ECOMZEN

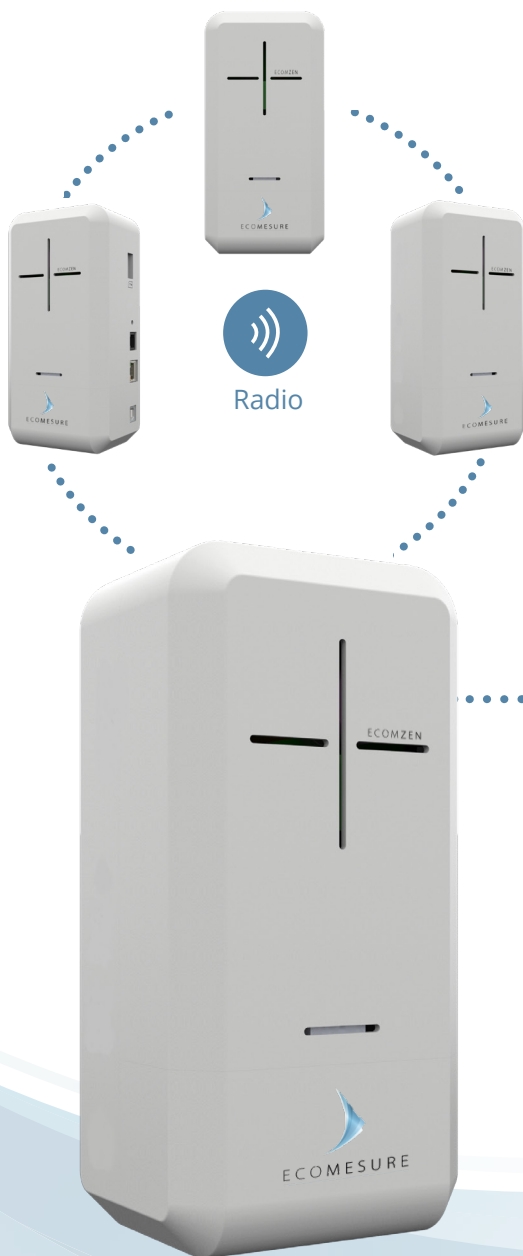## *CONNECTED STATION*
OF MULTIPARAMETERS MEASUREMENT FOR INDOOR AIR QUALITY

Radio

Indoor air is up to 8 times more loaded in pollutants than ambient air and we spend more than 80% of our time indoor.
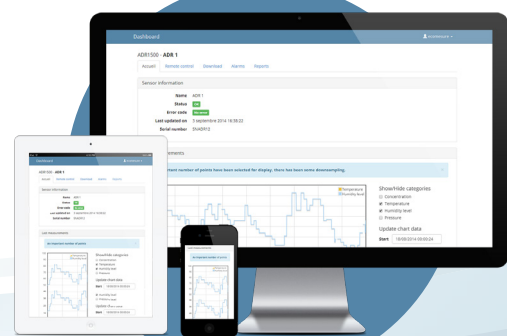
Ecomesure, air quality specialist, designed ECOMZEN to monitor the key parameters for indoor air quality : concentration of particles, CO_2, VOCs, CO, temperature, humidity and pressure.

Easy to install, ECOMZEN connects automatically to the web platform where a lot of services are available: instant data, air quality profiles, downloads, warnings and reports.

Ethernet, Wifi, 3/4G, LoRa or Zigbee

Secure web server
i-comesure.com

BENEFITS

- All-in-one multiparameter monitor
- Ongoing quality of measurements
- Simple, accurate and affordable
- Centralized services on i-comesure.com
- Optimized one-step maintenance

APPLICATIONS

- Public transport, airports
- Town halls, schools, universities, hospitals
- Malls, hotels, concert halls
- Smart buildings, IoT
- Meeting rooms, banquet halls, restaurants

ECOMESURE

ECOMZEN
CONNECTED STATION OF MULTIPARAMETERS MEASUREMENT FOR INDOOR AIR QUALITY

SPECIFICATIONS ECOMZEN

Communication between ECOMZEN	Radio Mesh Network 2.4 GHz (IEEE 802.15.4) - Line of sight range: 500 m LoRa/SigFox ready
Communication with the web server	Ethernet (options: Wi-Fi, 3/4G, LoRa, Zigbee) Encrypted and secured data exchanges using SSL protocol
Digital I/O	1 Digital Input / 1 Digital Output
Localization	Accelerometer, GPS
Access to web services	https://www.i-comesure.com Secured by password and SSL authentification
Web services	User support Mapping Data real time display Multi-display mode (index and scientific) Device status Device remote control Data storage Data downloading Alertes/alarms by SMS and/or E-mail Data analytics reports - access Virtual Integrated Devices (VID) Data ciphering API link Data base export
Power supply	5 VDC USB, 2 A max Mains adapter included: 90-264 VAC 50/60 Hz
Dimensions	H7 x L3.5 x P3 Inches (H175 x L85 x D73 mm) / 1.8 lbs. (0.8 kg)
Temperature / Relative Humidity	From 10 to 110 °F (-10 to +45 °C) / from 10 to 85 % RH without condensation From 0 to 120 °F (-20 to =50 °C) / from 0 to 95 % RH without condensation with degraded performances
Certifications	CE class B, FCC class A

Optimized maintenance and calibration:
one-step sensor cartridge replacement

INTEGRATED SENSOR CARTRIDGE

	Range	Detection limit	Accuracy
$PM_{2,5}$ and PM_{10} sensor (optical)	0 – 3000 µg/m³	2 µg/m³	4 µg/m³
CO_2 sensor (infrared)	0 to 5000 ppm	10 ppm	10 ppm at full scale
VOC_{tot} sensor (PID)	0 to 5000 ppb eq. isobutylene	3 ppb	5 ppb
CO sensor (electrochemical)	0 to 8000 ppb	10 ppb	10 ppb
Temperature	0 to 120 °F (-20 to +50 °C)	/	0.02 °F (0.01°C)
Humidity	0 to 100 %	/	0.04 %
Pressure	950 to 1050 hPa	/	1 hPa
Supplementary measurements	Other gas sensors (including SO_2, NO_2, O_3, NO) available		
Corrections	Drift corrected as a function of temperature, relative humidity and ageing		
Cartridge dimensions	H5 x L3.5 x D1.5 Inches (H128 x L85 x D38 mm)		

Designed & Made in France

ECZ-VEN4-20190118