

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 |