LoRaWAN® Indoor Air Quality Sensor

Measure all aspects of air quality with a single sensor.

Our air-quality sensor measures carbon dioxide (CO_2), total volatile organic compounds (TVOCs) and particulate matter (PM) levels, as well as temperature and humidity in a room. These sensors can be mounted on a wall or table. Producing near real-time, highly accurate data which you can use to ensure your indoor air quality is at optimum levels at all times.

Features

Measures ambient carbon dioxide (CO_2), total volatile organic compounds (TVOC), particulates (PM1/PM2.5/PM4/PM10), temperature and relative humidity:

- CO_2 0-5000 ppm
- PM1/2.5/4/10 1-511 µg/m³
- TVOC 0-5000 µg/m³
- Temperature -10-50 °C

Reports air quality every 5-60 minutes (configurable).

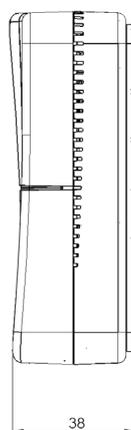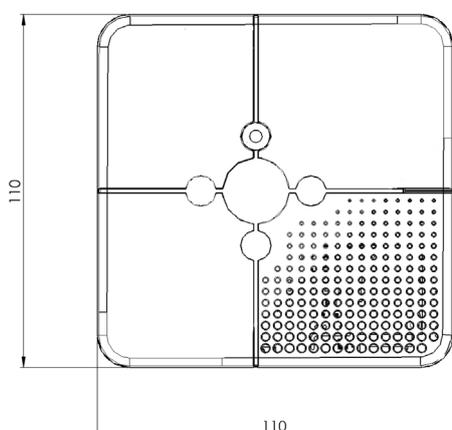Transmit data wirelessly via LoRaWAN® protocol, operating on licence-free ISM bands with long-range, low-power communication.

RESET Air Certified.

Dimensions (mm)

110

110

38

CO₂

Humidity

VOC

Temperature

Particulates

Pressac

Technology that makes buildings talk

Technical specification

Measurement	Transmission rate: reports every 5-60 minutes (default 15 minutes) with a random ±2 minutes to avoid data transmission collisions Measurement range: CO_2: 0–5000 ppm (accuracy ±60 ppm ±5% of reading) PM1.0/2.5/4.0/10: 1–511 µg/m³ • Accuracy for 1 and 2.5: ±10 µg/m³ (for values <100 µg/m³), ±10% of reading (for values ≥100 µg/m³ • Accuracy for 4 and 10: ±25 µg/m³ (for values <100 µg/m³), ±25% of reading (for values ≥100 µg/m³ TVOC: 1–5000 µg/m³ • 1 - 600 µg/m³ ± 20µg/m³ • 601 - 5000 µg/m³ ± 20µg/m³ Temperature: –10 to +50 °C (accuracy ±0.5 °C) Humidity: 0 - 100% RH (accuracy ±5%RH)
Power specification	Input Voltage: 5V DC Power Source: External DC power supply (provided) Connector: Barrel Type N 2.5 x 5.5mm ⊖—●—⊕ Power Consumption: max 500 mA / 2.5 W
Wireless specification	Protocol: LoRaWAN® Specification 1.0.1 LoRaWAN® Device Class: Class A Radio frequency: EU868 (863-870 MHz) Tx Power: +14 dBm Sensitivity: -146 dBm Security: LoRaWAN® End-to-End encryption (AES-CTR), Data Integrity Protection (AES-CMAC) Join Method: OTAA (Over-The-Air Activation)
Enclosure specification	Material: ABS Plastic IP rating: IP2X Dimensions: 110 x 110 x 38 mm (approx)
Installation	Fixing: Screws to wall – screws provided – or rubber feet for desktop Recommended Positioning: head height on an internal wall, away from heat or ventilation sources Operating temperature: -10°C to +55°C Storage temperature: -20°C to +55°C Environment: indoor Calibration: CO_2 performs an initial calibration after 24 hours then auto recalibrates every 7 days.
Compliance	CE approved, RoHS compliant, WEE directive compliant, RESET AIR accredited
Part number	SR_LIN_IAQ_L868

bsi ISO 9001 Quality Management Systems CERTIFIED ISO 14001 Environmental Management CERTIFIED

MADE IN BRITAIN

RESET HEALTHY BUILDING INTERNATIONAL STANDARD

LoRa Alliance®