revolveplus

LoRaWAN CO2 Smart Building Sensor









CO2, Light & Motion Sensor



Humidity & Temperature Sensor



Battery Powered Sensors

(No Wiring)



Data Transfer via LoRaWAN



European Designed and Built

EvolvePlus offers a range of IoT Smart Building Management solutions that enable analysis of people movement, CO2 levels, temperature, light, humidity and desk occupancy. The LoRaWAN CO2 Sensor delivers advanced indoor environment monitoring in a compact, battery-powered enclosure.

Our IoT sensors are designed and built in Europe for the highest quality, with up to 10 year battery power to ensure easy installation without intrusive wiring.

By monitoring CO2, temperature, humidity, motion and light levels organisations can analyse and create an excellent indoor quality that promotes well-being and productivity.

Strategically placed sensors help collect valuable information throughout your facilities. The CO2, temperature, humidity, motion and light data is automatically sent via your LoRaWAN network provider and can be analysed via the optional EvolvePlus Dashboard.



Package Features

LoRaWAN CO2 Smart Building Sensor

Battery Powered Sensors Measuring Indoor Climate

The LoRaWAN CO2 Sensor measures CO2, temperature, humidity, motion and light levels ideal for meeting rooms, corporate offices, classrooms, galleries, libraries and other facilities.

The sensors are powered by two 3.6V AA lithium batteries providing an easy and wire-free installation experience. The sensors are equipped with NFC (Near Field Communication) for easy configuration with a smartphone. You can change the sample rate, data rate, encryption keys, triggers and activation.

Sensor Measurement

- CO2
- Temperature
- Humidity
- Light
- Motion detection sensor (PIR)



Device Specifications

Dimensions: 86 x 86 x 27 mm

Weight: 80 g excluding batteries, 120 g including batteries Power supply: 2 x 3.6V AA Lithium Batteries (not included)

Estimated battery life: Up to 10 years (depending on configurations and environment)

Radio protocol: LoRaWAN

Radio frequency band: AU915, AS923, EU868

Range: Up to 8 Km depending on terrain and building structure.

Recommended install height: 1.6m

Operating conditions: 0 to 50 °C, 0 to 85 % RH (non-condensing)

CO2 range: 0-2000 ppmTemperature range: 0-40 °CHumidity range: 0-100 %Light range: 4-2000 Lux

Integrated IoT Platform

The LoRaWAN CO2 Sensor can be easily integrated within your organisation's existing LoRaWAN IoT platform by transmitting data to LoRaWAN public, private and community networks such as *The Things Network*. The solution is provided with both The Things Network and generic javascript decoders for the payload data.

The optional cloud delivered EvolvePlus Dashboard allows users to analyse measurements of sensor battery levels, CO2, temperature, humidity, motion and light levels by hour, day, week, month, and year using the web based reports and charts. It is optimised to handle multiple locations and scalable so that additional sensors can be added at any time.



