



Kaiterra Sensedge Mini

# BACnet User Manual

September 2026

# 1. Introduction

The Kaiterra Sensedge Mini is a smart air quality monitor that supports multiple communication methods, including BACnet.

BACnet (Building Automation and Control Network) is a communications protocol for building automation and control defined by ANSI/ASHRAE Standard 135-2012. The protocol defines a model for building automation, describing how devices and systems interact. The Sensedge Mini supports BACnet/IP over Wi-Fi or Ethernet.

## Firmware requirement

| Firmware                   | Version                |
|----------------------------|------------------------|
| Minimum version for BACnet | 2.1.1                  |
| Latest version             | 2.6.5 (September 2026) |

Please make sure your Sensedge Mini is running Firmware Version 2.1.1 or later. If the Firmware Version is older than 2.1.1, connect the device to an Internet network to update the firmware. Once connected, this process is automatic and should take no more than 5 minutes.

# 2. Setting up BACnet on the Sensedge Mini

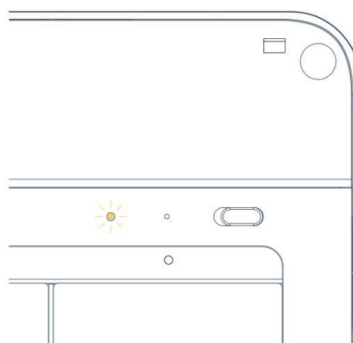
To set up BACnet on the Sensedge Mini, you need the Kaiterra Enterprise Configuration Tool and a Wi-Fi or Ethernet connection for the device. Follow the procedure that matches your network connection.

## 2.1 Setting up BACnet via Wi-Fi

### 1. Prepare for configuration

Download the [Kaiterra Enterprise Configuration Tool](#) on your computer or smartphone.

After the device is turned on, it automatically enters configuration mode for 15 minutes. The STATUS light flashes yellow during this time. If the device is not in configuration mode, turn it off and back on again.



## 2. Connect to the device's Wi-Fi signal

Open the network settings on your computer or smartphone and connect to the Wi-Fi network whose name starts with "Kaiterra".

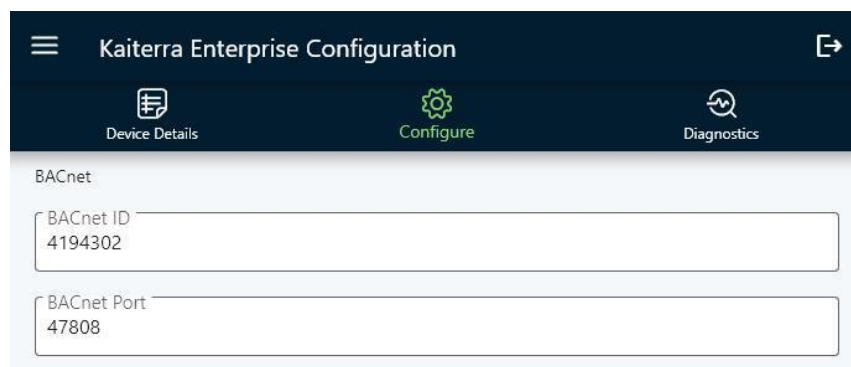
## 3. Configure the device settings, including Wi-Fi network settings

In the Configuration Tool you can configure settings such as Device Name and Wi-Fi network. Enter the Wi-Fi details in the corresponding fields:

- SSID
- Security type
- Password
- Network Type
- IP (manual mode only)
- Subnet mask (manual mode only)
- Gateway (manual mode only)

## 4. Configure your BACnet settings

Scroll to the BACnet section at the bottom of the Configuration Tool and enter your BACnet ID (1-4194302). If this field is left empty, BACnet will be disabled.

The screenshot shows the 'Kaiterra Enterprise Configuration' interface. At the top, there is a dark blue header with a menu icon, the title 'Kaiterra Enterprise Configuration', and an exit icon. Below the header is a navigation bar with three icons: 'Device Details', 'Configure' (highlighted in green), and 'Diagnostics'. The main content area is titled 'BACnet' and contains two input fields. The first field is labeled 'BACnet ID' and contains the value '4194302'. The second field is labeled 'BACnet Port' and contains the value '47808'.

Once a BACnet ID is entered, additional fields appear, such as BACnet Port and BBMD IP Address. Fill these in as needed.

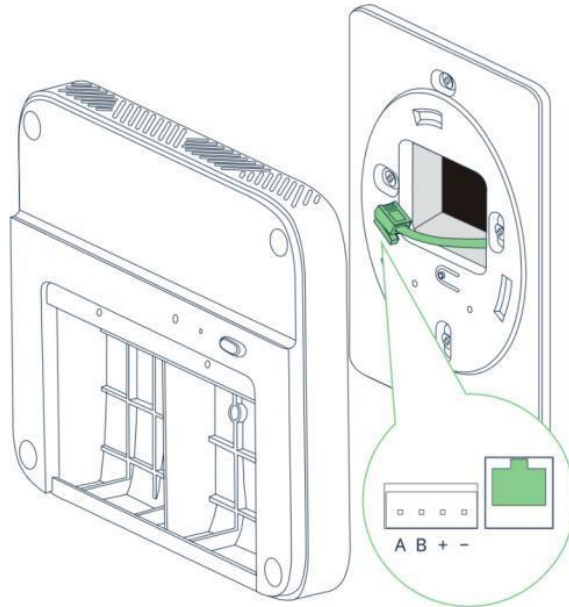
When configuration is complete, scroll to the bottom and click "Configure Device".

The STATUS light on the Sensedge Mini will flash green during the pairing process and, if successful, the STATUS light will turn off. If the STATUS light begins to flash red, please repeat these steps to establish a proper connection.

## 2.2 Setting up BACnet via Ethernet

### 1. Connect your Ethernet cable

Run the Ethernet cable through the opening in the mounting plate and into the Ethernet port on the back of the device. You should hear a click and see a green light on the port.



### 2. Prepare for configuration

Download the [Kaiterra Enterprise Configuration Tool](#) on your computer or smartphone.

After the device is turned on, it automatically enters configuration mode for 15 minutes. The STATUS light flashes yellow during this time. If the device is not in configuration mode, turn it off and back on again.



### 3. Connect to the device's Wi-Fi signal

Open the network settings on your computer or smartphone and connect to the Wi-Fi network whose name starts with "Kaiterra".

### 4. Configure the device settings, including Ethernet network settings

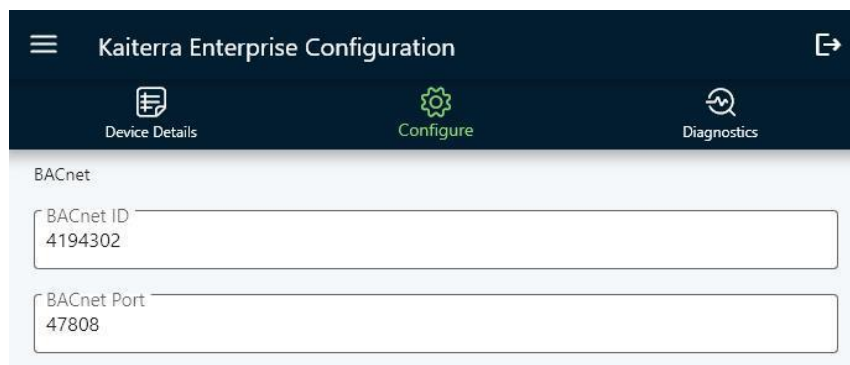
In the Configuration Tool you can configure settings such as Device Name and Ethernet network. Enter the Ethernet details in the corresponding fields (not required if the device uses DHCP):

- IP address
- Subnet mask
- Gateway

### 5. Configure your BACnet settings

Scroll to the BACnet section at the bottom of the Configuration Tool and enter your BACnet ID (1-4194302). If this field is left empty, BACnet will be disabled.

Once a BACnet ID is entered, additional fields appear, such as BACnet Port and BBMD IP Address. Fill these in as needed.



The screenshot shows the 'Kaiterra Enterprise Configuration' interface. At the top, there is a dark blue header with a hamburger menu icon on the left, the title 'Kaiterra Enterprise Configuration' in the center, and an exit icon on the right. Below the header is a navigation bar with three icons: 'Device Details' (a document icon), 'Configure' (a gear icon, which is highlighted in green), and 'Diagnostics' (a magnifying glass icon). The main content area is titled 'BACnet' and contains two input fields. The first field is labeled 'BACnet ID' and has the value '4194302' entered. The second field is labeled 'BACnet Port' and has the value '47808' entered.

When configuration is complete, scroll to the bottom and click "Configure Device".

## 3. Protocol Implementation Conformance Statement (PICS)

The PICS is a standard document that lists all the parameters and information you may need to set up your BACnet connection.

The Sensedge Mini PICS is available at [support.kaiterra.com](https://support.kaiterra.com).

## 4. Frequently Asked Questions (FAQ)

### **Can BACnet be daisy-chained (looped)?**

No. BACnet MS/TP is wired in a daisy-chain configuration, but the Sensedge Mini supports BACnet/IP, where daisy-chaining does not apply. It would mean daisy-chaining Ethernet, which requires two Ethernet ports and Ethernet-switching hardware that the device does not have.

### **When do I need a BBMD?**

BACnet/IP uses IP broadcasts for device discovery (Who-Is / I-Am). Broadcasts do not cross IP subnets, so if your building automation system is on a different subnet from the Sensedge Mini, it will not discover the device.

A BBMD (BACnet/IP Broadcast Management Device) solves this by forwarding broadcast traffic between subnets. The Sensedge Mini can register with an existing BBMD as a Foreign Device, after which it receives the broadcasts the BBMD forwards.

If the device and the building automation system are on the same subnet, leave the BBMD fields empty. No BBMD is needed.