

BACnet Protocol Implementation Conformance Statement

Multisensor IP

Date: 6. 2. 2023

Vendor Name: STEINEL GmbH

Product Name: 1128

Application Software Version: 1.4

BACnet Protocol Revision: 19

Product Description:

The most precise presence detector ever becomes the ultimate sensory organ. For the true detection of people, brightness, ambient temperature, humidity, air pressure, volatile organic compounds (VOC) and CO2 measurements are necessary. Information that brings the digitalization of building automation a great deal further. This combination makes the Multisensor True Presence® a good investment in building intelligence, a comfortable environment for people and real efficiency. The best comes from above – precise, digital information for modern building management.

BACnet Standardized Device Profiles Supported (Annex L):

- ☐ BACnet Cross-Domain Advanced Operator Workstation (B-XAWS)
- ☐ BACnet Advanced Operator Workstation (B-AWS)
- ☐ BACnet Operator Workstation (B-OWS)
- ☐ BACnet Operator Display (B-OD)
- ☐ BACnet Advanced Lighting Workstations (B-ALWS)
- ☐ BACnet Lighting Operator Display (B-LOD)
- ☐ BACnet Advanced Life Safety Workstation (B-ALSWS)
- ☐ BACnet Life Safety Workstation (B-LSWS)
- ☐ BACnet Life Safety Annunciator Panel (B-LSAP)
- ☐ BACnet Advanced Access Control Workstation (B-AACWS)
- ☐ BACnet Access Control Workstation (B-ACWS)
- ☐ BACnet Access Control Security Display (B-ACSD)
- ☐ BACnet Advanced Elevator Workstation (B-AEWS)
- ☐ BACnet Elevator Workstation (B-EWS)
- ☐ BACnet Elevator Display (B-ED)
- ☐ BACnet Advanced Lighting Control Station (B-ALCS)
- ☐ BACnet Lighting Control Station (B-LCS)
- ☐ BACnet Building Controller (B-BC)
- ☐ BACnet Advanced Application Controller (B-AAC)
- ☐ BACnet Application Specific Controller (B-ASC)
- ☐ BACnet Smart Actuator (B-SA)
- ☒ BACnet Smart Sensor (B-SS)
- ☐ BACnet Lighting Supervisor (B-LS)
- ☐ BACnet Lighting Device (B-LD)
- ☐ BACnet Advanced Life Safety Controller (B-ALSC)
- ☐ BACnet Life Safety Controller (B-LSC)
- ☐ BACnet Advanced Access Control Controller (B-AACC)
- ☐ BACnet Access Control Controller (B-ACC)
- ☐ BACnet Advanced Elevator Controller (B-AEC)
- ☐ BACnet Elevator Controller (B-EC)
- ☐ BACnet Elevator Monitor (B-EM)
- ☐ BACnet Router (B-RTR)
- ☐ BACnet Gateway (B-GW)
- ☐ BACnet Broadcast Management Device (B-BBMD)
- ☐ BACnet Access Control Door Controller (B-ACDC)
- ☐ BACnet Access Control Credential Reader (B-ACCR)
- ☐ BACnet Secure Connect Hub (B-SCHUB)
- ☐ BACnet General (B-GENERAL)

BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B

DS-RPM-B

DS-WP-B

DS-WPM-B

DS-COV-B

Segmentation Capability:☐ Able to transmit segmented messages

Window Size _____

☐ Able to receive segmented messages

Window Size _____

Standard Object Types Supported:**Device Object:**

Properties
Object Identifier
Object Name
Object Type
Active COV Subscriptions
APDU Timeout
Application Software Version
Database Revision
Description
Device Address Binding
Firmware Revision
Max APDU Length
Model Name
Number of APDU Retries
Object List
Object Types Supported
Protocol Revision
Protocol Version
Segmentation Support
Services Supported
System Status
Vendor Identifier
Vendor Name

Analog Input Object:

Properties
Object Identifier
Object Name
Object Type
COV Increment
Description
Event State
Out of Service
Present Value
Status Flags
Units

Binary Input Object:

Properties
Object Identifier
Object Name
Object Type
Description
Event State
Out of Service
Polarity
Present Value
Status Flags

Analog Value Object:

Properties
Object Identifier
Object Name
Object Type
COV Increment
Description
Event State
Out of Service
Present Value
Status Flags
Units

BACnet Data Link Layer Options:

- ☐ ARCNET (ATA 878.1), 2.5 Mb. (Clause 8)
☐ ARCNET (ATA 878.1), EIA-485 (Clause 8), baud rate(s) _____
☒ BACnet IP, (Annex J)
☒ BACnet IP, (Annex J), BACnet Broadcast Management Device (BBMD)
☐ BACnet IP, (Annex J), Network Address Translation (NAT Traversal)
☐ BACnet IPv6, (Annex U)
☐ BACnet IPv6, (Annex U), BACnet Broadcast Management Device (BBMD)
☐ BACnet/ZigBee (Annex O) _____
☐ Ethernet, ISO 8802-3 (Clause 7)
☐ LonTalk, ISO/IEC 14908.1 (Clause 11), medium: _____
☐ MS/TP master (Clause 9)
 - ☐ Master ☐ Slave
 - ☐ Non-isolated transceiver ☐ Isolated transceiver
 - ☐ Local 47K ohms bias resistors ☐ None ☐ Other: _____
 - Transceiver unit loading: ☐ 1 ☐ 1/2 ☐ 1/4 ☐ 1/8
 - Data rates: ☐ 9600 ☐ 19200 ☐ 38400 ☐ 57600 ☐ 76800 ☐ 115200
- ☐ Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
☐ Point-To-Point, modem, (Clause 10), baud rate(s): _____
☐ BACnet Secure Connect (Annex AB)
 - ☐ BACnet Secure Connect Node
 - If direct connections are supported:
 - Maximum number of simultaneous direct connections initiated: _____
 - Maximum number of simultaneous direct connections accepted: _____
 - ☐ BACnet Secure Connect Hub Function
 - Maximum number of simultaneous hub connections accepted: _____
 - ☐ HTTPS Proxy Support
 - List the types of HTTPS proxies supported: _____
 - ☐ Additional cipher suites supported beyond those required for TLS V1.3

Registry The additional cipher suites supported using the cipher suite names as of the TLS Cipher Suite at IANA (See RFC 8446):

☐ Additional Transport Layer Security versions other than V1.3 supported

The TLS versions other than V1.3 that are supported, including the supported cipher suites for the version beyond those required, using the cipher suite names as defined by the TLS version supported:

☐ Generates private keys internally, and provides matching certificate signing requests.

☐ DNS host name resolution supported (RFC 1123)

☐ mDNS host name resolution supported (RFC 6762)

☐ Other:

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) ☐ Yes ☐ No

Networking Options:

☐ Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.

☐ Annex H, BACnet Tunneling Router over IP

Character Sets Supported:

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

☐ ISO 10646 (UTF-8)

☐ IBM™/Microsoft™ DBCS

☒ ISO 8859-1

☐ ISO 10646 (UCS-2)

☐ ISO 10646 (UCS-4)

☐ JIS X 0208

Gateway Options:

N/A

Object Instance Summary:

Object Name	Object ID	Object Type	Min	Max	Unit	Access
Motion1	50	BI				R
Presence1	70	BI				R
Presence1HoldTime	71	AV	500	3600000	ms	RW
TruePresence1	90	BI				R
Brightness1	170	AI	0	2000	lx	R
Humidity	230	AI	0.00	100.00	%RH	R
Temperature	250	AI	-40.00	85.00	°C	R
TemperatureCorrection	270	AV	-12.00	12.00	°C	RW
VOC	280	AI	-2	5000	ppb	R
CO2	300	AI	-2	5000	ppm	R
Noise	340	AI	0	120	dB	R
AirPressure	380	AI	0.00	100.00	mbar	R
TruePresenceSettingsHeight	490	AV	1500	14000	mm	RW
TruePresenceSettingsRadius	500	AV	500	7500	mm	RW
TruePresenceSettingsScenario	510	AV	1	9		RW
AerosolStaleAirStatus	720	AI	0	2		R
AerosolRiskOfInfectionStatus	725	AI	0	2		R
AerosolAirTGA	740	AV	0	100	%	RW
AerosolAirTAR	750	AV	0	100	%	RW
AerosolAirHyst	760	AV	1	5	%	RW
AerosolInfRiskTGA	770	AV	0	100	%	RW
AerosolInfRiskTAR	780	AV	0	100	%	RW
AerosolInfRiskHyst	790	AV	1	5	%	RW
ComfortZone	800	AI				R
ComfortZoneUpperTemp	820	AV	0.00	40.00	°C	RW
ComfortZoneLowerTemp	830	AV	0.00	40.00	°C	RW
ComfortZoneUpperHum	840	AV	0	100	%	RW
ComfortZoneLowerHum	850	AV	0	100	%	RW
DewPoint	860	AI	-20.00	20.00	°C	R
AerosolStaleAir	880	AI	0	100	%	R
AerosolRiskOfInfection	900	AI	0	100	%	R
CO2TGA	920	AV	300	5000	ppm	RW
CO2TAR	930	AV	300	5000	ppm	RW
CO2Hyst	940	AV	1	250	ppm	RW
BuzzerSetting	950	AV	0	4		RW
LEDSetting	960	AV	0	3		RW
MountType	970	AV	0	1		RW
SensorLEDPattern	980	AV	0	255		RW