

Wireless thermometer, hygrometer barometer, Sigfox IoT

code: W7810



The device measures the temperature, humidity and atmospheric pressure from the built-in internal sensors. It is characterized by a simple compact design with the possibility of installation directly into the measured space. The sensor can be used [with a suitable sensor cap](#) even in more demanding conditions.

The measured values are sent in an adjustable time interval (10 min to 24 h) by radio transmission in the [Sigfox network](#) to the [COMET Cloud](#), from which the user can view them using a personal computer or mobile device.

The instrument can monitor up to 2 alarm limits of the measured variable. Exceeding these limits is indicated by sending an emergency message. COMET Cloud transmits this alarm message via e-mail to the selected user. The device is suitable for applications that tolerate the delay of information delivered by Sigfox (max. 10 min).

- wireless transmission of measured values and alarm states
- battery power with low battery indication (battery life 4 months to 7 years)
- external power with [optional accessories](#)
- remote setting of the device from COMET Cloud (maximum once a day)
- IP65
- traceable calibration certificate in accordance with EN ISO / IEC 17025

The availability of Sigfox network in a particular location

[Check your Sigfox network availability](#) before you buy your device. COMET devices in the Sigfox network can be used anywhere in the RC1 zone. Learn more about [Sigfox \(RC\) Radio Zones](#).

Technical data

| | |
|---|-----------------------------------|
| TEMPERATURE SENSOR | |
| Measuring range | -30 to +60 °C |
| Accuracy | ±0.4 °C |
| Resolution | 0.1 °C |
| Response time t90 of temperature measurement (temperature step 20°C, air flow approximately 1m/s) | 10 minutes |
| HUMIDITY SENSOR | |
| Measuring range | 0 to 100 % RH |
| Accuracy | ±1.8 % RH from 0 to 90 % at 23 °C |
| Resolution | 0.1% RH |
| DEW POINT | |

| | |
|------------------------------------|---|
| Measuring range | -60 to +60 °C |
| Accuracy | ±1.5 °C at ambient temperature T <25 °C and RH >30 % |
| Resolution | 0.1 °C |
| ATMOSPHERIC PRESSURE SENSOR SENSOR | |
| Measuring range | 600 to 1100 hPa |
| Accuracy | ±1.3 hPa at 23 °C from 800 to 1100 hPa |
| Resolution | 0.1 hPa |
| GENERAL TECHNICAL DATA | |
| Operating temperature | -30 to +60 °C |
| Channels | internal sensor of temperature, humidity sensor and atmospheric pressure |
| Message transmission interval | adjustable 10 minutes, 20 minutes, 30 minutes, 1 hour, 3 hours, 6 hours, 12 hours, 24 hours |
| Alarm message sending interval | 10 minutes |
| Operating frequency | 868 MHz |
| Maximum transmission power | 25mW |
| Sigfox radiation class | 0U |
| Radio configuration zone | RC1 (operation is possible in Europe, Iran, Oman and South Africa) |
| Typical range of transmitter | 50 km in the field, 3 km in the city |
| Power | Lithium battery 3.6 V, AA size |
| Protection class | IP65 |
| Dimensions | 126 x 89 x 40mm |
| Weight (including batteries) | 150g |
| Warranty | 3 years |