion-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Backup-And-Restore-State	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Active-COV-Subscriptions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Last-Restart-Reason	O	<input checked="" type="checkbox"/>		
Time-Of-Device-Restart	O	<input checked="" type="checkbox"/>		
Restart-Notification-Recipients	O	<input checked="" type="checkbox"/>		(up to 32 recipients)
UTC-Time-Synchronization-Recipients	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 recipients)
Time-Synchronization-Interval	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Align-Intervals	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Interval-Offset	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Serial-Number	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Standard Property	CC	R	W	Range Restriction
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
MAC-Address	8207	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hardware-Revision	8208	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Log-Object-List	8252	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Firmware-Index	8255	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Serial-Number	8277	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Production-Date	8278	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flag-Sum	8300	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Number-Of-Active-Transition	8301	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Number-Of-Open-Transition	8302	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
MSP-Version	8313	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-Character-Set	8351	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0: UTF8; 5: ISO-8859-1
Sauter-DST-Start-Date	8352	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DST-End-Date	8353	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DST-Start-Offset	8354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DST-End-Offset	8355	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-Disable-Event-Message-Text	8358	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Battery-OK-Indication	8380	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-Latitude	8348	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Longitude	8347	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Software-Product	8357	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

File (FL = 10)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
File-Type	R	<input checked="" type="checkbox"/>		
File-Size	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (delete)
Modification-Date	R	<input checked="" type="checkbox"/>		
Archive	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Read-Only	R	<input checked="" type="checkbox"/>		
File-Access-Method	R	<input checked="" type="checkbox"/>		
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Program (PRG = 16)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Program-State	R	<input checked="" type="checkbox"/>		
Program-Change	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reason-For-Halt	O	<input checked="" type="checkbox"/>		
Description-Of-Halt	O	<input checked="" type="checkbox"/>		
Program-Location	O	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Instance-Of	O	<input checked="" type="checkbox"/>		
Status-Flags	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>		
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Download-User	8322	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Download-Comment	8323	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DDC-Inputs	8257	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DDC-Outputs	8258	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DDC-Params	8259	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sauter-DDC-Memories	8260	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Structured View (SV = 29)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(up to 128 characters)
Node-Type	R	<input checked="" type="checkbox"/>		
Node-Subtype	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Subordinate-List	R	<input checked="" type="checkbox"/>		
Subordinate-Annotations	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I.1.6.2 Input, Output, Value

Analog Input (AI = 0)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Update-Interval	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Min-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Resolution	O	<input checked="" type="checkbox"/>		
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Limit-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>		
Interface-Value	R	<input checked="" type="checkbox"/>		
Fault-High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Fault-Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Offset	8250	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	REAL
Slope	8251	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	REAL
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Analog Output (AO = 1)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Min-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Resolution	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Priority-Array	R	<input checked="" type="checkbox"/>		
Relinquish-Default	R	<input checked="" type="checkbox"/>		
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Limit-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>		
Interface-Value	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Min-Hardware-Value	8248	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	REAL
Max-Hardware-Value	8249	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	REAL
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Hardware-Output-Value	8334	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Analog Value (AV = 2)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(CMD enabled)
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-Array	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Relinquish-Default	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Limit-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Min-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Resolution	O	<input type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fault-High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Fault-Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(CMD enabled)
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Min-Range-Value	8332	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Range-Value	8333	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Binary Input (BI = 3)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-value	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Polarity	R	<input checked="" type="checkbox"/>		
Inactive-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Active-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Change-Of-State-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Change-Of-State-Count	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-State-Count-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Elapsed-Active-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-Active-Time-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Alarm-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Interface-Value	O	<input checked="" type="checkbox"/>		
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)

Binary Output (BO = 4)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Polarity	R	<input checked="" type="checkbox"/>		
Inactive-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Active-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Change-Of-State-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Change-Of-State-Count	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-State-Count-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Elapsed-Active-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-Active-Time-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Minimum-Off-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Minimum-On-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-Array	R	<input checked="" type="checkbox"/>		
Relinquish-Default	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Feedback-Value	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Interface-Value	O	<input checked="" type="checkbox"/>		
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hardware-Output-Value	8334	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Binary Value (BV = 5)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(CMD enabled)
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Inactive-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Active-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 32 characters)
Change-Of-State-Time	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Change-Of-State-Count	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-State-Count-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Elapsed-Active-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (reset)
Time-Of-Active-Time-Reset	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Minimum-Off-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Minimum-On-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-Array	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Relinquish-Default	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Alarm-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(CMD enabled)

Multi-State Input (MI = 13)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Number-Of-States	R	<input checked="" type="checkbox"/>		
State-Text	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Alarm-Values	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Fault-Values	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Interface-Value	O	<input checked="" type="checkbox"/>		
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)

Multi-State Output (MO = 14)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.. up to 12
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Device-Type	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Number-Of-States	R	<input checked="" type="checkbox"/>		
State-Text	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Priority-Array	R	<input checked="" type="checkbox"/>		
Relinquish-Default	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Feedback-Value	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Interface-Value	O	<input checked="" type="checkbox"/>		
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hardware-Output-Value	8334	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Multi-State Value (MV = 19)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.. up to 12 (CMD enbl.)
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Number-Of-States	R	<input checked="" type="checkbox"/>		
State-Text	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Priority-Array	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Relinquish-Default	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Alarm-Values	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fault-Values	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(CMD enabled)

Positive Integer Value (PIV = 48)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Present-Value	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(CMD enabled)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-Array	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Relinquish-Default	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Limit-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Min-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Pres-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fault-High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Fault-Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Interface-Value	O	<input checked="" type="checkbox"/>		
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(CMD enabled)
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Lighting Output (LO = 54)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Tracking-Value	R	<input checked="" type="checkbox"/>		
Lighting-Command	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
In-Progress	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Blink-Warn-Enable	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Egress-Time	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Egress-Active	R	<input checked="" type="checkbox"/>		
Default-Fade-Time	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Default-Ramp-Rate	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Default-Step-Increment	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Transition	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-Array	R	<input checked="" type="checkbox"/>		
Relinquish-Default	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Min-Actual-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Max-Actual-Value	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Lighting-Command-Default-Priority	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Priority-Array-Reset	8309	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Default-On-Value	8337	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-On-Delay	8338	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Manual-Priority	8341	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Manual-Timeout	8342	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Fading-Mode	8385	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Lamp-Curve	8386	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sauter-Output-Is-Active	8387	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I.1.6.3 Scheduling

Calendar (CAL = 6)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Present-Value	R	<input checked="" type="checkbox"/>		
Date-List	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Schedule (SCHD = 17)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Effective-Period	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Weekly-Schedule	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Exception-Schedule	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Schedule-Default	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
List-Of-Object-Property-References	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-For-Writing	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>		
Reliability	R	<input checked="" type="checkbox"/>		
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I.1.6.4 Alarm and Event Management

Event Enrollment (EE = 9)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Event-Type	R	<input checked="" type="checkbox"/>		Floating_Limit (4) Out-of-range (5), Unsigned-range (11), Signed-out-of-range (15), Unsigned-out-of-range (16), Change-of-status-flags (18)
Notify-Type	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Parameters	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(see event-type)
Object-Property-Reference	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-State	R	<input checked="" type="checkbox"/>		
Event-Enable	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	R	<input checked="" type="checkbox"/>		
Notification-Class	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	R	<input checked="" type="checkbox"/>		
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(W, when no Ref set)
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Status-flags	R	<input checked="" type="checkbox"/>		
Reliability	R	<input checked="" type="checkbox"/>		
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)

Notification Class (NC = 15)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Notification-Class	R	<input checked="" type="checkbox"/>		
Priority	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Ack-Required	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Recipient-List	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Status-Flag-Sum	8300	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Number-Of-Active-Transition	8301	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Number-Of-Open-Transition	8302	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I.1.6.5 Trending and Logging

Trend Log (TL = 20)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Enable	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Start-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Stop-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Log-DeviceObjectProperty	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Log-Interval	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
COV-Resubscription-Interval	O	<input type="checkbox"/>	<input type="checkbox"/>	
Client-COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(NULL)
Stop-When-Full	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Buffer-Size	R	<input checked="" type="checkbox"/>		(Create only)
Log-Buffer	R	<input checked="" type="checkbox"/>		
Record-Count	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (Reset)
Total-Record-Count	R	<input checked="" type="checkbox"/>		
Logging-Type	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Align-Intervals	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Interval-Offset	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Trigger	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Status-Flags	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notification-Threshold	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Records-Since-Notification	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Last-Notify-Record	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-State	R	<input checked="" type="checkbox"/>		
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Event Log (EL = 25)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Property-List	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Enable	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Start-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Stop-Time	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Stop-When-Full	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Buffer-Size	R	<input checked="" type="checkbox"/>		Max. 8 (Create only)
Log-Buffer	R	<input checked="" type="checkbox"/>		
Record-Count	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 (Reset)
Total-Record-Count	R	<input checked="" type="checkbox"/>		
Notification-Threshold	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Records-Since-Notification	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Last-Notify-Record	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Sauter-Event-Log-Accepted-List	8413	<input checked="" type="checkbox"/>		

I.1.6.6 Application

Command (CMD = 7)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[0..12]
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
In-Process	R	<input checked="" type="checkbox"/>		
All-Writes-Successful	R	<input checked="" type="checkbox"/>		
Action	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(array, up to 12, max. 16 action commands each)
Action-Text	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(array, up to 12, max. 32 characters long each)
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Pulse Converter (PC = 24)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Present-Value	R	<input checked="" type="checkbox"/>		
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Scale-Factor	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Adjust-Value	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Count	R	<input checked="" type="checkbox"/>		
Update-Time	R	<input checked="" type="checkbox"/>		
Count-Change-Time	R	<input checked="" type="checkbox"/>		
Count-Before-Change	R	<input checked="" type="checkbox"/>		
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
COV-Period	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Low-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Limit-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Reference	8244	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Event-Suppress-Active	8245	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Hardware-Input-Module-Id	8263	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hardware-Input-Channel-Id	8264	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PC-Limit-Monitoring-Interval	8281	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unsigned, 1..86400
PC-Pulse-Rate	8282	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	REAL

Loop (LP = 12)

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Present-Value	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Status-Flags	R	<input checked="" type="checkbox"/>		
Event-State	R	<input checked="" type="checkbox"/>		
Reliability	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Out-Of-Service	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Update-Interval	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Output-Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Manipulated-Variable-Reference	R	<input checked="" type="checkbox"/>		
Controlled-Variable-Reference	R	<input checked="" type="checkbox"/>		
Controlled-Variable-Value	R	<input checked="" type="checkbox"/>		
Controlled-Variable-Units	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Setpoint-Reference	R	<input checked="" type="checkbox"/>		
Setpoint	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(W, if no Setpoint-Ref)
Action	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Proportional-Constant	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Proportional-Constant-Units	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Integral-Constant	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Integral-Constant-Units	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Derivative-Constant	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Derivative-Constant-Units	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Bias	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Maximum-Output	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Minimum-Output	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Priority-For-Writing	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COV-Increment	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Time-Delay	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Notification-Class	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Error-Limit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Deadband	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Enable	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Acked-Transitions	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notify-Type	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Time-Stamps	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Message-Texts-Config	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Event-Detection-Enable	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit-Ref	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event-Algorithm-Inhibit	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(W, when no Ref set)
Time-Delay-Normal	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reliability-Evaluation-Inhibit	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Event-Suppress-Cascade-Active	8246	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(IR enabled)
Controller-Deadband	8262	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COV-Synchronization-Period	8314	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

I.1.6.7 Proprietary Objects

The proprietary objects are implemented according to all requirements for Conformance and Interoperability (Clause 22) and according to Extending BACnet To Accommodate Vendor Proprietary Information (Clause 23).

There are no specific property range restrictions except those specified in the BACnet Standard.

Proprietary object types are supported as listed:

IO Unit (IOU = 384)

Description: The IO-Unit object type defines the hardware units and represents the hardware inputs and outputs from the BACnet building controller and from the I/O-modules, the operating panel and the communication modules connected to the controller.

Standard Property	CC	R	W	Range Restriction
Object-Identifier	R	<input checked="" type="checkbox"/>		
Object-Name	R	<input checked="" type="checkbox"/>		
Object-Type	R	<input checked="" type="checkbox"/>		
Description	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(up to 128 characters)
Firmware-Revision	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Property-List	R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile-Name	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
System-Status	O	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ¹

Proprietary Property	ID	R	W	Property Datatype Range Restriction
Hardware-Revision	8208	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IOunit-Idx	8227	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Plugged-In	8228	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Serial-Number-Actual	8230	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
OP-Unit-Serial-Number-Expected	8235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Model-Name-Expected	8237	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Model-Name-Actual	8238	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Channel-Values	8239	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ¹
Channel-Types	8240	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ¹
Sauter-On-Delay	8338	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ¹
cm-protocol-id-actual	8269	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ²
cm-protocol-id-expected	8270	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ²
cm-protocol-version	8271	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O ²
cm-status	8276	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	O ²

O¹: Properties only present for ecoLink (EY-EM: IO modules), ecoUnit (EY-RU: room units), ecosCom581 (EY-CM581: EnOcean-GW), when IOunit-Idx ∈ [1000,1031;2000,2031;1500,1503;2500,2503;1498,1499;2498,2499]

O²: Properties only present for ecosCom (EY-CM: COM modules), when IOunit-Idx ∈ [1,3]

BACnet Protocol Implementation Conformance Statement

I.1.7 Data Link Layer Options

- | | | |
|-------------------------------------|----------------------|---|
| <input checked="" type="checkbox"/> | BACnet IP, (Annex J) | |
| <input checked="" type="checkbox"/> | BACnet IP, (Annex J) | BACnet Broadcast Management Device (BBMD) |
| <input type="checkbox"/> | BACnet IP, (Annex J) | Network Address Translation (NAT Traversal) |

I.1.8 Device Address Binding

- Static device binding supported ¹

I.1.9 Networking Options

- Router (Clause 6) List of all routing configurations:
 BACnet Tunneling Router over IP (Annex H)

I.1.10 Character Sets

Supports following character sets²:

- | | | | | | |
|-------------------------------------|-------------------|--------------------------|----------------------|-------------------------------------|------------|
| <input checked="" type="checkbox"/> | ISO 10646 (UTF-8) | <input type="checkbox"/> | IBM™/Microsoft™ DBCS | <input checked="" type="checkbox"/> | ISO 8859-1 |
| <input type="checkbox"/> | ISO 10646 (UCS-2) | <input type="checkbox"/> | ISO 10646 (UCS-4) | <input type="checkbox"/> | JIS 0208 |

Outgoing character strings are communicated according to the selected character set (Sauter-character-set).

Incoming character strings with character sets other than ISO 10646 (UTF-8) will be mapped to ISO 10646 (UTF-8) internally.

I.1.11 Communication Gateway

In conjunction with the extension module ecosCom581, EnOcean devices can be supported (ISO/IEC 14543-3-10).

The room automation stations ecos504/505 can have up to 3 communication modules with a various combination of physical interfaces to communicate with Non-BACnet devices on a sub-network. Following sub-network communication protocols are supported:

- KNX/TP1 for KNX integration (ISO/IEC 14543-3)
- DALI as DALI-2 application controller (IEC 62386)
- SMI(LoVo) as SMI actuator (Standard Motor Interface)
- RS-485 for Modbus/RTU- and Modbus/ASCII-Master
- M-Bus (EN 13757-2) and RS-232 as M-Bus-Master (EN 13757-3)

The room automation stations ecos504/505 uses the basic approach to be a BACnet gateway as of Clause H.1.1.3 of ASHRAE 135-2020.

¹ This is currently necessary for two-way communication with MS/TP slaves and certain other devices.

² Indicating support for multiple character sets does not imply that they can all be supported simultaneously.



© Fr. Sauter AG

Im Surinam 55

CH-4058 Basel

Tel. +41 61 - 695 55 55

Fax +41 61 - 695 55 10

www.sauter-controls.com

info@sauter-controls.com

Printed in Switzerland

Document Revision: 07

Released: 14.03.2022