

# CARBON

## Energy Monitoring, Indoor Air Quality *Connected*



- Connected
- Temperature, Humidity
- CO2
- Data accessed remotely\*
- Possible customization

Carbon measures the CO2 level and continuously monitors air quality to visually alert occupants when it is time to ventilate to renew indoor air. With its temperature and humidity sensors, Carbon also analyzes the ambient parameters of the building. Carbon integrates the iZiAiR air quality and hygrothermal comfort algorithm to easily study each indoor environment and identify possible improvements.

### PRODUCT BENEFITS

- > NDIR CO2 sensor with performances validated by an independent laboratory
- > LED indicator to visualize the CO2 level
- > Lithium batteries, autonomy 10 years \*\*: no repeated battery change, no electrical connection required
- > Robust product totally sealed and cannot be dismantled
- > Anti-theft fixing device for wall mounting
- > Quick and easy installation
- > No maintenance required

### APPLICATIONS

- > Monitoring of ambient parameters in commercial and residential buildings
- > Supervision of ambient parameters at work (offices, meeting rooms)

\* Optional subscription fees may apply

\*\* Lifetime for standard use. Battery life may vary

## SPECIFICATIONS

### Carbon Dioxide (CO2)

Technology: Non-Dispersive InfraRed (NDIR)

Resolution: 20ppm

Accuracy:  $\pm(50 \text{ ppm} + 3\% \text{ of measuring range})$

Measurement range: 0 – 5000ppm

### Temperature

Resolution: 0.1°C

Accuracy:  $\pm 0.3^\circ\text{C}$

Measurement range:  $-30^\circ\text{C} / +70^\circ\text{C}$

### Humidity

Resolution: 0.5% R.H.

Accuracy:  $\pm 2\% \text{ R.H.}$

Measurement range: 0 – 100% R.H.

### Frequency of measurements

Every 10 minutes (configurable)

### Data transmission mode

Real time

Datalog (gather measurements in a single message)

Alerts on threshold

### Network pairing / Operation / CO2 indicator

2x LED: Orange / Red

### Power supply

3x integrated lithium batteries (5850 mAh)

### Battery life

10 years in typical use

**Dimensions:** 105 x 105 x 35 mm

**Weight:** 150g

### Conditions of use

Indoor environment

Temperature:  $0^\circ\text{C}$  to  $+50^\circ\text{C}$

Relative humidity: 0% RH to 95% RH

### Type of mounting

Wall-mounted

Freestanding

### Wireless protocol

LoRaWAN

Sigfox

EnOcean

*Other wireless protocols studied on request*

## WARRANTY

2 ans

## FUNCTIONS

Measurement of Indoor Air Quality  
Carbon Dioxide (CO2)

Measurement of ambient parameters

> Temperature

> Relative humidity

Central button

> Short press: instant Air Quality (display by the indicator light)

> Long press: instantaneous measurement and transmission

Configuration and diagnostics of the product locally (NFC) or remotely (downlink)

iZiAiR Indoor Air Quality Index

CO2 level display by indicator light (configurable)



Average



Warning

## PRODUCTS REFERENCES

PILOT EnOcean – I420EO

PILOT LoRaWAN – I420LR

PILOT Sigfox – I420SF

## CONTENT OF THE BOX

> 1 device

> 1 anti-theft wall bracket

> 2 screws and nylon wall plugs

> 3M® double-sided adhesive attachment

## CE CERTIFICATION

*Designed in France*