Wireless thermometer with built-in sensor and with pulse counting input, IoT Sigfox

code: W0854P



The device measures the temperature from the built-in sensor with the possibility of installation directly into the measured space thanks to IP65 protection. The sensor also has a read input that is connectable to all energy meters with pulse output. When connected to a suitable sensor on the production line, it can count e.g. pieces produced or be used to measure the average frequency of the input pulses (suitable e.g. for measuring wind speed when the input is connected to an anemometer).

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).

Highlights:

- wireless transmission of measured values and alarm states
- battery power (battery life 1 year to 10 years)
- LED indication of device status
- 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 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	
Measuring range	-30 to +60 °C
Accuracy	±0.4 °C
Resolution	0.1 °C
Response time	t90 < 10 min (temperature step 20 °C, air flow approximately cca 1 m/s)
COUNTER INPUT	
HW counter range	24 bits (16 777 215)

Connectable pulse source	Voltage-free contact, open collector, voltage signal
Input voltage for the „L	0 to 0.6 V
Input voltage for the „H“	1.8 to 30 V
Maximum pulse frequency	60 Hz
Minimum lenght of input pulse	6 ms
Adjustable counter output	absolute counter (total number of pulses), relative counter (difference in the number of pulses per recording interval), relative counter peaks (minute peaks)
Alarm functions	available only for relative counter
Connection method	2 wired shieldied cable width lenght of 1.5 m
GENERAL TECHNICAL DATA	
Operating temperature	-30 to +60 °C
Channels	built-in temperature sensor, counter input
"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 (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
Protection class	IP20
Dimensions	126 x 89 x 40 mm
Weight (including batteries)	250g
Warranty	3 years