

MONITOR AIR QUALITY 24/7

SEN10701 / LRS10701 GENERAL ENVIRONMENT IAQ SENSOR



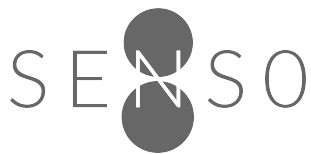
Product Features

- SENSO8 SEN10701/LRS10701 General Environment IAQ Sensor provides a simple and cost effective solution for PM2.5, Carbon Dioxide, TVOC, Formaldehyde and Ambient Temperature & Humidity monitoring
- Battery⁽¹⁾ or DC Powered
- Support NB-IoT or LoRa
- Color LED bar for Air Quality Index(AQI) indication
- Configurable measurement interval and alert settings
- Open API for easy integration into IoT platform
- Applications: Indoor Air Quality Monitoring for Office, Shop, Mall, School, etc....

Performance Specifications

| | SEN10701-xxxx | LRS10701-xxxx |
|-----------------------------------|---|---|
| Input Power | 2 x 3.6V C-Size ER26500 Battery, or 8.5-15V DC, Max 1A Power Adaptor | |
| Battery Life ⁽¹⁾ | Up to 3 years ⁽²⁾ | Up to 3.5 years ⁽³⁾ |
| Measuring period | Battery: Every 15 mins DC Power: Every 5 mins | Battery: Every 10 mins DC Power: Every 10 mins |
| Data upload interval (heartbeat) | Battery: Every 60 mins DC Power: Every 5 mins | Battery: Every 10 mins DC Power: Every 10 mins |
| Alert notification | Yes, message to server | |
| PM2.5 | Minimum detectable particle: 0.3 μ m Indicatable range: 0 μ g/m ³ – 2,000 μ g/m ³ Accuracy: \pm 10% | |
| Carbon Dioxide (CO ₂) | Measurement range: 400ppm-5,000ppm Accuracy: \pm 30ppm | |
| Temperature | Measurement range: -20°C to 60°C Accuracy: \pm 0.6°C (-20°C to -10°C), \pm 0.4°C (-10°C to 5°C) and \pm 0.2°C (5°C to 60°C) | |
| Humidity | Measurement range: 10 to 100% RH Accuracy: \pm 4%RH (10-20% RH), \pm 2%RH (20-80%RH) and \pm 4%RH (80-100%RH) | |
| TVOC | Measurement range: 0 – 60,000ppb Accuracy: 15% | |
| Formaldehyde (HCHO) | Measurement range: 0 – 10ppm | |

1. Battery operation does not apply to models with PM2.5
2. Based on 60 mins heartbeat interval for NB-IoT models, LED color bar light off
3. Based on 10 mins heartbeat interval for LoRa models, LED color bar light off



MONITOR AIR QUALITY 24/7

SEN10701 / LRS10701 GENERAL ENVIRONMENT IAQ SENSOR

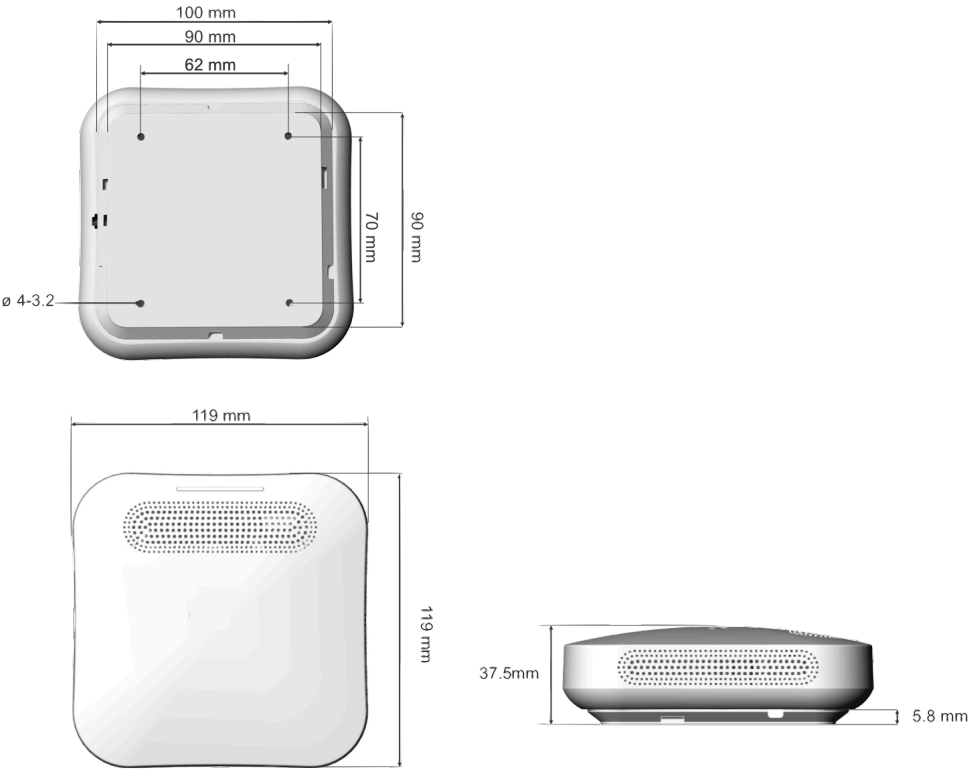
Wireless Characteristics

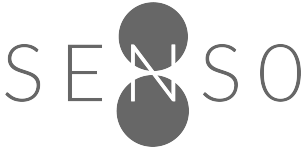
| | SEN10701-xxxx | LRS10701-xxxx |
|-----------------------|--|---------------|
| Wireless Connectivity | LTE Cat NB1 (NB-IoT) B1, B3, B5, B8, B20 | LoRaWAN AS923 |
| Transmit Power | Max. 23dBm | Max. 14dBm |
| Sensitivity | Max. -116 dBm | Max. -140 dBm |
| Antenna Type | Built-in Antenna (External Antenna – Optional) | |

Physical Characteristics

| | |
|------------------------|------------------------------|
| Dimension | 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 |

Dimension





MONITOR AIR QUALITY 24/7

SEN10701 / LRS10701 GENERAL ENVIRONMENT IAQ SENSOR

Ordering Partnumber

| Partnumber | Connectivity | Sensor Features |
|--------------------|--------------|---|
| LRS10701-C000-0000 | LoRa | Temperature, Humidity, CO2 |
| LRS10701-CPV0-0000 | | Temperature, Humidity, CO2, PM2.5, TVOC |
| LRS10701-CPVF-0000 | | Temperature, Humidity, CO2, PM2.5, TVOC, HCHO |
| SEN10701-C000-0000 | NB-IoT | Temperature, Humidity, CO2 |
| SEN10701-CPV0-0000 | | Temperature, Humidity, CO2, PM2.5, TVOC |
| SEN10701-CPVF-0000 | | Temperature, Humidity, CO2, PM2.5, TVOC, HCHO |