



GREYSTONE
ENERGY SYSTEMS INC



GDT SERIES

Toxic Gas Detector

Setup Guide for BACnet® Communication



The Device BACnet® objects allow configuration of the device. Device object properties are shown below.

Object Type	Object Identifier	Object Name	Description	Default
Device	381003	Gas Sensor 003		
Analog Input	AI 1	CO Sensor Value	0 to 500 ppm, Resolution = 1 ppm	
	AI 2	NO2 Sensor Value	0 to 10 ppm, Resolution = 0.1 ppm	
	AI 3	Temperature Sensor Value	-20 to 50°C or -4 to 122°F, Res = 0.1°	
Analog Value	AV 1	CO Buzzer Setpoint	20 to 500 ppm, Resolution = 10 ppm	150 ppm
	AV 2	CO Buzzer Delay	0 to 10 minutes, Resolution = 1 minute	5 minutes
	AV 3	NO2 Buzzer Setpoint	1 to 10 ppm, Resolution = 1 ppm	2 ppm
	AV 4	NO2 Buzzer Delay	0 to 10 minutes, Resolution = 1 minute	5 minutes
	AV 5	Alarm1 Setpoint	20 to 500 ppm CO, Resolution = 10 ppm	50 ppm
			1 to 10 ppm NO2, Resolution = 1 ppm	2 ppm
	AV 6	Alarm1 Hysteresis	10 to 100 ppm CO, Resolution = 5 ppm	10 ppm
			0.5 to 2.0 ppm NO2, Resolution = 0.5 ppm	0.5 ppm
	AV 7	Alarm1 Delay	0 to 10 minutes, Resolution = 1 minute	2 minutes
	AV 8	Alarm2 Setpoint	20 to 500 ppm CO, Resolution = 10 ppm	150 ppm
			1 to 10 ppm NO2, Resolution = 1 ppm	4 ppm
	AV 9	Alarm2 Hysteresis	10 to 100 ppm CO, Resolution = 5 ppm	20 ppm
			0.5 to 2.0 ppm NO2, Resolution = 0.5 ppm	0.5 ppm
	AV 10	Alarm2 Delay	0 to 10 minutes, Resolution = 1 minute	2 minutes
	AV 11	Test Mode Time	1 to 15 minutes, Resolution = 1 minute	5 minutes
	AV 12	CO Fault Mode Time	3 to 6 years, Resolution = 1 year	3 years
	AV 13	NO2 Fault Mode Time	1 to 4 years, Resolution = 1 year	2 years
	AV 14	CO ReCal Mode Time	1 to 3 years, Resolution = 1 year	1 year
	AV 15	NO2 ReCal Mode Time	1 to 3 years, Resolution = 1 year	1 year
	AV 16	Temperature Offset	-5 to 5 Δ°C, Resolution = 0.1 Δ°C -10 to 10 Δ°F, Resolution = 0.1 Δ°F	0.0 Δ°C 0.0 Δ°F
AV 17	CO Strobe Setpoint	20 to 500 ppm, Resolution = 10 ppm	150 ppm	
AV 18	CO Strobe Delay	0 to 10 minutes, Resolution = 1 minute	5 minutes	
AV 19	NO2 Strobe Setpoint	1 to 10 ppm, Resolution = 1 ppm	2 ppm	
AV 20	NO2 Strobe Delay	0 to 10 minutes, Resolution = 1 minute	5 minutes	
Binary Value	BV 1	Buzzer Alarm	0 = Disable, 1 = Enable	1
	BV 2	CO Buzzer Alarm	0 = Disable, 1 = Enable	1
	BV 3	NO2 Buzzer Alarm	0 = Disable, 1 = Enable	1
	BV 4	Buzzer Alarm Test	0 = Normal, 1 = Test	0
	BV 5	Alarm1 Assignment	0 = CO, 1 = NO2	0
	BV 6	Alarm2 Assignment	0 = CO, 1 NO2	0
	BV 7	Alarm Mode Operation	0 = Auto Reset, 1 = Manual Reset	0
	BV 8	Relay1 Operation	0 = Direct, 1 = Reverse	0
	BV 9	Relay2 Operation	0 = Direct, 1 = Reverse	0
	BV 10	Relay1 Test	0 = Normal, 1 = Test	0
	BV 11	Relay2 Test	0 = Normal, 1 = Test	0
	BV 12	Test Mode Enable	0 = Disable, 1 = Enable	0
	BV 13	CO Fault Mode Enable	0 = Disable, 1 = Enable	0
	BV 14	CO Fault Mode Reset	0 = Normal 1 = Reset	0
	BV 15	NO2 Fault Mode Enable	0 = Disable, 1 = Enable	0
	BV 16	NO2 Fault Mode Reset	0 = Normal, 1 = Reset	0
	BV 17	CO ReCal Mode Enable	0 = Disable, 1 = Enable	1
	BV 18	CO ReCal Mode Reset	0 = Normal, 1 = Reset	0

Binary Value	BV 19	NO2 ReCal Mode Enable	0 = Disable, 1 = Enable	1
	BV 20	NO2 ReCal Mode Reset	0 = Normal, 1 = Reset	0
	BV 21	CO Zero Filter	0 = Disable, 1 = Enable	1
	BV 22	NO2 Zero Filter	0 = Disable, 1 = Enable	1
	BV 23	Strobe Alarm	0 = Disable, 1 = Enable	1
	BV 24	CO Strobe Alarm	0 = Disable, 1 = Enable	1
	BV 25	NO2 Strobe Alarm	0 = Disable, 1 = Enable	1
	BV 26	Strobe Alarm Test	0 = Normal, 1 Test	0
Binary Input	BI 1	CO Sensor Status	0 = No Sensor, 1 = Sensor	1
	BI 2	NO2 Sensor Status	0 = No Sensor, 1 = Sensor	0
	BI 3	Device Status	0 = Normal, 1 = Alarm	0
	BI 4	Buzzer Status	0 = Normal, 1 = Alarm	0
	BI 5	Alarm1 Status	0 = Normal, 1 = Alarm	0
	BI 6	Alarm2 Status	0 = Normal, 1 = Alarm	0
	BI 7	Test Mode Status	0 = Normal, 1 = Test Mode	0
	BI 8	CO Fault Mode Status	0 = Normal, CO Fault Mode	0
	BI 9	NO2 Fault Mode Status	0 = Normal, 1 = NO2 Fault Mode	0
	BI 10	CO ReCal Mode Status	0 = Normal, 1 = CO ReCal Mode	0
	BI 11	NO2 ReCal Mode Status	0 = Normal, 1 = NO2 ReCal Mode	0
	BI 12	Strobe Status	0 = Normal, 1 = Alarm	0
Multi-State Value	MSV 1	LCD Format	1 = CO, 2 = NO2, 3 = CO + NO2, 4 = Temp, 5 = CO + Temp, 6 = NO2 + Temp, 7 = Status, 8 = None	1
	MSV 2	LCD Backlight	1 = Auto, 2 = Off, 3 = On	1

The Device BACnet® Object

Property	Default Value	Property Data Type	Access
Object Identifier	381003	BACnetObjectIdentifier(numeric)	Read / Write
Object Name	Gas Sensor 003	CharacterString (32)	Read / Write
Object Type	DEVICE (8)	BACnetObjectType	Read
System Status	OPERATIONAL (0)	BACnetDeviceStatus	Read
Vendor Name	Greystone Energy Systems	CharacterString	Read
Vendor Identifier	381	Unsigned16	Read
Model Name	GS	CharacterString	Read
Firmware Revision	1.0	CharacterString	Read
Application Software Version	V1.0	CharacterString	Read
Location	150 English Drive, Moncton, NB	CharacterString (32)	Read / Write
Description	Gas Sensor	CharacterString (32)	Read / Write
Protocol Version	1	Unsigned	Read
Protocol Revision	14	Unsigned	Read
Protocol Services Supported	See description below	BACnetServicesSupported	Read
Protocol Object Types Supported	See description below	BACnetObjectTypesSupported	Read
Object List	See description below	BACnetArray	Read
Maximum APDU Length Accepted	50, B'0000'	Unsigned	Read
Segmentation Supported	NO_SEGMENTATION (3)	BACnetSegmentation	Read
APDU Timeout	6,000	Unsigned	Read / Write
Number of APDU Retries	3	Unsigned	Read / Write
Max Master	127	Unsigned	Read / Write
Max Info Frames	1	Unsigned	Read
Device Address Binding	Empty	BACnetAddressBinding	Read
Database Revision	0	Unsigned	Read
Property List		BACnetArray	Read

Object Identifier	Initial default number is 381003, where 381 is the vendor ID and 003 is the default network MAC address. When the MAC address is initially changed the value is updated and saved. For example, if the MAC address is set to 50 via the menu for startup, then the device instance will be set to 381050. This property is also writable via BACnet. If the Device:Object_Identifier is written to via BACnet then the MAC address is no longer appended to the vendor ID to create this value.
Object Name	Initial string is "Gas Sensor 003" where 003 is the default network address. Can be written with a new string of maximum length of 32 characters and the value is saved. The "003" is the MAC address and is automatically changed if the MAC address is changed. Once written to via BACnet, the MAC address no longer gets appended to the value.
Protocol Services Supported	readProperty, readPropertyMultiple, writeProperty, deviceCommunicationControl, who-Has, who-Is, subscribeCOV, subscribeCOVProperty Binary bit string = {00000100 00001011 01000000 00000000 01100010 0}
Protocol Object Types Supported	Analog_Input, Analog_Value, Binary_Value, Binary_Input, Device, Multi-State_Value, Multi-State_Input Binary bit string = {10100100 10000100 00010000 00000000 00000000 00000000 00000000}
Object List	((Device, Instance 1), (AI1..AI3), (AV1..AV20), (BV1..BV26), (BI1..BI12), (MSV1..MSV2))
APDU Timeout	Value is 6,000. Can be modified from 1 to 10,000.
Number Of APDU Retries	Value is 3. Can be modified from 1 to 10.
Max Master	Value is 127. Can be modified from 1 to 127.
Database Revision	Value is 0 to 255.

The Analog Input BACnet objects allow reading of sensor values. Analog input object properties are shown below.

ANALOG INPUT OBJECT: AI1 CO Sensor Value

Property	Default Value	Property Data Type	Access
Object Identifier	AI1	BACnetObjectIdentifier	Read
Object Name	CO Sensor Value	CharacterString (32)	Read
Object Type	ANALOG_INPUT (0)	BACnetObjectType	Read
Present Value	See description below	Real	Read
Description	0 to 500 ppm	CharacterString (32)	Read
Device Type	CO Sensor	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
COV Increment	5	Real	Read
Property List		BACnetArray	Read

AI1 represents the CO value reported from the CO sensor.

Rules Enforced: 0 ppm <= Present Value <= 500 ppm, Resolution = 1 ppm

ANALOG INPUT OBJECT: AI2 NO2 Sensor Value

Property	Default Value	Property Data Type	Access
Object Identifier	AI2	BACnetObjectIdentifier	Read
Object Name	NO2 Sensor Value	CharacterString (32)	Read
Object Type	ANALOG_INPUT (0)	BACnetObjectType	Read
Present Value	See description below	Real	Read
Description	0 to 10 ppm	CharacterString (32)	Read
Device Type	NO2 Sensor	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
COV Increment	5	Real	Read
Property List		BACnetArray	Read

AI2 represents the NO2 value reported from the NO2 sensor.

Rules Enforced: 0 ppm <= Present Value <= 10 ppm, Resolution = 0.1 ppm

ANALOG INPUT OBJECT: AI3 Temperature Sensor Value

Property	Default Value	Property Data Type	Access
Object Identifier	AI3	BACnetObjectIdentifier	Read
Object Name	Temperature Sensor Value	CharacterString (32)	Read
Object Type	ANALOG_INPUT (0)	BACnetObjectType	Read
Present Value	See description below	Real	Read
Description	-20 to 50 C or -4 to 122 F	CharacterString (32)	Read
Device Type	Temperature Sensor	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Units	degrees-Celsius (62) or degrees-Fahrenheit (64)	BACnetEngineeringUnits	Read/Write
COV Increment	2	Real	Read
Property List		BACnetArray	Read

AI3 represents the temperature value reported from the temperature sensor.

Rules Enforced: -20.0 °C <= Present Value <= 50.0 °C, Resolution = 0.1 °C
 -4.0 °F <= Present Value <= 122.0 °F, Resolution = 0.1 °F
 Units default to °C but can be changed to °F by writing to the Units property

The Analog Value BACnet objects allow device configuration and settings. AV object properties are shown below.

ANALOG VALUE OBJECT: AV1 CO Buzzer Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV1	BACnetObjectIdentifier	Read
Object Name	CO Buzzer Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	150	Real	Read/Write
Description	20 to 500 ppm	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired buzzer alarm setpoint for CO.

Present Value defaults to 150 ppm.

Rules Enforced: 10 ppm <= Present Value <= 500 ppm, Resolution = 10 ppm

ANALOG VALUE OBJECT: AV2 CO Buzzer Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV2	BACnetObjectIdentifier	Read
Object Name	CO Buzzer Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	5	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired CO buzzer alarm time delay.

Present Value defaults to 5 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV3 NO2 Buzzer Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV3	BACnetObjectIdentifier	Read
Object Name	NO2 Buzzer Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	2	Real	Read/Write
Description	1 to 10ppm	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired buzzer alarm setpoint for NO2.

Present Value defaults to 2 ppm.

Rules Enforced: 1 ppm <= Present Value <= 10 ppm, Resolution = 1 ppm

ANALOG VALUE OBJECT: AV4 NO2 Buzzer Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV4	BACnetObjectIdentifier	Read
Object Name	NO2 Buzzer Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	5	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired NO2 buzzer alarm time delay.

Present Value defaults to 5 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV5 Alarm1 Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV5	BACnetObjectIdentifier	Read
Object Name	Alarm1 Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	50 or 2	Real	Read/Write
Description	20-500 ppm CO, 1-10 ppm NO2	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm1 setpoint.

Present Value defaults to 50 ppm if the alarm is assigned to CO, 2 ppm if the alarm is assigned to NO2.

Rules Enforced: 10 ppm <= Present Value <= 500 ppm, Resolution = 10 ppm for CO
1 ppm <= Present Value <= 10 ppm, Resolution = 1 ppm for NO2

ANALOG VALUE OBJECT: AV6 Alarm1 Hysteresis

Property	Default Value	Property Data Type	Access
Object Identifier	AV6	BACnetObjectIdentifier	Read
Object Name	Alarm1 Hysteresis	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	10 or 0.5	Real	Read/Write
Description	10-100 ppm CO, 0.5-2.0 ppm NO2	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm1 hysteresis.

Present Value defaults to 10 ppm if the alarm is assigned to CO, 0.5 ppm if the alarm is assigned to NO2.

Rules Enforced: 10 ppm <= Present Value <= 100 ppm, Resolution = 5 ppm for CO
0.5 ppm <= Present Value <= 2.0 ppm, Resolution = 0.5 ppm for NO2

ANALOG VALUE OBJECT: AV7 Alarm1 Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV7	BACnetObjectIdentifier	Read
Object Name	Alarm1 Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	2	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm1 time delay.

Present Value defaults to 2 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV8 Alarm2 Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV8	BACnetObjectIdentifier	Read
Object Name	Alarm2 Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	150 or 4	Real	Read/Write
Description	20-500 ppm CO, 1-10 ppm NO2	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm2 setpoint.

Present Value defaults to 150 ppm if the alarm is assigned to CO, 4 ppm if the alarm is assigned to NO2.

Rules Enforced: 10 ppm <= Present Value <= 500 ppm, Resolution = 10 ppm for CO
1 ppm <= Present Value <= 10 ppm, Resolution = 1 ppm for NO2

ANALOG VALUE OBJECT: AV9 Alarm2 Hysteresis

Property	Default Value	Property Data Type	Access
Object Identifier	AV9	BACnetObjectIdentifier	Read
Object Name	Alarm2 Hysteresis	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	20 or 0.5	Real	Read/Write
Description	10-100 ppm CO, 0.5-2.0 ppm NO2	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm2 hysteresis.

Present Value defaults to 10 ppm if the alarm is assigned to CO, 0.5 ppm if the alarm is assigned to NO2.

Rules Enforced: 10 ppm <= Present Value <= 100 ppm, Resolution = 5 ppm for CO
0.5 ppm <= Present Value <= 2.0 ppm, Resolution = 0.5 ppm for NO2

ANALOG VALUE OBJECT: AV10 Alarm2 Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV10	BACnetObjectIdentifier	Read
Object Name	Alarm2 Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	2	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired alarm2 time delay.

Present Value defaults to 2 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV11 Test Mode Time

Property	Default Value	Property Data Type	Access
Object Identifier	AV11	BACnetObjectIdentifier	Read
Object Name	Test Mode Time	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	5	Real	Read/Write
Description	1 to 15 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired test mode time.

Present Value defaults to 5 minutes.

Rules Enforced: 1 minutes <= Present Value <= 15 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV12 CO Fault Mode Time

Property	Default Value	Property Data Type	Access
Object Identifier	AV12	BACnetObjectIdentifier	Read
Object Name	CO Fault Mode Time	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	3	Real	Read/Write
Description	3 to 6 Years	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Years (67)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired CO fault mode time.

Present Value defaults to 3 years.

Rules Enforced: 3 years <= Present Value <= 6 years, Resolution = 1 year

ANALOG VALUE OBJECT: AV13 NO2 Fault Mode Time

Property	Default Value	Property Data Type	Access
Object Identifier	AV13	BACnetObjectIdentifier	Read
Object Name	NO2 Fault Mode Time	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	2	Real	Read/Write
Description	1 to 4 Years	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Years (67)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired NO2 fault mode time.

Present Value defaults to 2 years.

Rules Enforced: 1 years <= Present Value <= 4 years, Resolution = 1 year

ANALOG VALUE OBJECT: AV14 CO ReCal Mode Time

Property	Default Value	Property Data Type	Access
Object Identifier	AV14	BACnetObjectIdentifier	Read
Object Name	CO ReCal Mode Time	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	1	Real	Read/Write
Description	1 to 3 Years	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Years (67)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired CO recalibration mode time.

Present Value defaults to 1 year.

Rules Enforced: 1 years <= Present Value <= 3 years, Resolution = 1 year

ANALOG VALUE OBJECT: AV15 NO2 ReCal Mode Time

Property	Default Value	Property Data Type	Access
Object Identifier	AV15	BACnetObjectIdentifier	Read
Object Name	NO2 ReCal Mode Time	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	1	Real	Read/Write
Description	1 to 3 Years	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Years (67)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired NO2 recalibration mode time.

Present Value defaults to 1 years.

Rules Enforced: 1 years <= Present Value <= 3 years, Resolution = 1 year

ANALOG VALUE OBJECT: AV16 Temperature Offset

Property	Default Value	Property Data Type	Access
Object Identifier	AV16	BACnetObjectIdentifier	Read
Object Name	Temperature Offset	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	0	Real	Read/Write
Description	Temperature Offset	CharacterString (32)	Read
Status Flags	{false, false, false, false} (1111)	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	delta-degrees-Fahrenheit (120) or Δ°C (121)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to calibrate the temperature sensor input to conform to a local reference.

Rules Enforced: -5.0 Δ°C <= Present Value <= 5.0 Δ°C, Resolution = 0.1 Δ°C
-10.0 Δ°F <= Present Value <= 10.0 Δ°F, Resolution = 0.1 Δ°F

Units depend on the device units, either °C or °F
Changing units always resets Present Value to 0

ANALOG VALUE OBJECT: AV17 CO Strobe Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV17	BACnetObjectIdentifier	Read
Object Name	CO Strobe Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	150	Real	Read/Write
Description	20 to 500 ppm	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired strobe alarm setpoint for CO.

Present Value defaults to 150 ppm.

Rules Enforced: 10 ppm <= Present Value <= 500 ppm, Resolution = 10 ppm

ANALOG VALUE OBJECT: AV18 CO Strobe Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV18	BACnetObjectIdentifier	Read
Object Name	CO Strobe Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	5	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired CO strobe alarm time delay.

Present Value defaults to 5 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

ANALOG VALUE OBJECT: AV19 NO2 Strobe Setpoint

Property	Default Value	Property Data Type	Access
Object Identifier	AV19	BACnetObjectIdentifier	Read
Object Name	NO2 Strobe Setpoint	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	2	Real	Read/Write
Description	1 to 10 ppm	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	parts-per-million (96)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired Strobe alarm setpoint for NO2.

Present Value defaults to 2 ppm.

Rules Enforced: 1 ppm <= Present Value <= 10 ppm, Resolution = 1 ppm

ANALOG VALUE OBJECT: AV20 NO2 Strobe Delay

Property	Default Value	Property Data Type	Access
Object Identifier	AV20	BACnetObjectIdentifier	Read
Object Name	NO2 Strobe Delay	CharacterString (32)	Read
Object Type	ANALOG_VALUE (2)	BACnetObjectType	Read
Present Value	5	Real	Read/Write
Description	0 to 10 Minutes	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Units	Minutes (72)	BACnetEngineeringUnits	Read
Property List		BACnetArray	Read

Used to set the desired NO2 Strobe alarm time delay.

Present Value defaults to 5 minutes.

Rules Enforced: 0 minutes <= Present Value <= 10 minutes, Resolution = 1 minute

The binary value BACnet® objects allow configuration of the device. Binary value object properties are shown below.

BINARY VALUE OBJECT: BV1 Buzzer Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV1	BACnetObjectIdentifier	Read
Object Name	Buzzer Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (2)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the buzzer alarm. The default is enable.

BINARY VALUE OBJECT: BV2 CO Buzzer Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV2	BACnetObjectIdentifier	Read
Object Name	CO Buzzer Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (2)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the CO buzzer alarm. The default is enable.

BINARY VALUE OBJECT: BV3 NO2 Buzzer Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV3	BACnetObjectIdentifier	Read
Object Name	NO2 Buzzer Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the NO2 buzzer alarm. The default is enable.

BINARY VALUE OBJECT: BV4 Buzzer Alarm Test

Property	Default Value	Property Data Type	Access
Object Identifier	BV4	BACnetObjectIdentifier	Read
Object Name	Buzzer Alarm Test	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Test (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object manually controls the Buzzer Status. The default is Normal (0). If the value is set to Test (1), then a Buzzer Alarm is forced and Buzzer Status will get set to 1. This function is useful for testing the Buzzer alarm but must be manually set back to 0 after the test. The Buzzer Status will immediately reset to 0.

BINARY VALUE OBJECT: BV5 Alarm1 Assignment

Property	Default Value	Property Data Type	Access
Object Identifier	BV5	BACnetObjectIdentifier	Read
Object Name	Alarm1 Assignment	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	CO (0) or NO2 (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to assign the buzzer alarm to either the CO or NO2 sensor. If only one sensor is present then the value is fixed.

BINARY VALUE OBJECT: BV6 Alarm2 Assignment

Property	Default Value	Property Data Type	Access
Object Identifier	BV6	BACnetObjectIdentifier	Read
Object Name	Alarm2 Assignment	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	CO (0) or NO2 (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to assign the buzzer alarm to either the CO or NO2 sensor. If only one sensor is present then the value is fixed.

BINARY VALUE OBJECT: BV7 Alarm Mode Operation

Property	Default Value	Property Data Type	Access
Object Identifier	BV7	BACnetObjectIdentifier	Read
Object Name	Alarm Mode Operation	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Auto Reset (0) or Manual Reset (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to set the alarm1 and alarm2 reset mode to either Auto Reset or Manual Reset. The default is Auto Reset.

BINARY VALUE OBJECT: BV8 Relay1 Operation

Property	Default Value	Property Data Type	Access
Object Identifier	BV8	BACnetObjectIdentifier	Read
Object Name	Relay1 Operation	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	0 = Direct, 1 = Reverse	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no relay	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no relay	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO-SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object sets Relay1 operation if it is installed. The default is Direct (0) meaning the relay is normally not energized and will energize on an alarm condition (the NO/NC PCB designations are correct). Reverse operation means the relay is normally energized and will de-energize on an alarm condition (the NO/NC PCB designations are reversed). Reverse operation can be used for 'Fail Safe' operation as the relay will change state on power loss.

BINARY VALUE OBJECT: BV9 Relay2 Operation

Property	Default Value	Property Data Type	Access
Object Identifier	BV9	BACnetObjectIdentifier	Read
Object Name	Relay2 Operation	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	0 = Direct, 1 = Reverse	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no relay	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no relay	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO-SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object sets Relay2 operation if it is installed. The default is Direct (0) meaning the relay is normally not energized and will energize on an alarm condition (the NO/NC PCB designations are correct). Reverse operation means the relay is normally energized and will de-energize on an alarm condition (the NO/NC PCB designations are reversed). Reverse operation can be used for 'Fail Safe' operation as the relay will change state on power loss.

BINARY VALUE OBJECT: BV10 Relay1 Test

Property	Default Value	Property Data Type	Access
Object Identifier	BV10	BACnetObjectIdentifier	Read
Object Name	Relay1 Test	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Test (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no relay	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no relay	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO-SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object manually controls Relay1 if it is installed. The default is Normal (0). If the value is set to Test (1), then Relay1 is forced to activate. This function is useful for testing the relay but must be manually set back to 0 after the test.

BINARY VALUE OBJECT: BV11 Relay2 Test

Property	Default Value	Property Data Type	Access
Object Identifier	BV11	BACnetObjectIdentifier	Read
Object Name	Relay2 Test	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Test (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no relay	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no relay	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO-SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object manually controls Relay2 if it is installed. The default is Normal (0). If the value is set to Test (1), then Relay2 is forced to activate. This function is useful for testing the relay but must be manually set back to 0 after the test.

BINARY VALUE OBJECT: BV12 Test Mode Enable

Property	Default Value	Property Data Type	Access
Object Identifier	BV12	BACnetObjectIdentifier	Read
Object Name	Test Mode Enable	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Test (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the Test Mode operation. The default is disable.

BINARY VALUE OBJECT: BV13 CO Fault Mode Enabled

Property	Default Value	Property Data Type	Access
Object Identifier	BV13	BACnetObjectIdentifier	Read
Object Name	CO Fault Mode Enable	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the CO Fault Mode operation. The default is disable.

BINARY VALUE OBJECT: BV14 CO Fault Mode Reset

Property	Default Value	Property Data Type	Access
Object Identifier	BV14	BACnetObjectIdentifier	Read
Object Name	CO Fault Mode Reset	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Reset (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to reset the CO Fault Mode if it has been activated. Writing a 1 to Present_Value will clear the CO fault and reset the timer.

Note: After 3 seconds, value will reset to 0 automatically if reset. LCD will indicate the results "DONE" or "FAILED".

BINARY VALUE OBJECT: BV15 NO2 Fault Mode Enable

Property	Default Value	Property Data Type	Access
Object Identifier	BV15	BACnetObjectIdentifier	Read
Object Name	NO2 Fault Mode Enable	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the NO2 Fault Mode operation. The default is disable.

BINARY VALUE OBJECT: BV16 NO2 Fault Mode Reset

Property	Default Value	Property Data Type	Access
Object Identifier	BV16	BACnetObjectIdentifier	Read
Object Name	NO2 Fault Mode Reset	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Reset (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to reset the NO2 Fault Mode if it has been activated. Writing a 1 to Present_Value will clear the NO2 fault and reset the timer.

Note: After 3 seconds, value will reset to 0 automatically if reset. LCD will indicate the results “DONE” or “FAILED”.

BINARY VALUE OBJECT: BV17 CO ReCal Mode Enable

Property	Default Value	Property Data Type	Access
Object Identifier	BV17	BACnetObjectIdentifier	Read
Object Name	CO ReCal Mode Enable	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the CO Recalibration Mode operation. The default is enable.

BINARY VALUE OBJECT: BV18 CO ReCal Mode Reset

Property	Default Value	Property Data Type	Access
Object Identifier	BV18	BACnetObjectIdentifier	Read
Object Name	CO ReCal Mode Reset	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Reset (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to reset the CO Recalibration Mode if it has been activated. Writing a 1 to Present_Value will clear the CO recalibration alarm and reset the timer.

Note: After 3 seconds, value will reset to 0 automatically if reset. LCD will indicate the results “DONE” or “FAILED”.

BINARY VALUE OBJECT: BV19 NO2 ReCal Mode Enable

Property	Default Value	Property Data Type	Access
Object Identifier	BV19	BACnetObjectIdentifier	Read
Object Name	NO2 ReCal Mode Enable	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the NO2 Recalibration Mode operation. The default is enable.

BINARY VALUE OBJECT: BV20 NO2 ReCal Mode Reset

Property	Default Value	Property Data Type	Access
Object Identifier	BV20	BACnetObjectIdentifier	Read
Object Name	NO2 ReCal Mode Reset	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Reset (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to reset the NO2 Recalibration Mode if it has been activated. Writing a 1 to Present_Value will clear the NO2 recalibration alarm and reset the timer.

Note: After 3 seconds, value will reset to 0 automatically if reset. LCD will indicate the results "DONE" or "FAILED".

BINARY VALUE OBJECT: BV21 CO Zero Filter

Property	Default Value	Property Data Type	Access
Object Identifier	BV21	BACnetObjectIdentifier	Read
Object Name	CO Zero Filter	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the CO sensor zero filter. The default is enable.

BINARY VALUE OBJECT: BV22 NO2 Zero Filter

Property	Default Value	Property Data Type	Access
Object Identifier	BV22	BACnetObjectIdentifier	Read
Object Name	NO2 Zero Filter	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the NO2 sensor zero filter. The default is enable.

BINARY VALUE OBJECT: BV23 Strobe Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV23	BACnetObjectIdentifier	Read
Object Name	Strobe Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the Strobe alarm. The default is enable.

BINARY VALUE OBJECT: BV24 CO Strobe Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV24	BACnetObjectIdentifier	Read
Object Name	CO Strobe Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the CO Strobe alarm. The default is enable.

BINARY VALUE OBJECT: BV25 NO2 Strobe Alarm

Property	Default Value	Property Data Type	Access
Object Identifier	BV25	BACnetObjectIdentifier	Read
Object Name	NO2 Strobe Alarm	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read/Write
Description	Disable (0) or Enable (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1) if no sensor	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object is used to enable or disable the NO2 Strobe alarm. The default is enable.

BINARY VALUE OBJECT: BV26 Strobe Alarm Test

Property	Default Value	Property Data Type	Access
Object Identifier	BV26	BACnetObjectIdentifier	Read
Object Name	Strobe Alarm Test	CharacterString (32)	Read
Object Type	BINARY_VALUE (5)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read/Write
Description	Normal (0) or Test (1)	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Property List		BACnetArray	Read

This object manually controls the Strobe Status. The default is Normal (0). If the value is set to Test (1), then a Strobe LED is forced and Strobe Status will get set to 1. This function is useful for testing the Strobe alarm but must be manually set back to 0 after the test. The Strobe Status will immediately reset to 0.

The binary input BACnet objects indicates the device status.

BINARY INPUT OBJECT: BI1 CO Sensor Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI1	BACnetObjectIdentifier	Read
Object Name	CO Sensor Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	ACTIVE (1)	BACnetBinaryPV	Read
Description	No Sensor (0) or Sensor (1)	CharacterString (32)	Read
Device Type	Indicates CO Sensor Installed	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates if the CO sensor is installed.

BINARY INPUT OBJECT: BI2 NO2 Sensor Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI2	BACnetObjectIdentifier	Read
Object Name	NO2 Sensor Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	No Sensor (0) or Sensor (1)	CharacterString (32)	Read
Device Type	Indicates NO2 Sensor Installed	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates if the CO sensor is installed.

BINARY INPUT OBJECT: BI3 Device Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI3	BACnetObjectIdentifier	Read
Object Name	Device Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Alarm (1)	CharacterString (32)	Read
Device Type	Indicates Device Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates if the device is in normal status or if any alarm is present.

BINARY INPUT OBJECT: BI4 Buzzer Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI4	BACnetObjectIdentifier	Read
Object Name	Buzzer Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Alarm (1)	CharacterString (32)	Read
Device Type	Indicates Buzzer Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates if the buzzer is in alarm state.

BINARY INPUT OBJECT: BI5 Alarm1 Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI5	BACnetObjectIdentifier	Read
Object Name	Alarm1 Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Alarm (1)	CharacterString (32)	Read
Device Type	Indicates Alarm1 Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the alarm1 state.

BINARY INPUT OBJECT: BI6 Alarm2 Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI6	BACnetObjectIdentifier	Read
Object Name	Alarm2 Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Alarm (1)	CharacterString (32)	Read
Device Type	Indicates Alarm2 Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the alarm2 state.

BINARY INPUT OBJECT: BI7 Test Mode Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI7	BACnetObjectIdentifier	Read
Object Name	Test Mode Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Test Mode (1)	CharacterString (32)	Read
Device Type	Indicates Test Mode Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the test mode state.

BINARY INPUT OBJECT: BI8 CO Fault Mode Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI8	BACnetObjectIdentifier	Read
Object Name	CO Fault Mode Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or CO Fault Mode (1)	CharacterString (32)	Read
Device Type	Indicates CO Fault Mode Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the CO fault mode state.

BINARY INPUT OBJECT: BI9 NO2 Fault Mode Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI9	BACnetObjectIdentifier	Read
Object Name	NO2 Fault Mode Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or NO2 Fault Mode (1)	CharacterString (32)	Read
Device Type	Indicates NO2 Fault Mode Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the NO2 fault mode state.

BINARY INPUT OBJECT: BI10 CO ReCal Mode Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI10	BACnetObjectIdentifier	Read
Object Name	CO ReCal Mode Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or CO ReCal Mode (1)	CharacterString (32)	Read
Device Type	Indicates CO ReCal Mode Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the CO recalibration mode state.

BINARY INPUT OBJECT: BI11 NO2 ReCal Mode Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI11	BACnetObjectIdentifier	Read
Object Name	NO2 ReCal Mode Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or NO2 ReCal Mode (1)	CharacterString (32)	Read
Device Type	Indicates NO2 ReCal Mode Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000) or (1100) if no sensor	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0) or NO_SENSOR (1)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates the NO2 recalibration mode state.

BINARY INPUT OBJECT: BI12 Strobe Status

Property	Default Value	Property Data Type	Access
Object Identifier	BI12	BACnetObjectIdentifier	Read
Object Name	Strobe Status	CharacterString (32)	Read
Object Type	BINARY_INPUT (3)	BACnetObjectType	Read
Present Value	INACTIVE (0)	BACnetBinaryPV	Read
Description	Normal (0) or Alarm (1)	CharacterString (32)	Read
Device Type	Indicates Strobe Status	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0) or FAULT (1)	BACnetEventState	Read
Reliability	NO_FAULT_DETECTED (0)	BACnetReliability	Read
Out of Service	FALSE (0)	Boolean	Read
Polarity	NORMAL (0)	BACnetPolarity	Read
Property List		BACnetArray	Read

This object indicates if the Strobe is in alarm state.

The multi-state value BACnet object allows configuration of the device. Multi-state value object properties are shown below.

MULTI-STATE VALUE OBJECT: MSV1 LCD Format

Property	Default Value	Property Data Type	Access
Object Identifier	MSV1	BACnetObjectIdentifier	Read
Object Name	LCD Format	CharacterString (32)	Read
Object Type	MULTISTATE_VALUE (19)	BACnetObjectType	Read
Present Value	See Description Below	Unsigned	Read / Write
Description	Display Settings	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Number of States	8	Unsigned	Read
Property List		BACnetArray	Read

This object sets the LCD displayed information. The default value is CO (1).

MSV1 State	Description
1	CO - the LCD shows "CO / xxx ppm"
2	NO2 - the LCD shows "NO2 / xx ppm"
3	CO + NO2 - the LCD shows "xxxppmCO / xxppmNO2"
4	Temperature - the LCD shows "Temp / xx.x °C" or "Temp / xx.x °F"
5	CO + Temp - the LCD shows "CO xxx / xx.x °C" or "CO xxx / xx.x °F"
6	NO2 + Temp - the LCD shows "NO2 xx.x / xx.x °C" or "NO2 xx.x / xx.x °F"
7	Status - the LCD shows "CO / Detector" (for example) and any status updates
8	None - the LCD is blank unless using the menu or the test mode

MULTI-STATE VALUE OBJECT: MSV2 LCD Backlight

Property	Default Value	Property Data Type	Access
Object Identifier	MSV2	BACnetObjectIdentifier	Read
Object Name	LCD Backlight	CharacterString (32)	Read
Object Type	MULTISTATE_VALUE (19)	BACnetObjectType	Read
Present Value	See Description Below	Unsigned	Read / Write
Description	1 = Auto, 2 = Off, 3 = On	CharacterString (32)	Read
Status Flags	{false, false, false, false} (0000)	BACnetStatusFlags	Read
Event State	NORMAL (0)	BACnetEventState	Read
Out of Service	FALSE (0)	Boolean	Read
Number of States	3	Unsigned	Read
Property List		BACnetArray	Read

This object sets the LCD backlight operating mode. The default value is Auto (1).

MSV2 State	Description
1	Auto - the backlight only lights during startup, during menu operation or during the test mode
2	Off - the backlight is disabled and never lights
3	On - the backlight is always on (highest power consumption)

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)

Date: July 10, 2019
Vendor Name: Greystone Energy Systems
Product Name: Gas Sensor
Product Model Number: GS
Application Software Version: 1.0
Firmware Revision: 1.0
BACnet Protocol Revision: 14

Product Description: The Greystone Gas Sensor is a smart CO, NO2 or combination CO + NO2 gas sensor with native BACnet MS/TP protocol for network communication. It measures carbon monoxide and/or Nitrogen Dioxide levels and reports values back to a building automation system (BAS). The device features an LCD to display measured values and for setup.

BACnet Standardized Device Profile (Annex L): BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported (Annex K):
DS-RP-B, DS-RPM-B, DS-WP-B, DS-COV-B, DS-COVP-B, DM-DDB-B, DM-DOB-B, DM-DCC-B

Segmentation Capability: Not supported

Standard Object Types Supported:

Object Type	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Device	No	No	Location, Description, Max_Master, Max_Info_Frames	Object_Identifier, Object_Name, Location, Description, APDU_Timeout, Max_Master, Number_Of_APDU_Retries
Analog Input	No	No	Description, Reliability, Device_Type, COV_Increment	Units
Analog Value	No	No	Description	Present_Value
Binary Value	No	No	Description	Present_Value
Binary Input	No	No	Description, Reliability	
Multi-State Value	No	No	Description	Present_Value

Data Link Layer Options : MS/TP master (Clause 9),
Baud rates : 9600, 19200, 38400, 57600, 76800, 115200

Device Address Binding : Not supported

Networking Options : None

Character Set Supported : ISO 10646 (UTF-8)