

# ECOMSMART

## MULTI-PARAMETER SMART AMBIENT AIR MONITOR



Ideal for monitoring air quality in ambient or harsh environments, ECOMSMART tracks pollutants such as NO<sub>2</sub>, O<sub>3</sub>, CO, NO, SO<sub>2</sub>, H<sub>2</sub>S, VOC, CO, PM<sub>1/2.5/4/10</sub> (and others) and temperature, pressure and humidity.

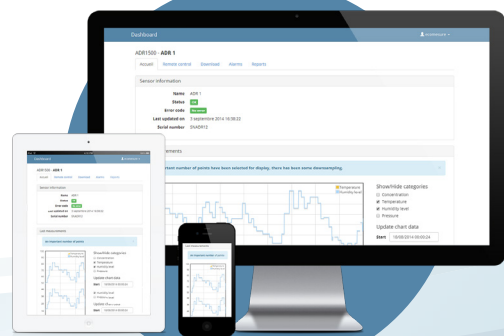
Easy to install, ECOMSMART automatically connects to the environmental data web platform <https://i-comesure.com> for real-time data monitoring and sensors remote control.



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



Secure web server  
[i-comesure.com](https://i-comesure.com)



### + BENEFITS

- + All-in-one multi-parameter system
- + Controlled calibration process for quality measurement
- + Easy to install and use
- + Centralized services on [i-comesure.com](https://i-comesure.com)
- + Stand-alone version (solar panel & battery)

### + APPLICATIONS

- + Urban centres, Smart cities
- + Industrial sites (quarries, mines, airports, ports)
- + Workshops, warehouses, work-sites
- + Roads, tunnels, subway

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## TECHNICAL SPECIFICATION

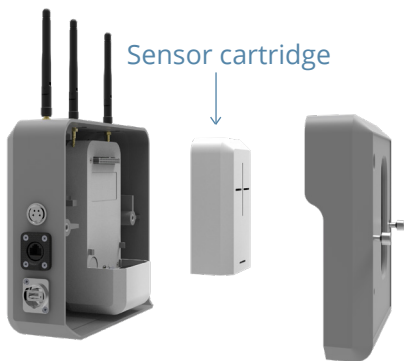


Dimensions/Weight	L8.2" x W7.8" x H3.5" (L210 x W200 x H90 mm) / 4.41 lbs (2 kg)
Connectivity	Ethernet Options: Wi-Fi - 3G/4G/GPRS - LTE-M - LoRa - ZigBee Pro
Frequency	One measurement every 60 seconds (ajustable from 10s to 1h)
Digital I/O	1 Digital Input / 1 Digital Output
Localization	Accelerometer, GPS
Access to data	<a href="https://i-comesure.com">https://i-comesure.com</a>
Web services	Mapping   Multi-data display   Device status   Device remote control   Data storage   Data download   Configurable alerts/alarms   Data analytics reports   Virtual Integrated Devices (VID)   Data ciphering   API   Database export   Data logger
Data security	Local + Cloud-based encryption WPA2-Enterprise compatible
Data storage	Built-in microSD memory card Web storage
Power supply	5 VDC USB, 2 A max. Adapter included: 100-240 VAC 50/60 Hz IP67 power supply Built-in battery backup (8h of use, 12h in LoRa) optional

"Autonomy kit" option	Solar panel (55 W, 90 W, 115 W); Battery weather-resistant assembly
External fastening	Clamped onto a post or a fence, weather-resistant (equivalent IP54)
Certifications	CE Class B, FCC Class A
Patent	Applicable in France, Europe, United States

## MEASUREMENT SPECIFICATIONS

Select the sensors of your choice:  
up to 3 electrochemical,  
1 PID, 1 NDIR and 1 optical sensors.



Optimized maintenance and calibration:  
one-step sensor cartridge  
annual replacement.



Sensors	Technology	Measurement Range	Detection Limit
NO <sub>2</sub>	Electrochemical	0-20 ppm	< 0.02 ppm
O <sub>3</sub>		0-20 ppm	< 0.02 ppm
CO		0-500 ppm	< 0.02 ppm
NO		0-20 ppm	< 0.08 ppm
SO <sub>2</sub>		0-50 ppm	< 0.02 ppm
H <sub>2</sub> S		0-50 ppm	< 0.01 ppm
NH <sub>3</sub>		0-100 ppm	< 3 ppm
CH <sub>2</sub> O		0-10 ppm	< 0.1 ppm
Cl <sub>2</sub>		0-20 ppm	< 0.2 ppm
HCl		0-20 ppm	< 0.5 ppm
VOC <sub>50</sub> and VOC <sub>3000</sub>	PID	0-50 ppm   0-3000 ppm	1 ppb   50 ppb
CH <sub>4</sub>	NDIR	0-2.5%	500 ppm
CO <sub>2</sub>		0-5000 ppm	1 ppm
PM <sub>1</sub> , PM <sub>2.5</sub> , PM <sub>4</sub> , PM <sub>10</sub>	Laser/Optical	0-1000 µg/m <sup>3</sup>	1 µg/m <sup>3</sup>
Total Suspended Particles (TSP)		0-2000 µg/m <sup>3</sup>	1 µg/m <sup>3</sup>
Environmental parameters	Technology	Measurement Range	Accuracy
Temperature	Temperature sensor	- 4 to 122 °F (-20 to +50 °C)	0.54 °F (0.3 °C)
Humidity	RH sensor	0 to 100% HR	3% HR
Pressure	Pressure sensor	300 to 1100 hPa	1 hPa