

# 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 RCZ1 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	$\pm 1.5$ °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	$\pm 1.3$ 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	RCZ1 (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