



User Manual V2.0

March 2024

Product Overview

BluLite is a Bluetooth Low Energy temperature & humidity data logger with the latest Bluetooth 5.0 technology. It can collect and record the environment's temperature & humidity. BluLite can store up to 32,000 records display data and alarm in real time on LCD screen. The logger connects to DataSuite app for Windows and FourtecLite for Android that enable manage and monitor the data as well as add a sound alarm.

The logger is a small-sized, low-weighted, easily portable and highly accurate device for wide use in the cold chain logistics, archives, labs, museums, etc.

Product application

- Food Manufacturing
- Catering, ready meal kits and hospitality
- Agriculture & aquaculture, pre & post harvesting
- Pharmaceutical manufacturing sites
- Pharmacies
- Laboratories
- Warehouse & museums
- Industrial applications
- Wholesale & retail
- Export, in land & last mile delivery transportation

Product Features

- ✓ High accuracy and stability
- ✓ Bluetooth 5.0
- ✓ Built-in highly sensitive temperature & humidity sensor
- ✓ Real-time broadcast temperature & humidity, can view the temperature & humidity in real time on the LCD
- ✓ It can store 32,000 pieces of temperature & humidity data (when the storage space is full, the first 256 pieces of data will be overwritten)
- ✓ Sound Alarm for temperature and humidity threshold when connected to DataSuite or FourtecLite
- ✓ Boomerang Report when connected to DataSuite and FourtecLite
- ✓ Automatic emails reports and Alarms when connected to DataSuite or FourtecLite

Product specification

Item	Specification
Protocol standard	Bluetooth Low Energy 5. 0
Battery	620mAh /3V(replaceable)
Sampling Memory	32,000 samples
Operating temperature range	-20°C~ +60°C
Temperature detection accuracy	±0.3°C (-20~40°C), ±0. 5°C(other)
Operating Humidity range	0~90%RH
Humidity detection accuracy	±3%RH(10~90%), ±5%(other)
Battery life	1 year depending on sampling rate and operating conditions
Net weight	40g
Dimensions	86mm*48mm*12mm
Standards compliance	IP54

Caution

- Proximity to metal objects may weaken the signal due to interference
- Make sure the logger and mobile device meet the manufacturer recommended distance on order to guarantee the accuracy of receiving
- Keep away from water and corrosive objects.

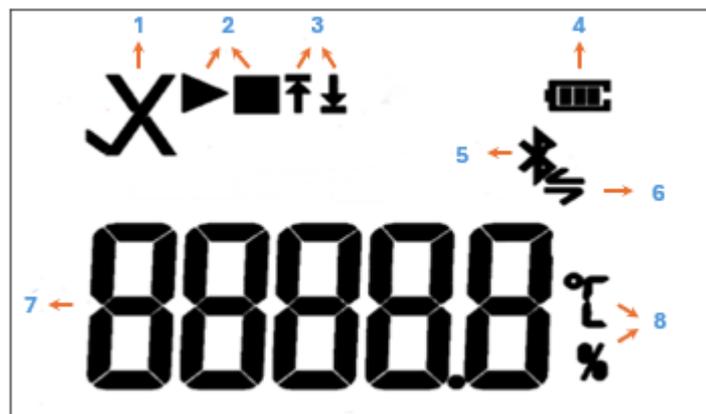
User Guides

Device Instructions

Device Buttons

Action	Instructions	Operation
Turn on ▶	Long press “Play” button for 3 seconds turns the device on	The device starts display real time measurements The device records the data only when pressing “run” using FourtecLite for Andorid or DataSuite for Windows
Turn Off ■	Long press the “Stop” button for 3 seconds	Turn off the device

LCD display description



NO.	Instructions	NO.	Instructions
1	√ measurement in threshold × measurement is/was out of threshold during the current run	5	Bluetooth indication
2	▶ readings are saved in logger ■ logger is on, measures are not saved.	6	Bluetooth is communicating
3	↑ the measurement is higher than the maximum range ↓ the measurement is lower than the minimum range	7	Reading Value every 2 seconds the value switches between Temperature and Humidity reading
4	Remaining battery level	8	°C Temperature unit % Humidity unit

Battery status displays description

Battery	Capacity
	Full
	Good
	Medium
	Lower (Please replace battery)

FourtecLite For Android

FourtecLite is an Android mobile application utility that enables reviewing sampling session history, configuring devices, and monitoring sampling sessions, all from an Android mobile device.

The user can connect the BluLite logger to FourtecLite application with Bluetooth.

Both efficient and user-friendly, FourtecLite is designed for different users in various processes and industries, offering flexibility and precision in data handling on the go:

- Monitor real-time data: keep track of ongoing sessions for immediate insights.
- Configure the data loggers: set up and adjust your Fourtec loggers directly from your Android device.
- Send email notifications of data abnormalities to pre-define email list.
- Define settings for each and every sensor and sync it when required with the DataSuite to keep data flow.

Download and install FourtecLite

Open play-store and install FourtecLite by Fourtec – Fourier Technologies Ltd.

Install and open the application.

Connect your device

1. Open the APP, and click “SCAN FOR BLE DEVICES”



2. Find your device and click “connect”.



3. Wait for connection and data loading



After connection the application will open

Important notes:

- The default name of the device is BluLite[7 last digits of ID number]. You can find the ID at the back of your device



- In case you changed the name in the settings it will appear according to the settings.

Disconnect your device

Go to BLE devices

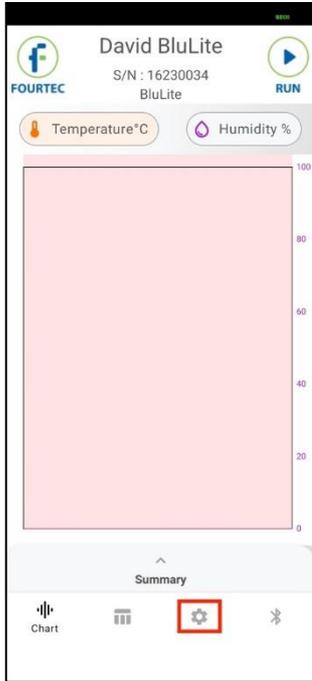
A list of all devices will appear on screen.

Click connect/disconnect form the selected device.



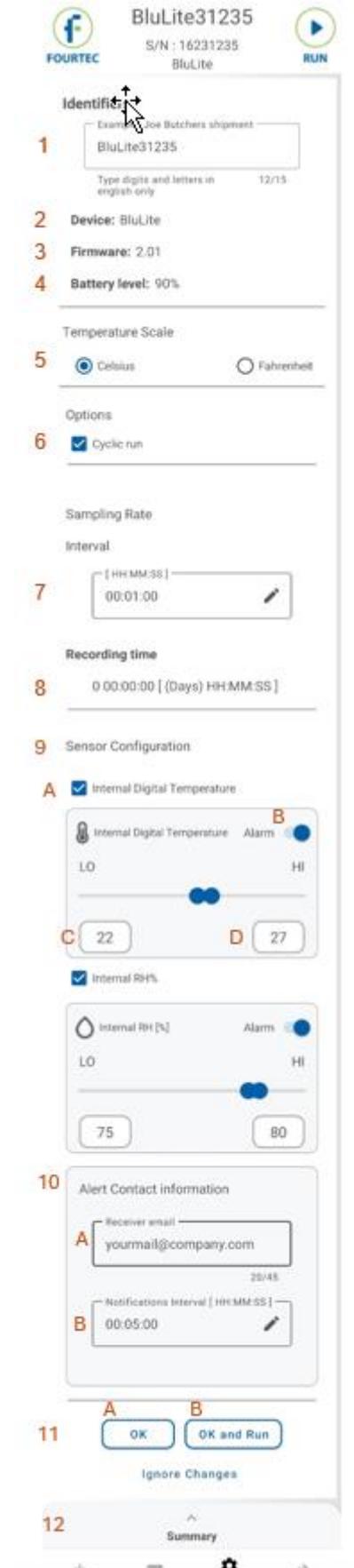
Configure device

Click setup button to set the device.



The screen will open as in the picture on the right:

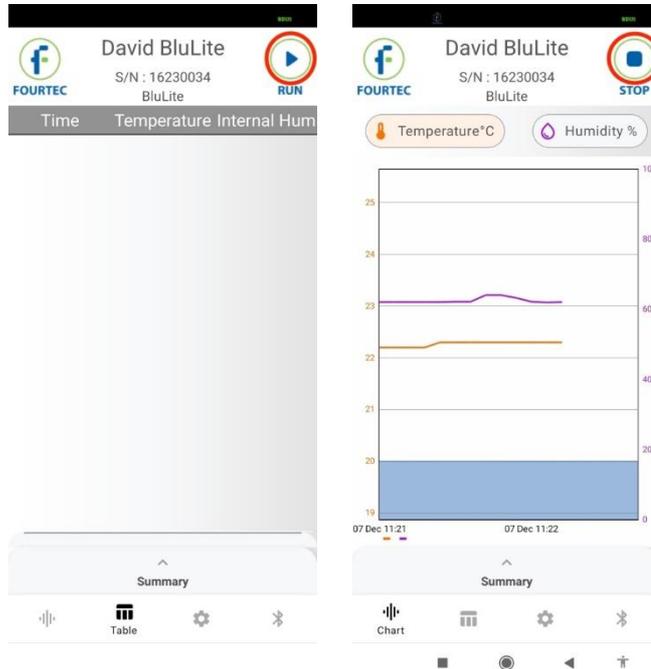
NO.	Instructions
1	Device name- The name is visible in DataSuite and FourtecLite and is used for connection and reports> It is editable – edit the text in the text box
2	Product name
3	Firmware
4	Level of Battery
5	The units of the measurement



6	<p>Cyclic Run The logger is in cycling mode - rewriting new measurements on old measurements when reaching the full capacity of the memory.</p>
7	<p>Interval The interval between samples</p>
8	<p>Recording time The current recorded time. When stop mode it shows the last log recorded When in run mode it shows the current recorded time.</p>
9	<p>Sensor Configuration A: sensor name The box is ticked by default. It shows that the sensor is activate B: turning it on, activates that alarm for this sensor C: minimum threshold for the alarm D: maximum threshold for the alarm</p>
10	<p>Alert contact information – Boomerang Feature A: insert your email address for email notifications *The mail is sent when the device is only B: Notification Intervals: the interval in which the alarm notification is sent</p> <p>Every time a user connects a logger to an Android device, an email will be sent with the alarms and an attached report to this email address.</p>
11	<p>A: save changes B: save changes and start run</p>
12	<p>Open short summary of the settings</p>

Start/Stop recording

"Run"/"Stop" button – starts measurement recording or stops the recording.



Note: Once clicking "Start", historical data will be deleted.

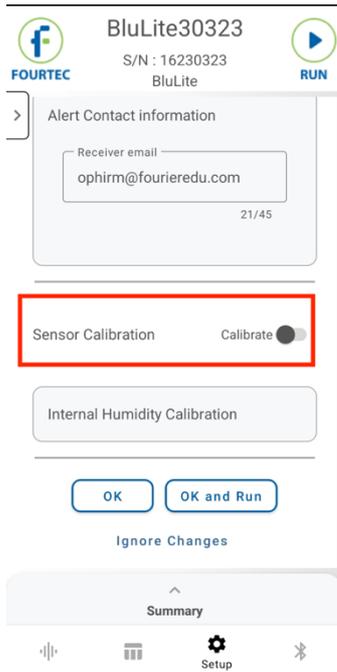
Calibration

The device is calibrated.

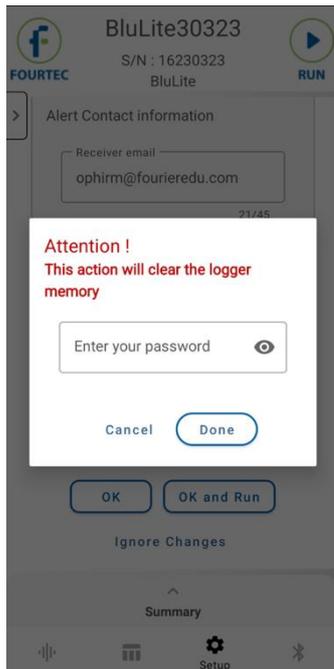
However, when necessary, the BluLite device can be calibrated.

Go to setup, and scroll down to “Sensor Calibration” section

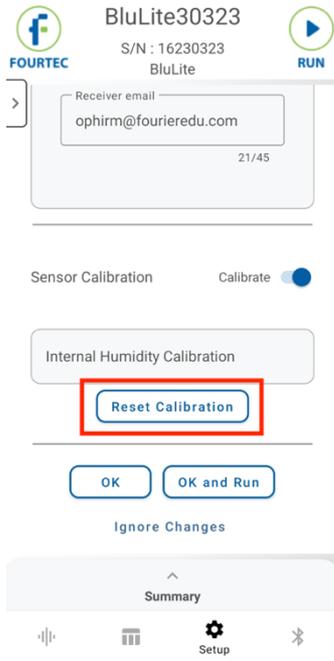
Turn on the switch:



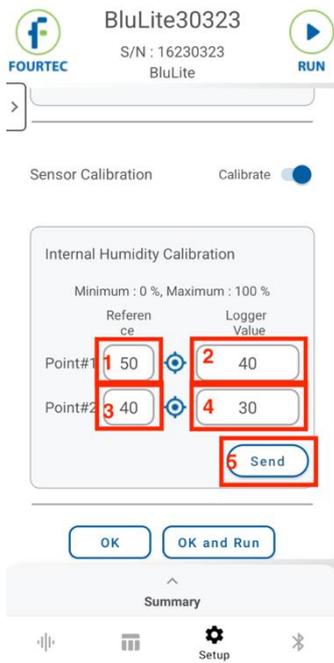
Enter the password “1234” and then press “Done”:



If the BluLite device is already calibrated, the “Reset Calibration” button appears, press on it



Insert two reference points and two reading points respectively, then press “Send”:



Then the device is ready to use.

DataSuite For Windows

Download and Install

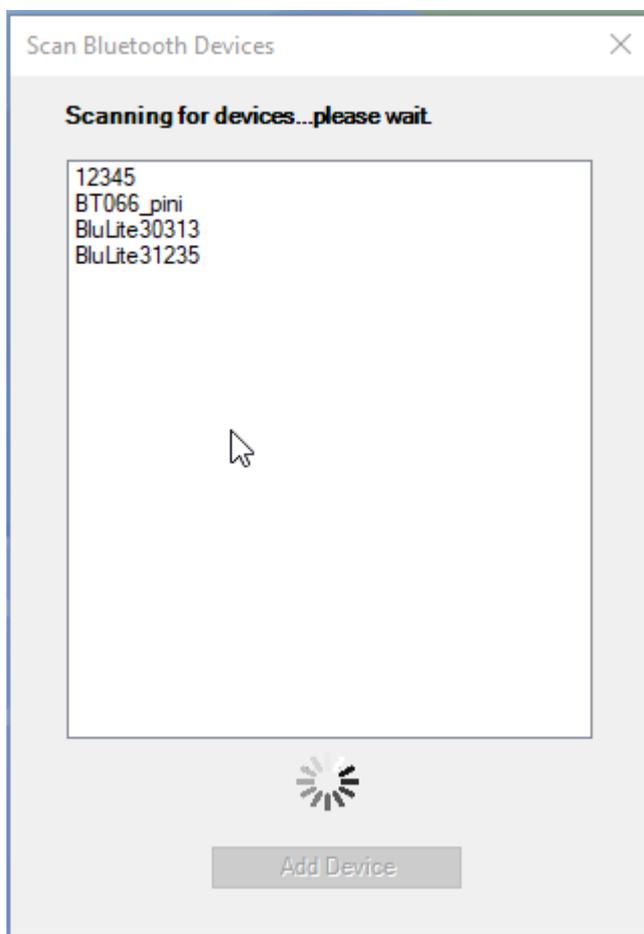
Go to <https://fourtec.com/download-center/> download DataSuite software.

Then install it on the computer and follow the wizard instructions.

Connect your device

Click on the bluetooth icon, a window opens with a list of bluetooth devices it detects

Select the device you want to connect and then click on “add device”



The logger will appear on the main screen in map/sensor view.

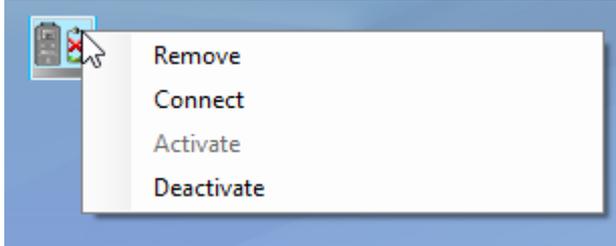
It is possible to connect a few BLE devices at the same time.

Important note: There is a limit of 4 active BluLite devices at the same time due to Windows and BlueTooth limitations. Further info can be found below in the next chapter.

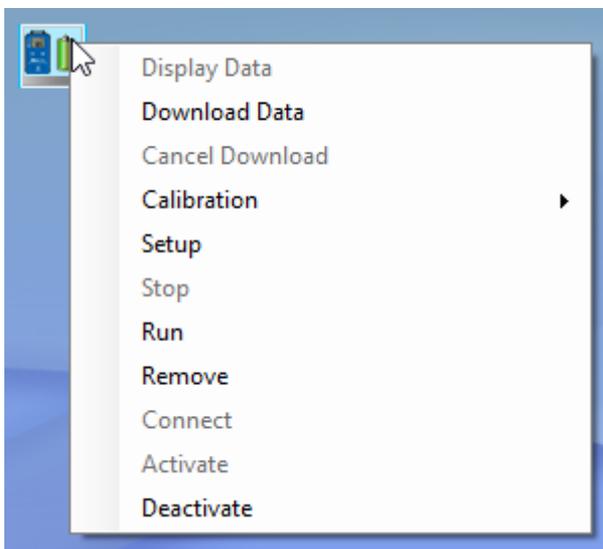
Disconnect/Connect and Deactivate/Activate

Right click on the BluLite icon on your mapview.

If the device is not connected the following menu appears:



If the device is connected the following menu appears:



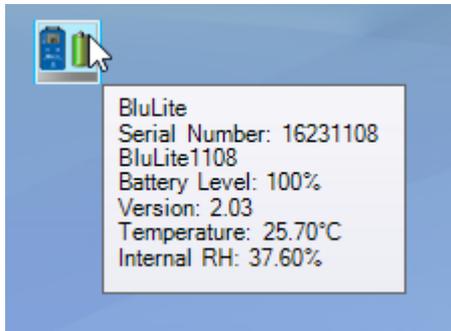
Instructions:

- Activate –activate the logger in DataSuite. It is possible to see online data measurements. The software supports up to 4 activated loggers. If there are already other 4 activated loggers, mind that you need to deactivate one of them first.
- Deactivate – The logger is recognized by DataSuite but there is no real time data from the logger. Select Deactivate when the logger is active and you may want to activate another logger. After deactivation the logger stays on the map view.
- Connect –. Select when you want to establish connection between DataSuite and the logger.
- Remove – unpair the logger from your device. Disconnect DataSuite from the logger and removes it from the map view.

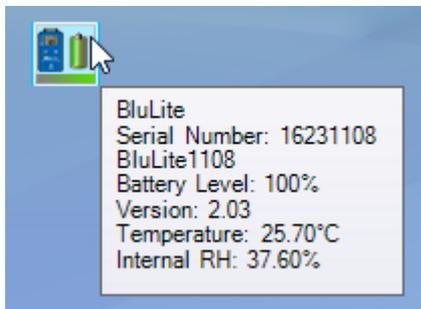
Important note: when launching DataSuite, it connects automatically to loggers that are activated in the software. If connection fails, BluLite might be out of range or off. When an activated BluLite comes to range or on, it will connect automatically after a short while.

Sensors' Tool tip

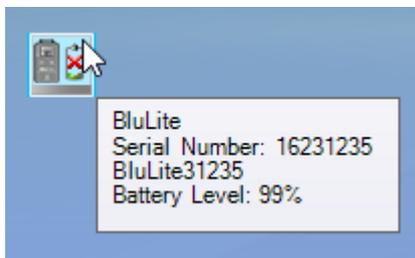
Active and not Running – Icon is colored and the reading is displayed



Active and Running – icon is colored and the progress bar is active

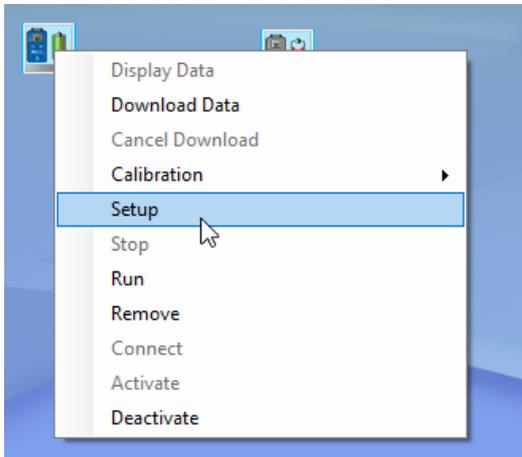


Deactive – icon is greyed.



Configure device

Right click on the BluLite icon then select setup

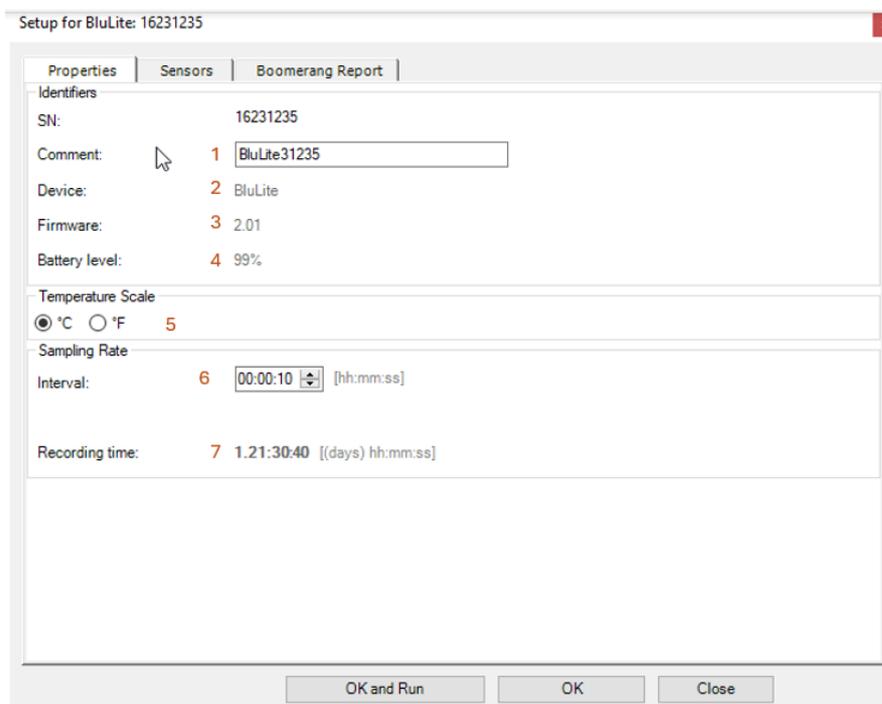


The setup has 3 tabs for configuration properties, sensors and boomerang report.

At the bottom of the window you can find:

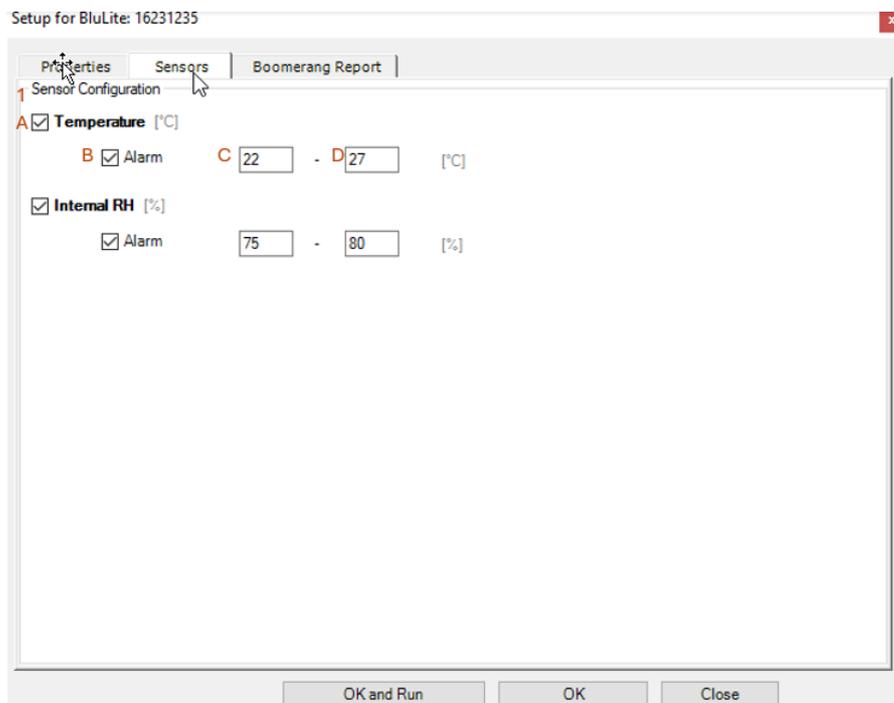
- OK and Run – Save the changes and start a run.
- OK – Save changes in the device.
- Close – Exit without changes.

Properties



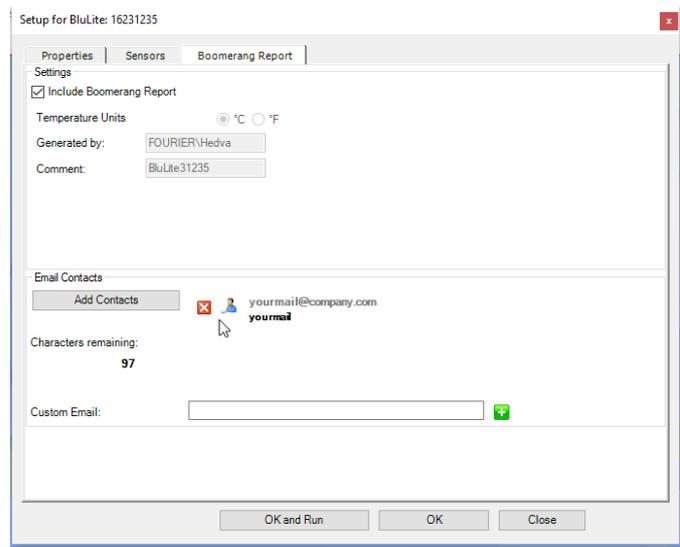
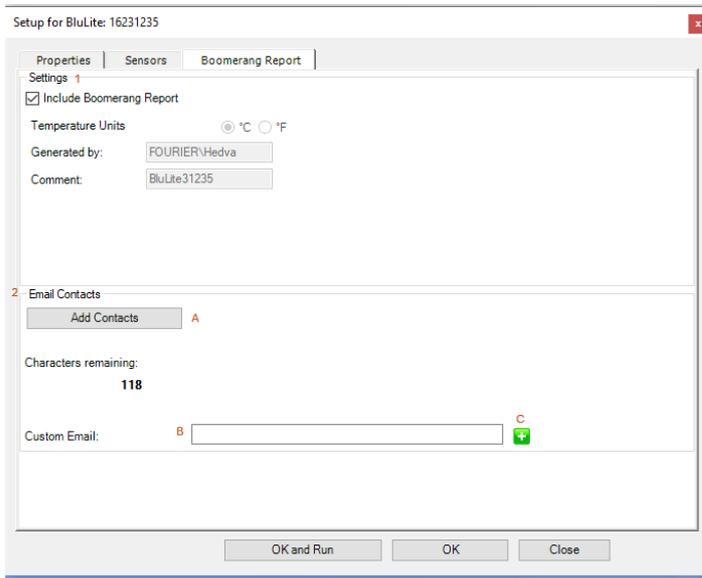
NO.	Instructions
1	Device name- The name is visible in DataSuite and FourtecLite and is used for connection and reports> It is editable – edit the text in the text box
2	Product name
3	Firmware
4	Level of Battery
5	The units of the measurement
6	Interval The interval between samples
7	Recording time The current recorded time. When stop mode it shows the last log recorded When in run mode it shows the current recorded time.

Sensors



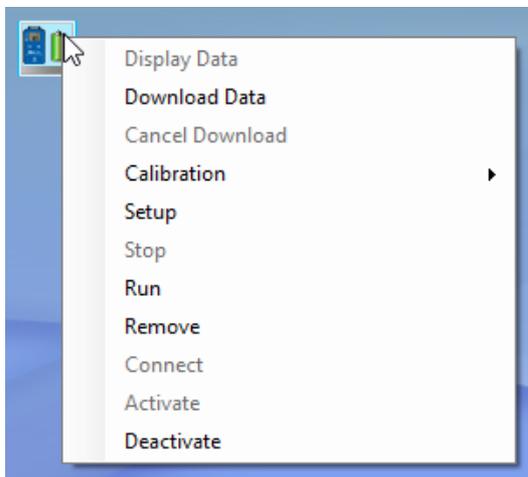
NO.	Instructions
1	<p>Sensor Configuration</p> <p>A: sensor name</p> <p>The box is ticked by default. It shows that the sensor is activate</p> <p>B: turning it on, activates that alarm for this sensor</p> <p>C: minimum threshold for the alarm</p> <p>D: maximum threshold for the alarm</p>

Boomerang Report



NO.	Instructions
1	Settings General information about the sensor that will appear in the report
2	Email Contacts A: Add contacts from your contacts list. B: write an email address you C: click + to add the email to the list of contacts for the Boomerang report.

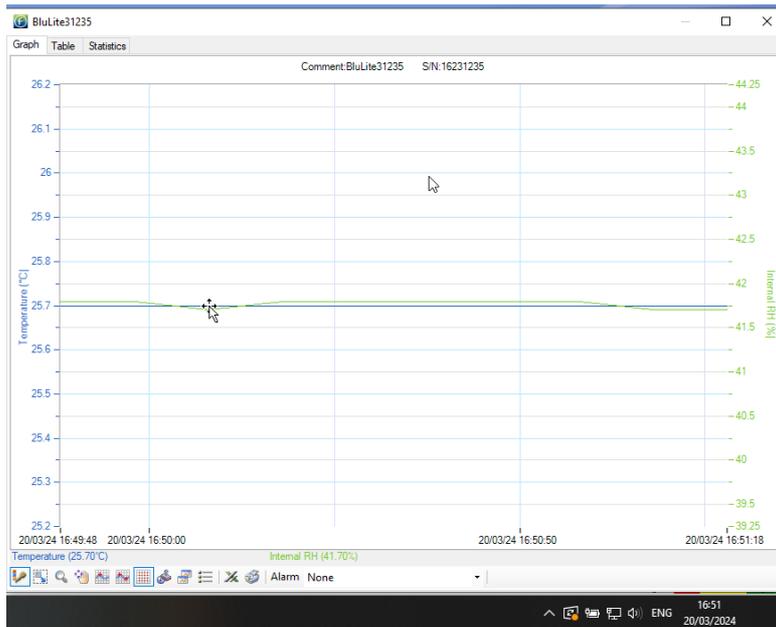
Start/Stop recording



On the map view, Right click on the device icon, click “run”/”stop” to start or stop the recording of the device.

Display Data

Right click on the device icon, select display data. The data stored in the logger is downloaded to the software and displayed in a graph. The graph is updated as long as the logger is connected.



Download Data

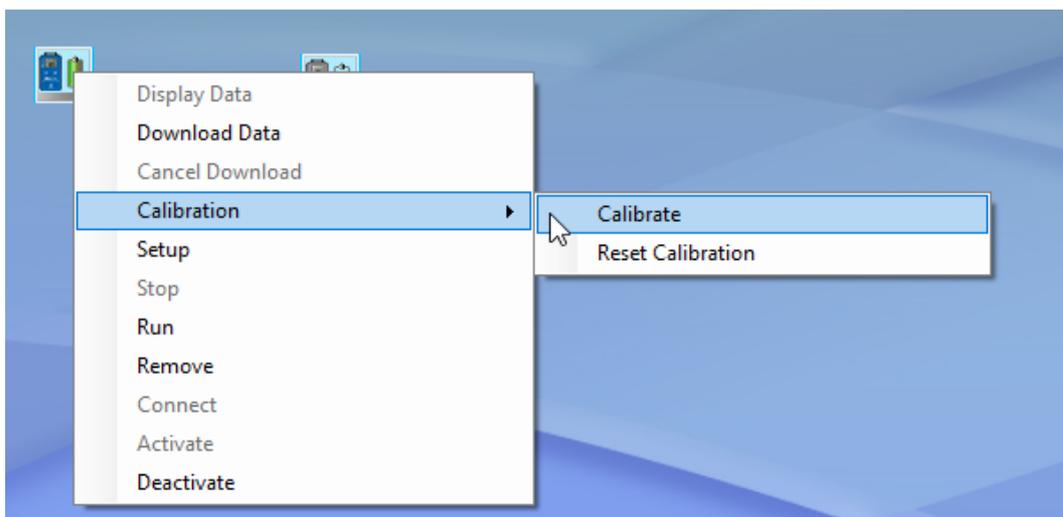
Download data downloads the data in the current run or last run on device and saves it on your pc.

Calibration

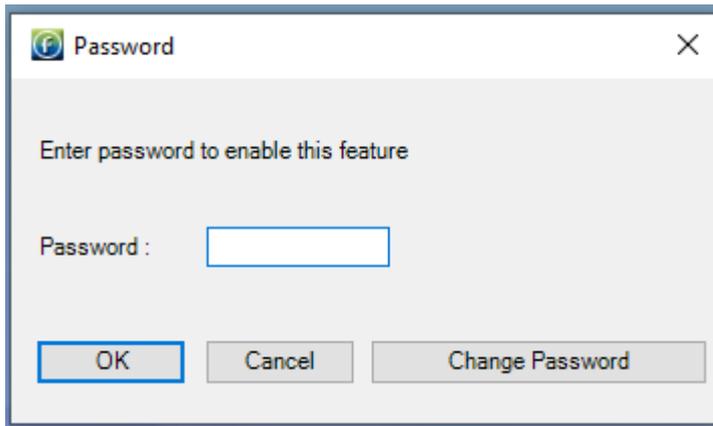
The device is calibrated.

However, when necessary, the BluLite device can be calibrated.

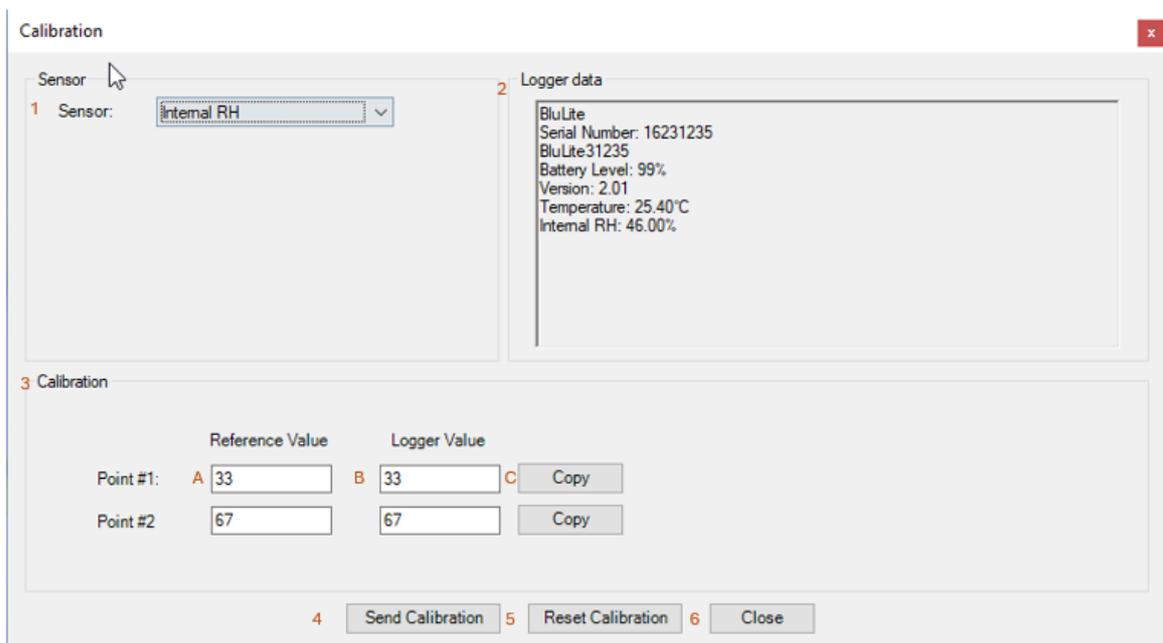
Right click on the device on map-view and select:



Entre your password (the default password is 1234)



Select the sensor and send calibration



NO.	Instructions
1	In case the logger has more than 1 sensor, please select the relevant sensor for calibration
2	Information about the logger
3	Calibration A: the relevant reference point B: the current value of the logger C: If you are performing an online calibration e.g. using a calibrator, the logger displays the value to be calibrated, press the Copy button to copy the real value to the Logger Value text box.