SENSO

WORKS WITH WELL

MONITOR AIR QUALITY 24/7

LRS10701 LoRaWAN IAQ SENSOR

LoRaWAN®

Product Features

- SENSO8 LRS10701 IAQ Sensor provides a simple and cost-effective wireless solution for monitoring Ambient Temperature & Humidity, PM2.5, Carbon Dioxide, TVOC, Formaldehyde, Ammonia…
- Battery or DC Power Supply
- Compliant with LoRaWAN® standard
- Featured in Works with WELL catalog
- Color LED bar for Air Quality Index(AQI) indication
- Configurable measurement interval and alert settings
- Applications: Indoor Air Quality Monitoring for Office, Shop, Mall, School, etc.…

Performance Specifications

Input Power	2 x 3.6V C Size ER26500 Lithium Battery or 8.5-15V DC, Max 1A Power Adaptor
Battery Life(1)	Up to 3.5 years(2)
Measuring period	Battery: Every 10 mins DC Power: Every 10 mins
Data upload interval (heartbeat)	Battery: Every 10 mins DC Power: Every 10 mins
Alert notification	Yes, message to server
Temperature	Measurement range: -20°C to 60°C, Resolution: 0.1°C Accuracy: ±0.6°C (-20°C to -10°C), ±0.4°C (-10°C to 5°C) and ±0.2°C (5°C to 60°C)
Humidity	Measurement range: 0 to 100% RH, Resolution: 0.5% Accuracy: ±3%RH (5-20% RH), ±2%RH (20-80%RH) and ±3%RH (80-95%RH)
PM1.0, PM2.5, PM10.0	Indicatable range: 0μg/m³ – 2,000μg/m³ Resolution: 1μg/m³, Accuracy: ±10%
Carbon Dioxide (CO_2)	Measurement range: 400ppm-5,000ppm Resolution: 1ppm, Accuracy: ±30ppm ± 3% reading
TVOC	Measurement range: 0 – 10,000ppb, 0 - 2,000μg/m³ (3) Resolution: 1ppb, Accuracy: ±15%
Formaldehyde (HCHO) (4)	Measurement range: 0 – 10ppm Resolution: 0.01ppm, Accuracy: ±10%
Ammonia (NH_3) (4)	Measurement range: 0 - 20ppm Resolution 0.1ppm, Accuracy: ±10%
Hydrogen Sulfide (H_2S) (4)	Measurement range: 0 - 50ppm Resolution 0.08ppm, Accuracy: ±10%
Carbon Monoxide (CO) (4)	Measurement range: 0 - 50ppm Resolution 0.5ppm, Accuracy: ±10%
Nitrogen Dioxide(NO_2) (4)	Measurement range: 0 - 5ppm Resolution 0.05ppm, Accuracy: ±10%

1. Does not apply to models with PM2.5. Please contact Arwin sales representative for the battery life information for the models with PM2.5.
2. Based on 10 mins heartbeat interval, LED color bar light off
3. Compliant with WELL standard, at DC supply mode
4. One SENSO8 IAQ unit can equip with up to two EC type sensors

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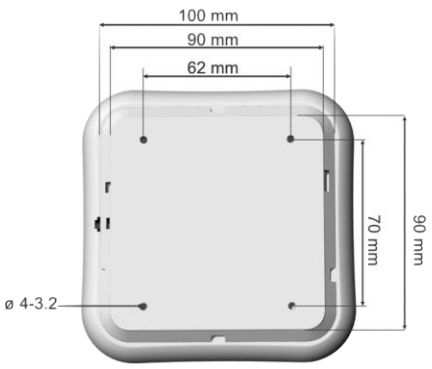
Wireless Characteristics

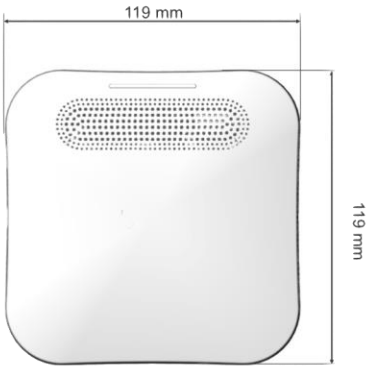
Wireless Connectivity	LoRaWAN® 1.0.3 EU863-870, US902-928, AU915-928, AS923
Transmit Power	EU868, AS923: Max. +16dBm US915, AU915: Max. +20dBm
Sensitivity	Max. -137 dBm
LoRaWAN Features	ABP/OTAA, ADR, Class A End-device
Antenna Type	Built-in Antenna

Physical Characteristics

Dimensions	H119 mm x W119 mm x H37.5 mm
Weight	approx. 175g
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 70°C
Storage Humidity Range	10% - 95% RH
Warranty Period	1 Year

Dimensions





ARWIN TECHNOLOGY

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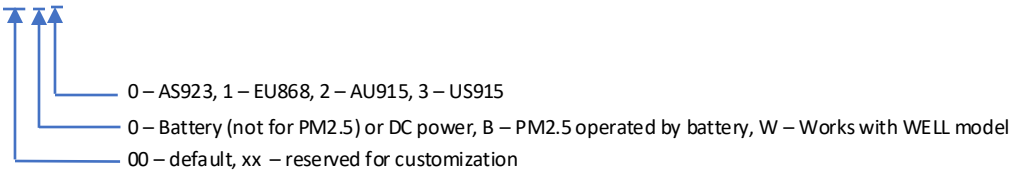
LRS10701 LoRaWAN IAQ SENSOR

Ordering Information

Partnumber	Sensor Features
LRS10701-C000-xxxx	Temperature, Humidity, CO2
LRS10701-CPV0-xxxx	Temperature, Humidity, CO2, PM1.0/2.5/10, TVOC
LRS10701-CPVF-xxxx	Temperature, Humidity, CO2, PM1.0/2.5/10, TVOC, HCHO
LRS10701-AH00-xxxx	Temperature, Humidity, NH3, H2S
LRS10701-MN00-xxxx	Temperature, Humidity, CO, NO2

Nomenclature for suffix:

LRS10701-CPVF-xxab



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