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 subcription
- 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.

With a newly purchased wireless sensor with Sigfox connectivity, you receive 1 year of COMET Cloud for free; an additional year of operation in COMET Cloud then requires 2 credits.

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 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
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