

# IoT Wireless Temperature Sensor for 3 external thermocouples and with 1 internal temperature sensor, powered by Sigfox

code: W0846



The transmitter measures the temperature from three external K-type thermocouple probes (NiCr-Ni) and the ambient temperature using a built-in sensor..

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 for each measured temperature channel. 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).

## Highlights:

- wireless transmission of measured values and alarm states
- temperature measurement in up to four places for the price of one subscription
- battery power (C size 3.6 V) with low battery indication (battery life up to 10 years)
- remote setting of the device from [COMET Cloud](#) (maximum once a day)
- **IP65 for usage of device on outside applications**
- 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 - internal sensor	
Measuring range	-30 to +60 °C
Accuracy	±0.4°C
Resolution	0.1 °C
Response time of temperature measurement (temperature step 20°C, air flow approximately 1m/s)	t63 < 6 minutes; t90 < 15 minutes
TEMPERATURE SENSOR - THERMOCOUPLE TYPE K	
Measuring range	-200 to +1300 °C
Accuracy	±0.4°C
Resolution	± ( 0,3 % of the measurement value +1,5 °C)

Response time	according to the connected thermocouple
GENERAL TECHNICAL DATA	
Operating temperature	-30 to +60 °C
Channels	3x thermocouple; 1x internal temperature sensor
Message transmission interval	adjustable 10 minutes, 20 minutes, 30 minutes, 1 hour, 3 hours, 6 hours, 12 hours, 24 hours
Operating frequency	868 MHz
Maximum transmission power	25mW
Sigfox radiation class	0U
Radio configuration zone	RC1
Typical range of transmitter	50 km in the field, 3 km in the city
Power	Lithium battery 3.6 V, C size, capacity 8.5 Ah
Number of battery slots	2
Protection class	IP65
Dimensions	179 x 134 x 45 mm without connectors
Weight (including batteries)	350g
Warranty	3 years