

Senspuck Pure Battery SPU20B

Senspuck Pure is a LoRaWAN Indoor Air Quality sensor. It is designed to operate autonomously for several years. It is suitable for wide variety of indoor applications where accurate data reading are needed.



Key features

- Accurate readings
- No maintenance
- Easy installation

Applications

- Indoor air quality
- Occupancy control
- Virus free environments

Technical specification



Enclosure

| | |
|------------|------------------------------------|
| Weight | 70g |
| Dimensions | Fi 85mm x 26mm |
| Materials | Biodegradable and recycled plastic |

Operating conditions

| | |
|-------------|--------------|
| Temperature | 0°C to +50°C |
| Humidity | 0 to 100% RH |

Power supply

| | |
|--------------------|-------------------------------|
| Power Supply type | Li-Ion Battery (ER14505) |
| Expected operation | Up to 7 years (w/o TVOC Data) |

Configuration

| | |
|----------------------|-----------------------------------|
| Sending interval | 12 minutes |
| Data upload interval | Configuration via Downlink packet |

| Connectivity | |
|---------------------|--|
| Wireless Technology | LoRaWAN® 1.0.3 |
| Wireless Security | LoRaWAN® End-to-End encryption (AES-CTR), Data Integrity Protection (AES-CMAC) |
| LoRaWAN Device Type | Class A - End-device |
| Supported regions | US902-928, EU863-870, AS920-923, AU915-928 |
| Link Budget | 137dB (SF7) to 151dB (SF12) |
| RF Transmit Power | 14dBm (Region specific) |

Sensors

| CO2 | |
|----------|----------------|
| Range | 400 to 5000ppm |
| Accuracy | ±30ppm |

| TVOC | |
|----------|--------------------------|
| Range | 0 to 10mg/m ³ |
| Accuracy | ±0.5mg/m ³ |

| Temperature | |
|-------------|--------------|
| Range | -20 to +85°C |
| Accuracy | ±0.2°C |

| Relative Humidity | |
|-------------------|-----------|
| Range | 0 to 100% |
| Accuracy | ±1.8% |

| Air Pressure | |
|---------------------|----------------|
| Range | 300 to 1200hPa |
| Accuracy (absolute) | ±1hPa |