Wireless thermometer, hygrometer, barometer for external probe, Sigfox IoT

code: W7811



The device measures the temperature and humidity from an external probe on the cable - you can choose it from an optional accessory. In comparison with sensor W3811 the sensor W7811 is additionally equipped with an internal sensor of atmospheric pressure. The sensor is characterized by a simple and compact design with the possibility of installation directly into the measured space. Model with external cable probe is also suitable for measurements in areas where the risk of poor reception sigfox. The probe can be placed at the measurement point and the device itself where is able to reach a better signal. The probe length must not exceed 30 meters. The probe can be used with a suitable sensor cap even in more demanding conditions.

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 with low battery indication (battery life 4 months to 7 years)
- external power with optional accessories
- 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.

Technical data

TEMPERATURE SENSOR	
Measuring range	according to the connected probe Digi/E
Accuracy	according to the connected probe Digi/E
Resolution	0.1 °C
Response time t90 of temperature measurement (temperature step 20°C, air flow approximately 1m/s)	according to the connected probe Digi/E

HUMIDITY SENSOR	
Measuring range	according to the connected probe Digi/E
Accuracy	according to the connected probe Digi/E
Resolution	0.1% RH
DEW POINT	
Measuring range	according to the connected probe Digi/E
Accuracy	according to the connected probe Digi/E
Resolution	according to the connected probe Digi/E
ATMOSPHERIC PRESSURE SENSOR SENSOR	
Measuring range	600 to 1100 hPa
Accuracy	±1.3 hPa at 23 °C from 800 to 1100 hPa
Resolution	0.1 hPa
GENERAL TECHNICAL DATA	
Operating temperature	-30 to +60 °C
Channels	internal atmospheric pressure sensor, 1x connectable temperature+humidity probe
Message transmission interval	adjustable 10 minutes, 20 minutes, 30 minutes,1 hour, 3 hours, 6 hours, 12 hours, 24 hours
Alarm message sending interval	10 minutes
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, AA size
Protection class	IP54
Dimensions	126 x 89 x 40mm
Weight (including batteries)	150g
Warranty	3 years