

# Airthings Space CO<sub>2</sub> Mini

Discrete CO<sub>2</sub> monitoring for the Airthings for Business ecosystem.



## MONITORS



CO<sub>2</sub>



HUMIDITY



TEMP



PRESSURE



LIGHT



NOISE

## VIRTUAL SENSORS:



OCCUPANCY



VIRUS RISK



AIR CHANGES

- Compact and economic
- Secure and encrypted end-to-end solution
- Scalable platform seamlessly integrates multiple Airthings for Business solutions
- Simple and intuitive installation requiring no tools
- Up to 10 years of battery life

# Airthings Space CO<sub>2</sub> Mini



## OVERVIEW

The Space CO<sub>2</sub> Mini is the discreet answer to increasing focus and regulations on CO<sub>2</sub> monitoring in schools, public buildings, and offices. Offered in a 4-pack, the Space CO<sub>2</sub> Mini helps cover more spaces in your building, ensuring optimal ventilation and energy usage. Wireless, with up to 10 years or more battery lifetime.

## PACKAGE CONTENTS

Part Number: SPACECO2MINI

Package Dimension: 7.9 x 4.5 x 2.4 in  
(200 x 115 x 60 mm)

Weight: 148 oz (419 g)

Package includes device and accessories:

- Airthings Space CO<sub>2</sub> Mini
- 2 x 1.5V Lithium AA batteries
- Double-sided tape
- Battery lid with theft protection

## LED INDICATOR

- Pull battery tab: LED blinks green when device is powered on.
- On boarding: LED pulses blue while device connects to Space Hub and pulses white until device is connected all the way to Airthings cloud.
- In case SmartLink connection is lost, within 10 min LED will blink green one time followed by blue LED pulse for up to 1 min or until connected to Space Hub. In case no connection is established, the blink pattern will repeat at increasing intervals, to not deplete batteries.
- Touching Airthings logo on product front with finger: single white blink if connected via Space Hub to cloud, single blue blink if not connected. If CO<sub>2</sub> Alert is enabled, LED shows CO<sub>2</sub> level color coded green, yellow, or red.
- CO<sub>2</sub> Alert: event is shown as two blinks in yellow or red depending on limits set. Alert frequency and snooze time can also be set in dashboard.

## KEY FEATURES

Sensors: CO<sub>2</sub>, Temperature, Relative Humidity, Air Pressure, Noise, and Light

Virtual Sensors: Virus Risk, Occupancy, Air Changes, Consult web dashboard for latest

Battery Life: 10 years (battery life depends on sensor on/off interval settings, office hours, and noise sensor settings - product has 5-year battery life regardless of settings)

Firmware updates: Automatically downloaded and installed over the air (OTA) via the Space Hub

*\*Space Hub is needed to post sensor values to cloud. Annual subscription fee for device is required.*

## Mounting

- Optimum product placement is on wall 4-6 feet (1.2 - 1.8 m) above floor. (If needed, the product can also be placed >6 ft (1.8 m) above floor, but in this case mounting with screws is mandatory.)
- Double-sided tape for mounting included
- Alternatively use two fully threaded countersunk screws 3.5 x 25 mm or longer (not included)
- For masonry/concrete add expansion plug. For plaster walls, special plugs should be used.

## MONITORS 6 CONDITIONS WITH 3 VIRTUAL SENSORS



# Airthings Space CO<sub>2</sub> Mini

## PRODUCT SPECIFICATIONS

Serial Number: 312xxxxxxx

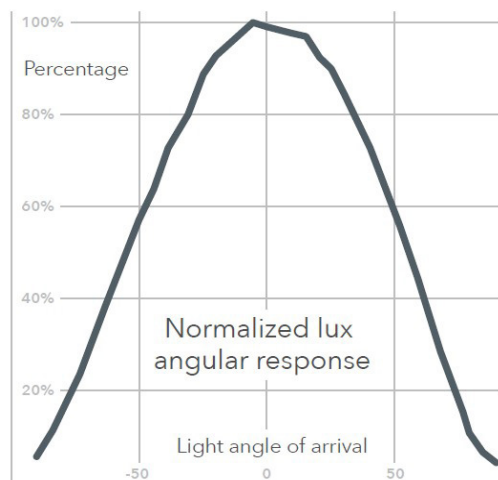
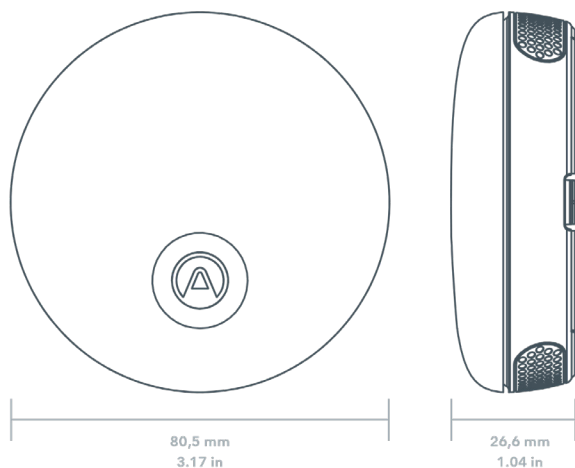
Dimensions: 3.17 x 3.17 x 1.04 in

(80.5 x 80.5 x 26.6 mm)

Weight: ~2.9 oz (~84 g) with batteries

Operational Environment (Temperature, Relative Humidity): 32 F to 113 F (0 C to 45 C) / 5% - 85% (non-condensing).

SmartLink frequencies: 865-870 / 902-928 MHz depending on region



## SENSOR SPECS

**TEMPERATURE AND RELATIVE HUMIDITY SENSOR**

- Temperature Accuracy:  $\pm 0.2$  °C /  $\pm 0.4$  °F
- Humidity Accuracy:  $\pm 2.0$  % RH

**CO<sub>2</sub> SENSOR**

- NDIR Sensor (Non-Dispersive Infra-Red):
- Measurement range 400 - 5000 ppm
- Accuracy:  $\pm 50$  ppm  $\pm 5\%$  within 500 - 2000ppm, 10 - 35 °C / 50 - 95 °F
- and 0 - 80%RH.
- Self-calibrated using an automatic baseline algorithm that updates once a week.

**LIGHT SENSOR (LUX)**

- Technology: Solid state sensor
- Resolution: 0.1 °F (0.1 °C)
- Accuracy:  $\pm 0.9$  °F at 77 °F /  $\pm 1.8$  °F from 32- 140°F ( $\pm 0.5$  °C at 25 °C /  $\pm 1$  °C from 0-60 °C)

**PRESSURE SENSOR**

- Technology: Solid state sensor
- Resolution: 0.02 mBar/hPA
- Absolute accuracy:  $\pm 0.6$  mBar/hPA
- Relative accuracy:  $\pm 0.12$  mBar/hPA
- Measurement range: 500-1100 mBar/hPA

**LIGHT SENSOR**

- Light sensor is measured in received luminous flux per unit area, also known as Lux. Light sensitivity varies with incoming light direction as shown in graph.
- Absolute Accuracy in most sensitive direction:  $\pm 5$  lux  $\pm 10\%$

**PRESSURE SENSOR**

- Absolute pressure accuracy:  $\pm 30$  Pa
- Unit-to-unit pressure accuracy:  $\pm 10$  Pa

**NOISE SENSOR**

- Ambient sound is sampled at 1% duty cycle and presented as sound pressure level in dB (adjusted to human ear hearing profile - A-weighted, dBA).
- Typical sensitivity: 33dBA SPL
- Dynamic range: 33dBA - 120dBA SPL
- Absolute Accuracy over dynamic range:  $\pm 3$  dB

**VIRTUAL SENSOR**

- Occupancy
- Virus Risk
- Air Changes

*Sensor sampling interval: 5 min default and 2.5 min optional*

*Office hours set on building level: Outside office hours +1 hour before and after noise sensor is turned off and CO<sub>2</sub> interval is set to hourly. In addition, humidity, pressure, and light are reduced to 5-minute interval regardless of sensor sampling interval setting.*