Carbon

Carbon dioxide detector
Indoor air quality monitor

INSAFE+

Wireless

INSAFE+ Carbon is a new generation connected carbon dioxide detector that also comes with ambient temperature and relative humidity sensors.

Carbon is not only a simple CO_2 sensor. Thanks to its edge computing architecture and IZIAIR embedded algorithm, Carbon calculates an indoor air quality index to help you take the appropriate actions.

Carbon is also a physical, connected push button that you can choose to program with two different actions (short or long-press) and intuitive light feedback.

It is an ideal product for connected homes, residential buildings and public-access buildings (schools, nurseries, hospitals, children's centers, retirement homes, etc.).

PRODUCT BENEFITS

- 3-in-1 Carbon Dioxide detector, Indoor Air Quality monitor and Push Button
- IZIAIR Indoor Air Quality Index
- Wireless sensor for easy and fast installation
- Up to 10-year battery life for the product and wireless connection
- Elegantly designed detector that blends in with any decor

APPLICATIONS

- Indoor air quality control in residential premises and public places
- HVAC control
- Enhancement of building energy efficiency
- Development of new services: home care, home support, well-being, heating cost savings, etc.

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■ FEATURES

Basic features

- Measurement of temperature and humidity every 10 minutes
- Measurement of CO_2 every 10 minutes
- Programmable Push Button
- Air quality measurement and instant display with indicator lights:

  ◆ Good air quality
  ◆ Poor air quality
  ◆ Bad air quality

Advanced Features

- IZIAIR indoor air quality index (5 levels)
- NFC antenna for a complete product customization via Nexelec smartphone application
- Functional self-test (every 10 min.)
- Residual battery life
- Permanent "keep alive" status
- Recommendations and user actions to improve comfort and indoor air quality

■ CHARACTERISTICS

Operating principle

Carbon dioxide (CO_2) detector based on non-dispersive infrared spectometric (NDIR) method.

Sensors and measurements

- Temperature. Resolution : 0.2°C
- Humidity. Resolution : 1% RH
- Carbon dioxide. Accuracy : ±(50 ppm + 3% of measuring range)

Transmission frequency

- On threshold
- On configurable time period
- On configurable alarm trigger

Power supply: Integrated and sealed lithium batteries

Battery life: up to 10 years according to wireless protocol and environment

Dimensions: L 105 mm x W 105 mm x H 30 mm

Net weight: 200 g (including battery and base)

Conditions of use

- Indoor household environment
- Temperature : 0°C to + 50°C
- Relative humidity: from 0% RH to 100% RH

Type of mounting

Wall-mounted, or standalone using removable base (included)

Wireless protocol

- EnOcean
- Zigbee
- Sigfox
- Lora
Other wireless protocols studied on request

Connection

- Product data directed to dedicated IoT platforms

■ ARTICLE REFERENCE

INSAFE+ Carbon

■ CONTENT OF THE BOX

- 1 INSAFE+ Carbon device
- 1 wall-mount bracket
- 1 standalone installation bracket
- 2 screws and nylon wall plugs
- 1 instruction manual

■ CERTIFICATION

CE Certificate

■ WARRANTY

2 years

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CE