

# sensohive



## Orbit K

Wireless temperature sensor with type K thermocouple connector

The wireless temperature sensor measures the temperature internally and externally using a type K thermocouple (bought separately).

By using the industry standard type K thermocouple, the sensor can measure temperatures within the range of -270 to +1260 °C depending on the thermocouple.

The sensor transmits data using the Sigfox-network, so you do not have to make any local installation of Wi-Fi, gateways/masterbox or similar setup.

[www.sensohive.com/sensors/orbitk](http://www.sensohive.com/sensors/orbitk)

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Information in this datasheet is based on specifications believed correct at the time of publication. The right is reserved to make changes as design and general improvements are introduced.

### Features

- No use of local gateway or installations
- $\pm 0.3$  °C accuracy (internal)
- Touch functionality
- Long battery lifetime
- Robust design

### Advantages

- Easy installation and activation
- Versatile use
- Maintenance free
- Low total cost of ownership
- Globally connected <sup>1</sup>

### Configuration Options

The Orbit K Sensor comes preconfigured with default settings. The Orbit K will as standard measure every 10 min. and transmit data to the cloud every 10 min.

These settings will be possible to change through the Sensohive App. The sensor will update the settings at least once a week in auto-mode or force updated through tapping 4 times on the sensor. Then the sensor will enter an update mode, where all settings will be updated to the settings you have set in the Sensohive App for the specific sensor.

Through the Sensohive App it is possible to change following settings:

- Sample rate
- Transmitting rate
- Warning zone
- Alarm zone

<sup>1</sup>Global connection refers to the area covered by Sigfox. Local requirements, legislation, and infrastructures can affect the network availability. Updated outdoor coverage: [www.sigfox.com](http://www.sigfox.com)

### Specifications

<b>Sensors</b>	Temperature (Internal) Temperature (external) Accelerometer, 3-axis
<b>Tolerances</b>	$\pm 0.3$ °C <sup>2</sup>
<b>Resolution</b>	0.015
<b>Measurement Range</b>	-270 to 1260 °C (external) <sup>3</sup>
<b>Operating Temperature</b>	-30 to 50 °C
<b>Operating Humidity</b>	0 to 95% RH
<b>Measurement Interval</b>	Every 10 min (adjustable)
<b>Transmission Interval</b>	Every 10 min (adjustable)
<b>Battery Type</b>	Li-SOCl <sub>2</sub> , not replaceable 3.6 V 5.400 mAh
<b>Battery Lifetime</b>	Up to 10 years <sup>4</sup>
<b>Tap Functionality</b>	Yes
<b>Network</b>	Sigfox
<b>Radio Zones</b>	RC1, RC2, RC4 <sup>5</sup>
<b>Material Enclosure</b>	ABS plastic (FDA approved)
<b>Dimensions</b>	75 x 26 mm (Ø x H)
<b>Weight</b>	88g
<b>Certifications</b>	CE Sigfox Ready, Class 0 (Best) Radio Equipment Directive (RED) RoHS

<sup>2</sup> The tolerance of the external temperature sensor depends on the type K thermocouple in use. Standard are around  $\pm 2.2$  °C. It is possible to purchase higher quality thermocouples with better precision. For further information feel free to contact us

<sup>3</sup> Dependent on the type K thermocouple.

<sup>4</sup> Battery life depends on mode, operating temperature, and frequency of measurements and transmissions. Standard configuration gives a lifetime of 1-2 years (estimated based on tests and simulations).

<sup>5</sup> RC1 is Sigfox Ready certified with Class 0. RC2 and RC4 is pending certification and are currently available as samples.

- Productivix intègre les IOT de SENSOHIVE, les ORBIT K et 3 dans ses développements d'applications mobiles sur smartphone Android durci ou du commerce
- Ajout du bon thermocouple, des attaches,
- design de l'application mobile sur mesure

