

# ECOMSMART

## CONNECTED STATION OF MULTIPARAMETERS MEASUREMENT OF AMBIENT AIR QUALITY



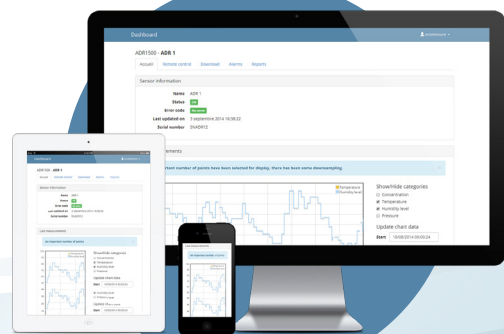
Ideal for monitoring air quality in ambient or harsh environments, ECOMSMART tracks key parameters: concentration of particles, O<sub>3</sub>, NO<sub>2</sub>, temperature, pressure and humidity.

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



Secure web server  
i-comesure.com

Ethernet, 3/4G,  
Wi-Fi, LoRa, Zigbee



### + BENEFITS

- + All-in-one multiparameter monitor
- + Ongoing quality of measurements
- + Simple, accurate and affordable
- + Centralized services on i-comesure.com
- + Stand-alone version (solar panel & 3G)

### + APPLICATIONS

- + Smart cities, IoT
- + Industrial sites (quarries, mines, airports, ports)
- + Workshops, warehouses, work-sites
- + Road construction

# ECOMSMART

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ECOMSMART  
SPECIFICATIONS

Communication between ECOMSMART	Radio 868 MHz (Europe) or 900 MHz (USA, Canada) / Line of sight range: 2 km LoRa/SigFox ready
Communication with the web server	Ethernet (options: 3/4G, Wi-Fi, Zigbee, LoRa) Encrypted and secured data exchanges using SSL protocol
Digital I/O	1 Digital Input / 1 Digital Output
Localization	Accelerometer, GPS
Access to web services	<a href="https://www.i-comesure.com">https://www.i-comesure.com</a> Secured by password and SSL authentication
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: 100-240 VAC 50/60 Hz
“ Solar kit ” Option	Solar Panel (50W) / Battery weatherproof assembly
Dimensions	H8 x L8 x P3.5 Inches (H200 x L210 x D90 mm) / 1.2 kg
External fastening	Clamped onto a post or a fence, IP54 (water resistant for outdoor conditions)
Internal fastening	Installed vertically
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
PM sensor (optical)	Continuous and simultaneous measurement of PM1, PM <sub>2.5</sub> and PM <sub>10</sub> Total flow rate: 1.2 L/min; Range: 0-3000 µg/m <sup>3</sup> ; Detection limit: 2µg/m <sup>3</sup> ; Accuracy: 4µg/m <sup>3</sup>



INTEGRATED  
SENSOR  
CARTRIDGE

Optimized maintenance and calibration:  
one-step sensor cartridge replacement

	Range	Detection limit	Accuracy
NO <sub>2</sub> (electrochemical)	0 to 5000 ppb	3 ppb	3 ppb
O <sub>3</sub> (electrochemical)	0 to 5000 ppb	6 ppb	6 ppb
Temperature	0 to 120 °F (-20 to +50 °C)	/	0.02 °F (0.01 °C)
Humidity	0 to 100 % HR	/	0.04% HR
Pressure	950 to 1050 hPa	/	1 hPa
Supplementary measurements	Other gas sensors (including SO <sub>2</sub> , CO, CO <sub>2</sub> , VOC, H <sub>2</sub> S, 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), plugged into the ECOMSMART		