atomsenses

LoRaWAN®

LoRaWAN 3-in-1 Sensor
Temp / Humidity / O2

Indoor Air Quality

SKU: AS-107

The Atomsenses AS-107 is a LoRaWAN electrochemical-type gas Oxygen (O2) detecting sensor with a high sensitivity to low concentrations of detected gas, high selectivity, and a stable baseline.

The sensor has an Ultra-low Power design and smart firmware, allowing it to last up to 5 years with three AA-type batteries. It can transmit data over long distances to any brand of LoRaWAN gateway.

✓ LoRaWAN communication

LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market

✓ Up to 5 years powerful battery

Ultra-low power sensing technology with Ultra-low power wireless technology allowing the sensor to last up to 5 years with 02 x AA batteries

✓ Industrial Grade High Accuracy

Advanced ultrasonic sensor to deliver high accuracy and stable measurement

✓ Supports ODM & OEM

- Temperature: Range: -40°C ~ 80°C; Resolution: 0.1 °C; Accuracy: ±0.5°C
- Humidity: Range: 0~100%RH; Resolution: 0.1%RH; Accuracy: ±3%RH
- Oxygen: Range: 0 ~ 30%vol; Resolution: 0.01%vol; Accuracy: ±5%FS

Specification

Wireless Transmission	
Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A

Sensors		
Temperature	Temperature Range	-20°C to + 70°C
	Accuracy	0°C to + 70°C (+/- 0.3°C), -20°C to 0°C (+/- 0.6°C)
	Resolution	0.1°C
Humidity	Humidity Range	0% to 100% RH
	Accuracy	10% to 90% RH (± 3%), below 10% and above 90% RH (± 5%)
	Resolution	0.5% RH
O2/Oxygen	O2 Range	0 ~ 30%vol
	Accuracy	±5%FS
	Resolution	0.01%vol

Physical Characteristics	
Power Supply	2 × 2700 mAh ER14505 Li-SOCl2 Replaceable Batteries
Ingress Protection	IP30
Dimension	98 × 98 × 29.5 mm
Installation	Wall Mounting