

## SenseCAP S2101

### Air Temperature and Humidity Sensor



#### Overview

SenseCAP LoRaWAN® S2101 Sensor measures temperature and humidity in the atmosphere at the range of  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ , and 0 to 100% RH (non-condensing), making it widely applicable in industrial environmental sensing scenarios.

It is specifically optimized for OTAs with builtin Bluetooth, which enables quick setups and updates. Thanks to LoRa® and IP66 enclosure design, this sensor features stability and reliability, while covering a long transmission range with low power consumption.

## Specifications

Air Temperature	
Range	-40 to +85 °C
Accuracy	±0.2 °C
Resolution	0.01 °C
Long-Term Drift	<0.03 °C/year
Air Humidity	
Range	0 to 100 %RH
Accuracy	±1.8 %RH
Resolution	0.01 %RH
Long-Term Drift	<0.25 %RH/year
General Parameters	
Product Model	S2101
Microcontroller	Wio-E5
Support Protocol	LoRaWAN v1.0.3 Class A
Built-in Bluetooth	App Tool to change parameters
LoRaWAN Channel Plan	IN865/EU868/US915/AU915/AS923*
Maximum Transmitted Power	19dBm
Sensitivity	-136dBm@SF12 BW=125KHz
Communication Distance	2 to 10km (depending on gateway antenna and environments)
IP Rating	IP66
Operating Temperature	-40 to +85 °C
Operating Humidity	0 to 100 %RH (non-condensing)
Device Weight	280g
Certification	CE / FCC / RoHS
Built-in Battery	
Battery Life	Up to 10 years**
Battery Capacity	19Ah (non-rechargeable)
Battery Type	Standard D-size SOC12 battery

\* The device supports different frequencies, and can be configured via the Bluetooth App.

\*\* The battery life varies with data upload intervals, and distances among gateways.