INSAFE+ CARBON

Carbon dioxide detector
Indoor air quality monitor

■ APPLICATIONS

> Indoor air quality control in residential premises and public places. The device measures temperature, relative humidity and CO_2 levels. INSAFE+ Carbon calculates the level of containment which assesses the quality of air renewal

> Automatic control of ventilation system

■ TECHNOLOGY

> 2-in-1 carbon dioxide detector and indoor air quality analyser

> Algorithm analyses air quality in real time

> Maintenance-free Non Dispersive Infrared Technology (NDIR) allows precise, reliable and stable measurement of CO_2 concentration in the ambient air

■ SMART HOME / SMART BUILDING

> A wide range of Smart Home / Smart Building compatible wireless protocols

> Wireless sensor for easy and fast installation

■ RELIABILITY

> Each detector is tested individually before it goes on sale

> NDIR CO_2 sensor with a 10-year service life

■ BATTERY LIFE

> Low maintenance: up to 10-year battery life for the product and wireless connection

> 10-year return on investment - quicker ROI than most detectors on the market

■ DESIGN

> Discreet and compact: INSAFE+ Carbon is only 3 cm thick

> LEDs : visual indication of CO_2 concentration on 3 levels

Connected

■ FEATURES

Basic features
> Measurement of temperature and humidity every 10 minutes
> Measurement of CO_2 every 10 minutes
> Air quality measurement and instant display with indicator lights:

- ◆ Optimal air quality
- ◆ Moderate air quality
- ◆ Poor air quality

Advanced Features
> Containment level
> Hygrothermal comfort indicator
> Air quality indicator
> Temperature, humidity and CO_2 measurement daily log
> 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)

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: 150 g (including battery and base)

Conditions of use
> Indoor household environment
> Temperature : -10°C to + 40°C
> Relative humidity: from 15% RH to 95% RH

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

Wireless protocol
> EnOcean
> Zigbee
> Bluetooth Low Energy
> Z-Wave
> 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

nexelec

www.insafe.io

CE