

## **BLUETOOTH LOW ENERGY**

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# Wireless thermocouple logger

EAN: 5905309602588



Efento thermocouple loggers are designed to monitor a wide range of temperatures using external thermocouple probes. Users can connect their preferred thermocouple probe (supported types: B, E, J, K, N, R, S, T) to the logger and monitor temperatures within the chosen range. Measurement accuracy varies based on the probe selected.

You can use a free mobile application to configure the device and read the data from its memory. If you add Efento Gateway, you can build a remote monitoring system.

Device is delivered without probe.

# **Key features**

#### → Works with Efento Cloud

Together with Efento Cloud, the sensors enable constant monitoring, alerting about exceeding safe limits, generating reports and analyzes.

## → Long battery life

Loggers have been designed to work for up to 5 years on battery. You can forget about changing the battery frequently or troublesome battery charging.

#### → Lower costs

Choosing wireless sensors and a cloud platform reduces the installation and maintenance costs.

## → Wide range of sensors

Efento sensors can measure various physical and chemical values. If you decide on one sensor today, you can expand your sensors fleet to another types anytime you want.

#### → Integration

Standard communication protocols allow integration with any cloud platform or mobile application.

#### → Easy set up

All you need to set up a logger is a smartphone with a free mobile application. The whole configuration takes no more than 15 minutes.



# **TECHNICAL DATA**

## **Temperature sensor**

- → Supported thermocouple types: B, E, J, K, N, R, S, T
- → Range and accuracy: depends on the connected probe
- → Resolution: 0.1°C
- → Memory size: 40 000 measurements
- → Measurement interval: 1 minute to 10 days (configurable by the user)

#### **Bluetooth Low Energy interface**

- → Communication: Bluetooth Low Energy (BLE)
- → Radio module frequency: 2,4 GHz
- → Power: 2,5 mW (4 dBm)
- → Range: up to 100 m (LOS)
- → Communication standard: Bluetooth Smart (Bluetooth Low Energy, Bluetooth 4.0)
- → Transmision period: 1 s

#### Communication

- → Protocol: CoAP;
- → Transmission interval: 5 minutes 10 days, configurable

## **Power supply**

→ Package of 3 x AA, 6300 mAh (replaceable) Battery operating time: up to 5 years

#### Mechanical

- → Dimensions: 26 x 60 x 124 mm
- → Weight: 0,15 kg (including batteries)
- → Enclosure: plastic ABS, color white, IP30

#### **Environmental**

- → Operating
  - ♦ Temperature: -15° to 70°C
  - Humidity: 0 to 99% non-condensing
- → Storage and transportation
  - ◆ Temperature: -40° to 70°C

## **Additional information**

# **Data security**

Data transmitted wirelessly between the sensor and smartphone / Efento Gateway can be encrypted. Thanks to that, unauthorized persons cannot hijack the communication between sensors and other devices. Efento sensors' software can be updated over the air, which will allow you to easily install any security patch that is released.

### **Integration**

If you want to integrate Efento loggers with your software, cloud platform or mobile application, we will provide you with the necessary documentation, libraries and / or SDKs.

## Sensor's passport

Sensor's passport documents the entire lifecycle of a device. By accessing the data on Efento Cloud platform, the user can check all information about the sensor: date of sale, warranty status, date of calibration, information on all service activities. In addition, the user can download all documents regarding the device – a duplicate of calibration certificate or service protocols.