



Kaiterra SenseEdge BACnet Protocol Implementation Conformance Statement

APRIL 2021

Date:	April 10 2021
Vendor Name:	Kaiterra
Product Name:	Sensedge Smart Air Quality Monitor
Product Model Number:	SE-100
Application Software Version:	1.0.31

Product Description:

The Sensedge is a sophisticated, commercial grade monitor that is optimized to meet the air quality needs of any indoor space. It provides accurate, secure, and continuous monitoring for commercial interiors, like offices, schools, hospitals, retails, and residences. The Sensedge offers 24/7, real-time monitoring of your indoor air quality. Color-coded displays and indices of various pollutants allow for quick, at-a-glance readings.

The Sensedge supports Wi-Fi (2.4G), Ethernet, and communication including an API from the cloud, as well as BACnet compatibility (depending on the version and firmware).

The Sensedge supports the BACnet/IP protocol, and supports both IPv4 and IPv6.2. The UDP port is 47808(0xBAC0).

BACnet Standardized Device Profile (Annex L):

- **BACnet Operator Workstation (B-OWS)**
 - **BACnet Advanced Operator Workstation (B-AWS)**
 - **BACnet Operator Display (B-OD)**
 - **BACnet Building Controller (B-BC)**
 - **BACnet Advanced Application Controller (B-AAC)**
 - **BACnet Application Specific Controller (B-ASC)**
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- **BACnet Smart Sensor (B-SS)**
- **BACnet Smart Actuator (B-SA)**

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

DS-RP-B DS-RPM-B DM-DDB-B DM-DOB-B DS-COV-B

Segmentation Capability:

- Able to transmit segmented messages Window Size 1000
- Able to receive segmented messages Window Size 1000

Standard Object Types Supported:

1. Analog Input

The Sensedge exposes 5 Analog Input objects.

All objects support COV Increment.

Analog Input Objects:

- PM2.5
- TVOC
- CO2
- Temperature
- Relative Humidity

Dynamically Creatable: No

Dynamically Deletable: No

Optional Properties Supported: COV Increment

Writable Properties: Object Name, COV Increment, Present Value (conditional), Out of Service

2. Device

Dynamically Creatable: No

Dynamically Deletable: No

Optional Properties Supported: APDU Segment Timeout

Writable Properties: Object Name, APDU Segment Timeout, APDU Timeout, Number of APDU Retries, APDU segment timeout, Max APDU Length Accepted, Max Segment accepted.

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s):
- MS/TP slave (Clause 9), baud rate(s):
- Point-To-Point, EIA 232 (Clause 10), baud rate(s):
- Point-To-Point, modem, (Clause 10), baud rate(s):
- LonTalk, (Clause 11), medium: _____
- BACnet/ZigBee (ANNEX O)
- Other: Wi-Fi 2.4 GHz 802.11 b/g/n

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

Character Sets Supported:

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

- ISO 10646 (UTF-8)
 - ISO 10646 (UCS-2)
 - IBM™/Microsoft™ DBCS
 - ISO 10646 (UCS-4)
 - ISO 8859-1
 - JIS X 0208
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