Airthings for Business

A single ecosystem, customizable to any building

www.airthings.com/business

Airthings for Business allows businesses to monitor, measure and analyze their indoor air quality. Improving the health and wellbeing of a building directly impacts productivity and energy efficiency, be it an office building, residential block, medical facility or educational institution.



FULL IAQ COVERAGE

Smartlink is the Airthings proprietary long range and low power IOT protocol. Smartlink connections from the Hub to Airthings devices can typically penetrate 3 thick walls/floors or 10 drywalls (non-loadbearing walls). Install multiple Hubs if more range is needed. Devices will connect to the closest Hub. The mounting bracket allows for placing the Airthings for Business Solution products on a flat surface or fixing it with double-sided tape or screws to the wall.

PRODUCT FEATURES Airthings for Business - Hub

Live data streaming from Airthings devices to the cloud with ethernet cable or preinserted eSIM/SIM card. In case ethernet is used, Airthings recommends that the Hub is connected to a local network, protected by a firewall.

LED status indicators: Power, cloud and device connection. Can support connections to up to 30 Airthings for Business Wave Plus and Airthings for Business Wave Mini.

PRODUCT FEATURES Airthings for Business Wave Plus

Sensors: Radon, CO₂, TVOC, Temp, relative Humidity, Air Pressure, relative Light intensity (0 - 100%) Battery life: 2 years on Lithium (1.5 years on alkaline)

PRODUCT FEATURES Airthings for Business Wave Mini

Sensors: TVOC, Temp, relative Humidity, Air Pressure, relative light intensity (0 - 100%)

Battery life: 4 years on alkaline (5 years on Lithium)

SPECIFICATIONS Airthings for Business Wave Plus & Wave Mini

Operational Environment (Temperature, Relative Humidity):

- Wave Plus: 4 ºC to 40 °C / 10 80 % (non-condensing)
- Others: 4 °C to 40 °C / 10 90 % (non-condensing)

Operation in temperatures < 0 °C or relative humidity > 90 % can cause permanent damage to the products

Hub power supply: 100–240 V AC / 50–60Hz

Protocols: Airthings Smartlink based on 802.15.4.g

SmartLink frequencies: 868/915MHz (Europe/US/CA)

Hub Cellular Modem: LTE Cat M1 (4G), Cat NB1 (NB-IoT 4G supported with future SW upgrade) and EGPRS (2G).

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



AIRTHINGS FOR BUSINESS

the Airthings for Business Hub.

DASHBOARD AND API

The Airthings Hub connects your Airthings devices online. Access real-time data from all your devices from the Airthings dashboard, or through the API or a Webhook. The Airthings dashboard includes alerts, advanced analytics and reporting. In addition, easily view, compare and export data and receive tips to reduce indoor air hazards, optimize ventilation and save on energy costs.

Each Airthings for Business Subscription includes unlimited cloud storage of sensor data.

SENSOR SPECIFICATIONS

Sensor sampling interval: 5 min, except radon 60 min Temperature sensor:

- Technology: Solid state sensor
- Resolution: 0.1 °C •
- Accuracy: ±0.5 °C at 25 °C / ±1 °C from 0-60 °C

Pressure sensor:

- Technology: Solid state sensor
- Resolution: 0.02 hPa
- Absolute accuracy: ± 0.6 hPa
- Relative accuracy: ± 0.12 hPa •
- Measurement range: 500-1100 hPa •

Relative humidity sensor:

- Technology: Solid state sensor
- Resolution: 0.5 % •
- Accuracy: ±3 % at 25 °C within 20-80 % RH •

VOC sensor:

- Measurement range: 0-10 000 ppb •
- Resolution: 1 ppb •
- Settling time: ~7 days

CO₂ sensor:

- NDIR Sensor (Non-Dispersive Infra-Red):
- Measurement range 400–5000 ppm •
- Resolution: 1 ppm
- Accuracy ±30ppm ±3% within 15 35°C and 10 80% RH can be reached • after multiple settling cycles on locations with natural indoor CO2 fluctuations
- Settling time: ~7 days •

Radon sensor:

- Passive diffusion chamber •
- Detection method: Alpha spectrometry
- Measurement range: 0 20,000 Bq/m³ •
- Long term measurement accuracy at 200 Bq/m³:
- After 7 days \pm 10 %, after 2 months \pm 5 % •

Light sensor:

Measurement range: 0 - 100 % •

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Hub for Business

PACKAGE CONTENT

Airthings Hub Ethernet cable Instruction Manual Mounting bracket Rubber bumper pads (for flat surface) Double-sided tape (for wall mount) Power supply adaptor US interchangeable supply blade EU interchangeable supply blade UK interchangeable supply blade

REQUIREMENTS

Dimensions: 125 x 125 x 25 mm

Hub Cellular, Model 2820 Weight: 258g Cellular connection with pre-inserted eSIM/SIM card or Ethernet connection

Hub, Model 2810 Weight: 249g Ethernet connection

PRODUCT CODES

Hub Cellular, Model 2820 EAN: 7090031108205 SKU: 282 Device serial number: 2820xxxxx Hub, Model 2810 EAN: 7090031108106 SKU: 281 Device serial number: 2810xxxxxx

PACKAGE

Dimensions: 158x158x79mm

Hub Cellular, Model 2820 Weight: 574 g

Hub, Model 2810 Weight: 563 g January 2021









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Wave Plus for Business

PACKAGE CONTENT

Air quality monitor 2 Lithium AA batteries Double-sided tape

REQUIREMENTS

Weight : 219g with 2 AA Lithium batteries Dimensions: diameter 120 mm, height 36 mm

Airthings Hub needed to post sensor values to cloud

PRODUCT CODES

US / Canada EAN: 7090031109318 SKU: 931 Device serial number: 2930xxxxxx

Europe EAN: 7090031109325 SKU: 932 Device serial number: 2930xxxxxx

PACKAGE

Dimensions: 153x153x46mm Weight: 346g

January 2021



















Wave Mini for Business

PACKAGE CONTENT

Air Quality Detector 3 x AA batteries Double-sided tape Table stand

REQUIREMENTS

Weight: 135g with 3 AA batteries Dimensions: diameter 80 mm, height 26 mm

Airthings Hub needed to post sensor values to cloud

PRODUCT CODES

US / Canada EAN: 7090031109219 SKU: 921 Device serial number: 2920xxxxxx

Europe EAN: 7090031109226 SKU: 922 Device serial number: 2920xxxxxx

PACKAGE

Dimensions: 105x105x45mm Weight: 180g, 6.3oz







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Note: Cloudberry is a product development prototype produced in a limited quantity and has not passed the necessary regulatory certifications to be offered for sale or marketed. Setup instructions at <u>airthings.com/cloudberry-setup</u>

Airthings Cloudberry

An Airthings sensor evaluation platform that connects wirelessly with Airthings Hub.

Airthings Cloudberry have about a 12 months battery life on 2 x D alkaline batteries.

Working condition: 4 °C ~60 °C and 0-90 % RH

PACKAGE CONTENT

Air Quality Detector 2 x D alkaline 1.5V batteries

DEVICE DETAILS

Power: 2 x D batteries

Device weight: 488g

Device dimensions: 130 x 130 x 40 mm

Airthings Hub and an Airthings for Business account is required to operate a Cloudberry.

Connects to Airthings Hub over Smartlink using low-frequency radio (868/915 MhZ).

PRODUCT CODES

Prototype platform - no EAN or SKU assigned.

Device serial number: 2990xxxxxx

PACKAGE

Weight: 560g Dimensions: 153x153x46mm









SENSOR SPECIFICATIONS

Sensor sampling interval: 5 min Particulate Matter (PM1 & PM2.5):

- Technology: laser light scattering
- Range: 0~1000μg/m³
 - Measurement error: 0 ~100μg/m3, ±10μg/m3 >100μg/m3, ±10%. Calibrated with a GRIMM using cigarette smoke source.
- Resolution: 1 μg/m³

Temperature sensor:

- Technology: Solid state sensor
- Resolution: 0.1 °C
- Accuracy: ±0.5 °C at 25 °C / ±1 °C from 0-60 °C

Pressure sensor:

- Technology: Solid state sensor
- Resolution: 0.02 hPa
- Absolute accuracy: ± 0.6 hPa
- Relative accuracy: ± 0.12 hPa
- Range: 500-1100 hPa
- Relative humidity sensor:
 - Technology: Solid state sensor
 - Resolution: 0.5 %
 - Accuracy: ±3 % at 25 °C within 20-80 % RH

VOC sensor:

- Range: 0-10 000 ppb
- Resolution: 1 ppb
- Settling time: ~7 days