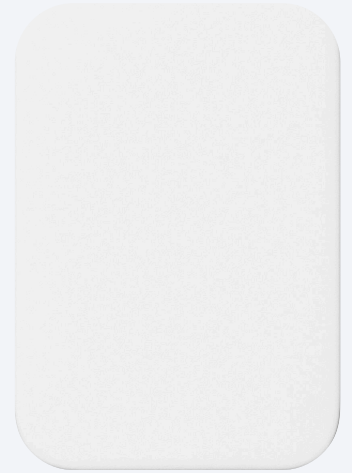


# IOTSPOT MULTI CLIMATE CO2 SENSOR

The Wireless CO<sub>2</sub> Sensor uses NDIR technology to measure CO<sub>2</sub> and also tracks temperature, relative humidity, and barometric pressure. Measurements are securely transmitted to the cloud via nearby Cloud Connectors using SecureDataShot™, enabling real-time indoor air quality monitoring and demand-controlled ventilation.



## Technical specifications of of UC1

### Mechanics & design

**Housing material:** Polycarbonate (PC)  
**Color:** White  
**Sensor technology:**  
**CO<sub>2</sub>:** Non-Dispersive Infrared (NDIR)  
**Temperature, Humidity, Pressure:** CMOS  
**Operating temperature range:** 0°C to 50°C  
**Operating humidity range:** 0% to 95% RH (noncondensing)  
**Storage conditions:** Cool and dry, near room temperature  
**Mounting method:** Adhesive or screws (wall-mounted, breathing height 1–1.8 m)

### Size & weight

95 × 66 × 25 mm; 116 g

### Band and mode / Output power

**Radio Protocol:** SecureDataShot  
**EU Radio Frequency:** 868 MHz SRD band  
**US Radio Frequency:** 915 MHz ISM band  
**Communication range (2nd Gen Cloud Connector):** up to 250 m indoors, 10 km free space

### Power

**Battery powered Battery type:** 2 × AA Alkaline  
**Battery life:** Up to 10 years  
**Battery replaceable:** Yes

### Data security:

Sensor data is encrypted using symmetric AES-128 encryption in CCM-mode

### Package content

1 × Wireless CO<sub>2</sub> Sensor  
 Mounting adhesive or screws (depending on configuration)

### Scalability

**Communication range of sensor to gateway:** up to 250 m (indoors, with 2nd Gen Cloud Connector)  
 1 gateway can provision for thousands sensors  
 Fully cloud-managed connectivity with automatic scaling – no pairing required

### Certification

**EU:** CE, UKCA  
**US/Canada:** FCC, ISED  
**FCC ID:** 2ATFX-102540  
**IC:** 25087-102540

### Customs

**HS Code:** 8517620800  
**ECCN:** 5A992.c



# Installation

## 1 Preparations

Before using the Wireless CO<sub>2</sub> Sensor, read the safety, installation, and operation instructions to ensure proper use. Please contact [support@iotspot.co](mailto:support@iotspot.co) for any questions.

## 2 Intended use

The Wireless CO<sub>2</sub> Sensor is designed for indoor use to monitor air quality parameters including CO<sub>2</sub>, temperature, relative humidity, and barometric pressure. It uses NDIR technology for CO<sub>2</sub> measurement and securely transmits data via Cloud Connectors using SecureDataShot™. This data enables real-time indoor air quality monitoring (IAQ) and demand-controlled ventilation (DCV).

## 3 Motion Sensor

The product's main functions are:

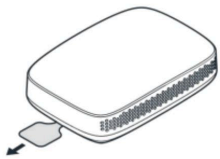
- Measuring CO<sub>2</sub> concentration (ppm), temperature (°C/°F), relative humidity (%RH), and barometric pressure (hPa).
- Transmitting sensor data to the cloud via SecureDataShot™.
- Providing continuous network status updates to ensure the sensor remains online and functional.
- Allowing configuration of Heartbeat Interval to match application requirements (2.5–60 minutes).

## 4 Mounting and commissioning

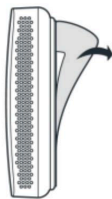
The Wireless CO<sub>2</sub> Sensor is designed for wall mounting at breathing height (1–1.8 m).

**Placement:** Install at least 1 m away from doors, windows, exterior walls, air vents, or heating/cooling sources for accurate measurement.

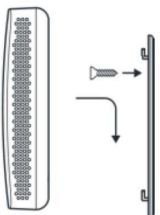
**Mounting process:**



1. Pull the battery tab to activate the sensor.



2. Mount the sensor to the wall using either: Option 1: Adhesive strip (peel and stick).



3. Mount the sensor to the wall using either: Option 2: Screw mounting (use wall anchor if necessary).

4. Ensure the device is mounted vertically, with unobstructed airflow.

## 5 Activation

The sensor is configured, using a smartphone app ('iotspot setup-app' in Google's PlayStore or Apple's Appstore). In essence this setup app allows you to synchronize the sensor to a iotspot device, so that the sensory data is transmitted to the smart workspace platform. Once the configuration of the product is finalized the sensor data can be displayed in dashboards or accessed as raw data. More detailed instructions about the iotspot setup app: <https://iotspot.zendesk.com/hc/en-nl/sections/360004605360-Setup-App>.

## 6 Maintenance & Care

The sensor housing can be dusted or cleaned with a damp cloth. Do not use solvents or abrasive cleaning agents. Replace batteries (2 x AA Alkaline) when required by removing the housing and observing polarity.

## 7 Disposal

Electrical and electronic equipment, accessories, and packaging must be recycled in an environmentally responsible manner. Do not dispose of electrical and electronic equipment as household waste.

**EU countries only:** In accordance with the European Directive on Waste Electrical and Electronic Equipment (WEEE), products no longer suitable for use must be collected separately and recycled appropriately.

## Warranty

A warranty period of 12 months applies to the product, commencing on the first day of use of the product. The warranty solely covers inadequacies caused by material defect or manufacturing defect.

The warranty does not cover any unauthorized use or tampering with the product, such as product overloading, use of violence or force, damage as a result of any unauthorized interference or caused by foreign items.

Failing to follow the safe conditions or safe installation condition instructions and common wear are also not included in the guarantee. Visit <https://www.iotspot.co/terms-and-conditions> to view more about the terms, conditions and guarantee of this product