Product datasheet

Wireless temperature sensor

Measure and monitor changes in ambient temperature, in real time.

Our wireless temperature sensors measure the ambient temperature in each room, cabinet or zone. The small, solar-powered sensors use ultra-low power wireless technology, making them easy to install and very low maintenance. Optional battery back-up available for low-light environments.
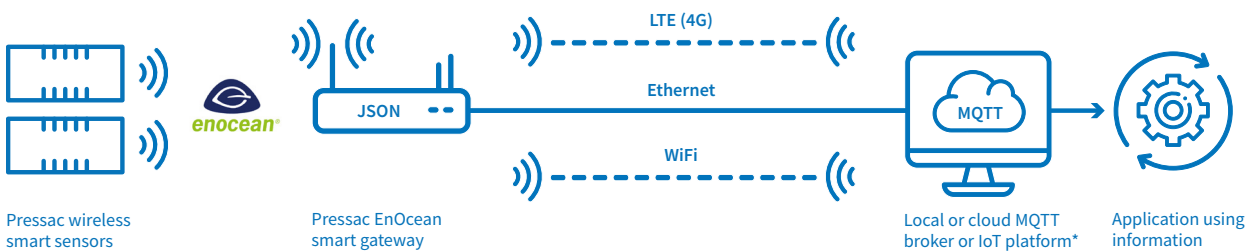
Features

Measures ambient temperature: 0-40°C (+/- 0.5°C)

Live alerts if the temperature changes by more than 0.5 $^{\circ}$C and updates every 15 minutes

Solar-powered using ambient room light – optimally angled to absorb light – with a battery back-up for periodic low-light conditions. Batteries typically last up to 10 years

Transmit data wirelessly and securely – using AES-128 encryption – via EnOcean wireless protocol, which uses internationally approved, licence-free ISM bands
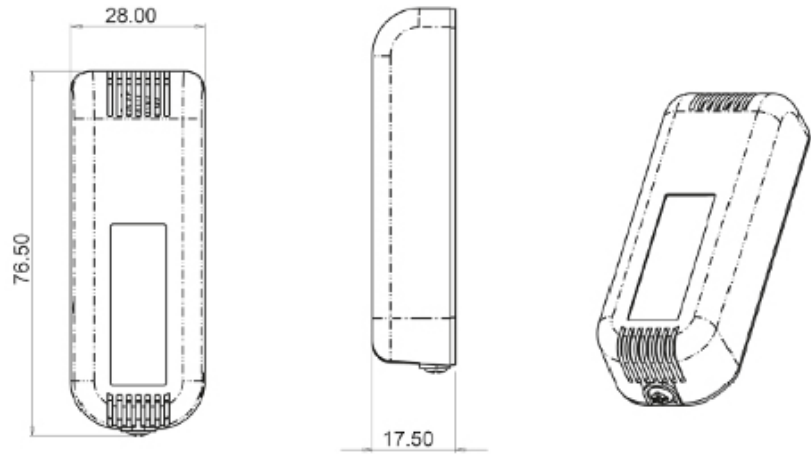
Integrating sensor data

Our smart gateway receives near real-time data from all sensors within range, converts the raw data into an easy-to-use JSON format, then publishes it using MQTT protocol. Data can be sent - via Ethernet, LTE (4G) or WiFi – to any local or cloud MQTT broker; securely to IBM Watson IoT, Microsoft Azure IoT Hub or AWS IoT Core; directly into Google Sheets; or to a Node-RED application.

Pressac wireless smart sensors

enocean

JSON

LTE (4G)

Ethernet

WiFi

Pressac EnOcean smart gateway

MQTT

Local or cloud MQTT broker or IoT platform*

Application using information

*Ready-made connections with:

aws | Microsoft Azure | IBM **Watson IoT** | Google Sheets | Node-RED

Pressac

Technology that makes buildings talk

Technical specification

28.00

76.50

17.50

Measurement	**Transmission rate:** reports every 100 seconds if the temperature changes by more than 0.5°C, otherwise updates every 15 minutes
	Measurement range: temperature 0°C to 40°C (accuracy +/- 0.5°C between 17°C and 27°C, otherwise +/- 1°C)
Power specification	**Power:** • solar – amorphous silicon solar cells • battery back-up for low-light conditions **Battery type:** CR2354 **Typical battery life:** up to 10 years (dependent on use)
Wireless specification	**Protocol:** EnOcean **Radio frequency:** • 868 MHz for Europe and other countries adopting RED • 902 MHz for USA (FCC specification) and Canada (IC specification) • 928 MHz for Japan (ARIB specification **Range:** up to 30 metres in buildings and 300 metres in free field **Telegram type:** 4BS **EnOcean Equipment Profile (EEP):** A5-02-05 **Security:** optional secure mode AES-128 encryption **Interoperability:** EnOcean certification 3.0 **Maximum power output:** 3dBm
Enclosure specification	**Material:** PC-ABS plastic **IP rating:** IP2X **Dimensions:** 76.5 x 28 x 17.5 mm (approx)
Installation	**Fixing:** adhesive pads or screws provided **Positioning:** away from heat or ventilation sources recommended **Operating temperature:** -20°C to +60°C **Storage temperature:** -20°C to +60°C **Environment:** indoor **Calibration:** factory calibrated
Compliance	CE approved, RoHS compliant, FCC compliant
Part number	MS_TEMP_BAT_[868]-[902]-[928]

If you're looking for a partner who offers quality solutions in high volumes – get in touch

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