

# IoT-enabled wireless measuring instruments

Operates on the Sigfox network for wireless connectivity



Antenna.

Features a large display for enhanced readability, showing the current value, minimum/maximum values, and alarm indications.

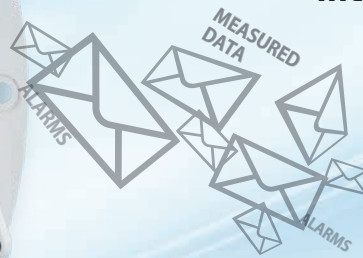
Operates on battery power, utilizing a 3.6 V AA-size battery, with the POWER version of the product featuring a replacement 3.6V lithium battery of size C.

Your measured data into COMET Cloud



Temperature and humidity sensor.

Data is transmitted to the COMET Cloud for storage and analysis.



- Accurate measuring of
  - Temperature
  - Humidity
  - Barometric Pressure
  - Events
  - CO<sub>2</sub>
- Affordable wireless communication for long distances
- Alarm indication via email
- Data storage in the COMET Cloud
- Rugged design
- Long battery life, up to 10 years

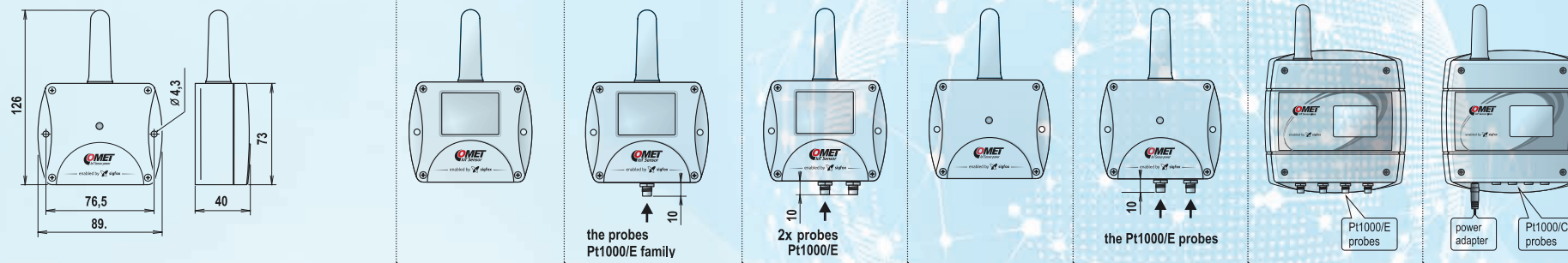


product catalog



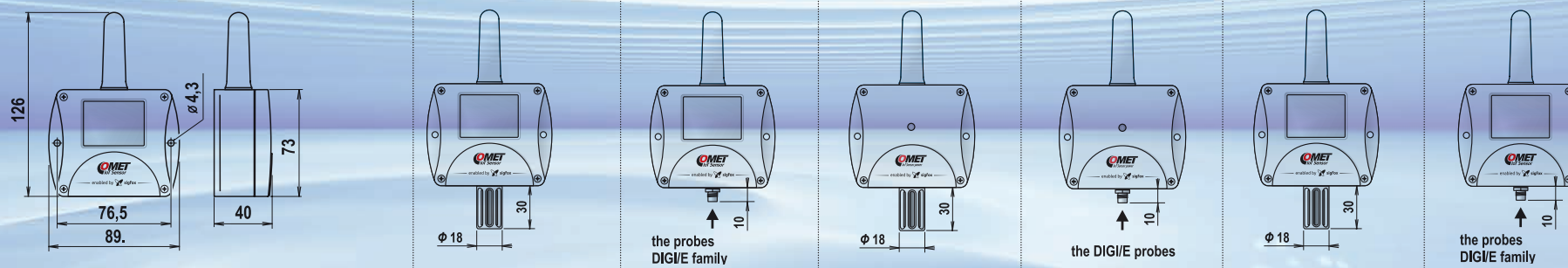
# Temperature wireless measurement

MEASURED VALUES			Temperature						
SIGFOX SENSOR MODELS			W0810	W0811	W0832	W0810P	W0832P	W0841	W0841E
temperature	internal	range	-30 to +60 °C	-	-30 to +60 °C	-30 to +60 °C	-30 to +60 °C	-90 to +260 °C	-90 to +260 °C
		accuracy	±0.4 °C	-	±0.4 °C	±0.4 °C	±0.4 °C	±0.2°C *	±0.2°C *
	external	range	-	-90 to +260 °C	-90 to +260 °C	-	-90 to +260 °C	-	-
		accuracy	-	±0.2°C *	±0.2°C *	-	±0.2°C *	-	-
sending interval / typical battery life			1 h / 1.5 year			1 h / 6 year		1 h / 5 year	
Protection class rating			IP65						



# Humidity and barometric pressure wireless measurement

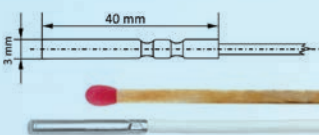
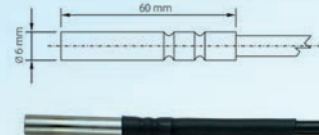
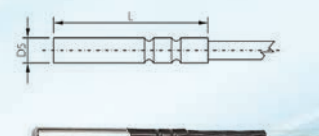
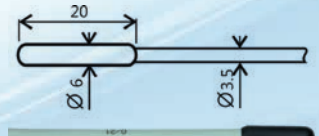
MEASURED VALUES			Temperature, relative humidity				Temperature, relative humidity, atm. pressure	
SIGFOX SENSOR MODELS			W3810	W3811	W3810P	W3811P	W7810	W7811
temperature	internal	range	-30 to +60 °C	-	-30 to +60 °C	-	-30 to +60 °C	-
		accuracy	±0.4 °C	-	±0.4 °C	-	±0.4 °C	-
	external	range	-	according to the probe	-	according to the probe	-	according to the probe
		accuracy	-	± 1.8% RH **	± 1.8% RH **	± 1.8% RH **	± 1.8% RH **	± 1.8% RH **
relative humidity		range	0 to 100 % RH	0 to 100 % RH	0 to 100 % RH	±1.8% RH **	0 to 100 % RH	0 to 100 % RH
dew point		range ***	-60 to +60 °C	according to the probe	-60 to +60 °C	-	-60 to +60 °C	according to the probe
barometric pressure		range	-	-	-	-	600 to 1100 hPa	600 to 1100 hPa
		accuracy	-	-	-	-	±1.3 hPa	±1.3 hPa
sending interval / typical battery life			1 h / 1.5 year		1 h / 6 year		1 h / 1.5 year	



\* accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ±0,2 % of measured value)  
 \*\* Accuracy of sensing element; from 0 to 90 %RH at 23 °C  
 \*\*\* for accuracy of dew point see graphs at device manual

# External temperature probes

Temperature probes attached to cables are specifically designed for measuring temperatures in certain applications. These probes are available in lengths of 1, 2, 5, and 10 meters. To ensure high-precision measurements, it is not recommended to use probes that exceed 20 meters in length. Unless otherwise specified, the probes are manufactured to Class A accuracy standards.

<p>Ultra thin temperature probe.</p>  <p>Pt1000TG3/E (-50°C to +200°C)</p>	<p>Universal, watertight temperature probe rated IP68, designed for long-term monitoring of temperature in liquids.</p>  <p>Pt1000TG68/E (-80°C to +200°C)</p>
<p>Cryogenic temperature probe designed for ultra-low temperature measurements.</p>  <p>Pt1000TR125/E (-190 to +150°C)</p>	<p>Cost-effective probe featuring a plastic housing and slow response time, rated with IP67 for protection.</p>  <p>Pt1000TR160/E (-30°C to +80°C)</p>

# Sensor covers for external probes

**F5300** - Teflon (PTFE) sensor cover (white color), featuring increased resistance against splashing water, a non-absorbent surface, and rust-free properties. Porous size: 25µm. Temperature range: -40°C to +125°C.

**F0000** - Sintered bronze sensor cover for moderately aggressive environments. Filtering ability: 0.025mm.

**F5200 (F5200B - black)** - Sensor cover with a stainless steel mesh filter. Filtering ability: 0.025mm.



# External temperature humidity probes

Ultra thin digital probe.  
 DIGIH/E  
 (-10 to +60 °C; 0 to 100% RH)

Budget-friendly probe, designed without a filter mesh.  
 DIGIS/E  
 (-10 to +60 °C; 0 to 95% RH)

Probe designed with an interchangeable protection filter.  
 DIGIL/E  
 (-30 to +105 °C; 0 to 100% RH)

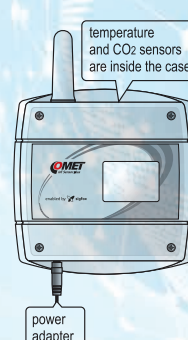
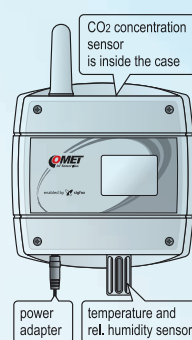
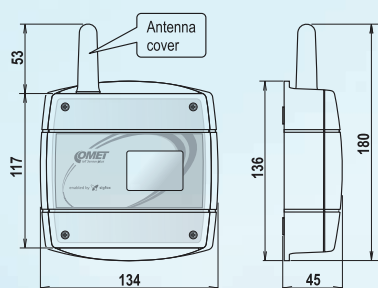


Additional probes can be found on the Comet System website at [www.cometsystem.com](http://www.cometsystem.com)



# CO<sub>2</sub> wireless measurement

MEASURED VALUES		Temperature relative humidity, CO <sub>2</sub>	
SIGFOX SENSOR MODELS		W8810	W8810
temperature	range	-20 to +60 °C	-20 to +60 °C
	accuracy	±0.4 °C	±0.4 °C
relative humidity	range	0 to 95 %RH	-
	accuracy	±1.8% RH **	
dew point temperature measuring range ***		-60 to +60 °C	
CO <sub>2</sub>	range	0 to 5000 ppm	
	accuracy	± (50 ppm + 3 % of measured value)	
sending interval / typical battery life		1h / 6 years	
class of protection of case with electronics / sensors		IP20 / -	IP20 / -



\* accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ±0,2 % of measured value)  
 \*\* Accuracy of sensing element; from 0 to 90 %RH at 23 °C  
 \*\*\* for accuracy of dew point see graphs at device manual

## Voltage, two-state signals, and pulses are monitored wirelessly

MEASURED VALUES		Temperature, two-state	Voltage	Pulses
SIGFOX SENSOR MODELS		W0850	W0870P	W0854P
temperature (internal)	range	-30 to +60 °C	-30 to +60 °C	-30 to +60 °C
	accuracy	±0.4 °C	±0.4 °C	±0.4 °C
two-state input		2 x	-	-
voltage	range	-	-30 to +60 Vss	-
	accuracy	-	±0.3 V	
counter		-	-	1x absolute; 1x relative
sending interval / typical battery life		1h / 1.5 years	1h / 6 years	1h / 6 years
class of protection of case with electronics		IP65	IP65	IP65

