

IoT Wireless Temperature and CO2 Sensor, powered by Sigfox





The device measures the temperature and concetration of CO_2 from an internal sensors.

The measured values are sent in an adjustable time interval (10 min to 24 h) by radio transmission in the <u>Sigfox network</u> to the <u>COMET Cloud</u>, 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. <u>COMET Cloud</u> 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
- two slots for batteries for longer operation time
- battery power (C size 3.6 V) with low battery indication (battery life up to 7 years)
- input for external power
- remote setting of the device from <u>COMET Cloud</u> (maximum once a day)
- IP20
- Traceable calibration certificate in accordance with EN ISO / IEC 17025

The availability of Sigfox network in a particular location

<u>Check your Sigfox network availability</u> before you buy your device. COMET devices in the Sigfox network can be used anywhere in the RC1 zone. Learn more about <u>Sigfox (RC) Radio Zones</u>.

Tekniska specifikationer

| TEMPERATURE SENSOR | |
|---|---|
| Measuring range | -20 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) | t90 < 8 min (temperature change 20 °C) |
| CO2 SENSOR | |
| Measuring range | 0 to 5000 ppm |
| Accuracy | ±(50ppm +2% from reading) at 25°C and 1013hPa |
| Resolution | 1 ppm |
| GENERAL TECHNICAL DATA | |
| Operating temperature | -20 to +60 °C |
| Channels | internal sensor for temperature and CO ₂ |

| Message transmission interval | adjustable 10 minuteses, 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 (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, C size, capacity 8.5 Ah |
| Protection class | IP20 |
| Number of battery slots | 2 |
| Dimensions | 179 x 134 x 45 mm |
| Weight (including batteries) | 340g |
| Warranty | 3 years |