LoRaWAN® Room Conditions Sensor

Measure all aspects of air quality with a single sensor.

Our room condition sensor measures occupancy, light, sound, temperature and humidity. This sensor can be mounted on a wall, ceiling or table top. Producing near real-time, highly accurate data which you can use to ensure your room conditions are at optimum levels at all times.

Features

Measures occupancy, light, sound, temperature and humidity:

- Occupancy up to 6 meters
- Light 0-20,000 lx
- Sound 0-124 dB
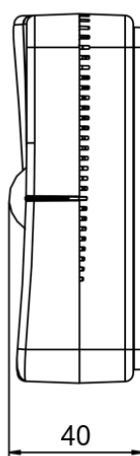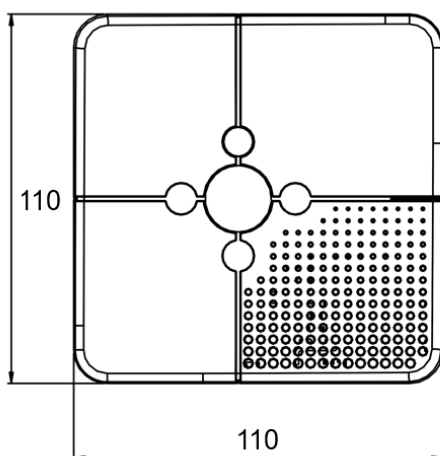- Temperature -10-50°C
- Humidity 0-100% RH

Instant updates when occupancy detected, plus status updates every 10–300 minutes. Reports room conditions every 5-60 minutes (configurable).

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

Dimensions (mm)

110

110

40

Occupancy   Light   Sound

Humidity   Temp

Pressac

Technology that makes buildings talk

Technical specification

Measurement	Transmission rate: • reports presence detection in real time and status updates can be confi gured between 10 minutes and 5 hours. Absence time out confi gurable between 2 and 60 minutes 42 • reports every 5-60 minutes (default 15 minutes) with a random ±2 minutes to avoid data transmission collisions Measurement range: • Occupancy detection range up to 6 meters within a 360 degree fi eld of view • Light: 0-20,000 lx (accuracy ±5 lx) • Sound: 1-124 dB (accuracy ±10 dB) • Temperature: –10 to +50 °C (accuracy ±0.5 °C) • Humidity: 0 - 100% RH (accuracy ±5%RH)
Power specification	Input Voltage: 5 V 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® Specifi cation 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 39 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
Compliance	CE approved, RoHS compliant, WEE directive compliant, FCC compliant
Part number	SR_LIN_RCS_L868

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