# Space CO$_2$ Mini

Space CO$_2$ Mini is the discreet answer to increasing focus and regulations on CO$_2$ monitoring in schools, public buildings and offices. Offered in a 4-pack, Space CO$_2$ 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 CONTENT

Airthings Space CO$_2$ Mini
2 x 1.5V Lithium AA batteries
Double-sided tape
Battery lid with theft protection

## MOUNTING

Optimum product placement is on wall 3.6 - 5.6 ft (110 - 170 cm) above floor.

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.

If needed, the product can also be placed > 6 ft (180 cm) above floor, but in this case mounting with screws is mandatory.

## PACKAGE

4 devices included in package

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

Weight: 148 oz (419 g)

## PHYSICAL SPECIFICATION

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

## REQUIREMENTS

Space Hub is needed to post sensor values to cloud.

## PRODUCT CODES

EU, India and United Arabic Emirates (UAE) 311xxxxxxx -  serial number

4-pack EU/UAE  SKU 13110, EAN 709003110 0117 UPC NA *

North America and ROW 312xxxxxxx - serial number

4-pack North America SKU 13120, EAN 709003110 0124 UPC 854232008552 *

* Both SKU 13110 and 13120 will be replaced with new common SKUs that cover all countries / regions to be supported by the models 311 and 312 respectively

## PRODUCT FEATURES

Sensors: CO$_2$, Temperature, Relative Humidity, Pressure, Noise, Light (lux)

Virtual sensors included: Virus Risk, Occupancy, please consult web dashboard for latest.

Battery life depends on sensor on/off/ interval settings and building settings - office hours. More than 10 years with noise off or alternative office hours set (i.e 7AM-5PM Mon-Fri). Product has more than 5 years battery life regardless of settings.

## PRODUCT SPECIFICATIONS

Operational Environment (Temperature, Relative Humidity):

32°F to 113°F (0 °C to 45 °C) / 5% - 85% (non-condensing)

Firmware updates are automatically downloaded and installed over the air (OTA) via the Space Hub

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

| CO$_2$ | HUMIDITY | TEMP | PRESSURE | LUX | NOISE | VIRTUAL SENSORS | OCCUPANCY | VIRUS RISK | VENTILATION RATE |

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## SENSOR SPECIFICATIONS

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$_2$ interval is set to hourly. In addition, humidity, pressure and light are reduced to 5 min interval regardless of sensor sampling interval setting.

### TEMPERATURE AND RELATIVE HUMIDITY SENSORS

Temperature Accuracy: ± 0.2°C /± 0.4°F
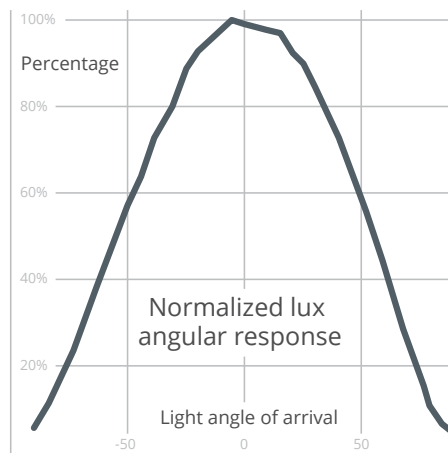Humidity Accuracy:  ± 2.0 % RH

### CO$_2$ SENSOR

NDIR Sensor (Non-Dispersive Infra-Red): Measurement range 400 – 5000 ppm

Accuracy: ± 50 ppm ± 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)

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.



Normalized lux angular response

Absolute Accuracy in most sensitive direction : ±5 lux ±10%

### PRESSURE SENSOR

Absolute pressure accuracy:
±0.3 mbar / ±30 Pa (0.01 inHg)
Unit-to-unit pressure accuracy:
±0.1 mbar / ±10 Pa (0.003 inHg)

### 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: ±3 dB

### VIRTUAL SENSORS

Occupancy
Virus Risk
Ventilation Rate

## PRODUCT ON-BOARDING AND DAILY USE

Battery tab pull: 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.

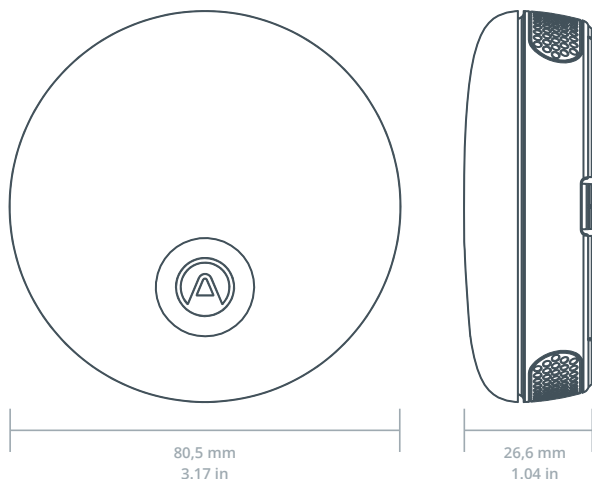In case SmartLink connection is lost, within 10 min LED will blink green one time followed by blue LED pulse for up to 1 min or until connected to Space Hub. In case no connection is established, the blink pattern will repeat at increasing intervals, to not deplete batteries.

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$_2$ Alert is enabled, LED shows CO$_2$ level color coded green, yellow or red.

CO$_2$ 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.

## PRODUCT DIMENSIONS



80,5 mm
3.17 in

26,6 mm
1.04 in

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