



REDEFINING RESOURCES

# Airsense

## Portable Air Quality Monitoring



# About AirSense

AirSense is a Portable Air Quality Monitoring System that measures multiple toxic gases and particulate matter along with noise. The device offers a range of customizable parameters, making it ideal for various applications such as environmental impact assessments, environmental audits, monitoring, smoke emissions, indoor air quality assessments, Gas leak detection, dust at construction sites, carbon monoxide, sulphur dioxide and other hazardous pollutants.



AirSense is a compact and remote mobile device that can be carried anywhere to get accurate air quality data. It also has an on board-device display that allows parameters to be directly. The data collected by AirSense can also be accessed through the environmental monitoring software, enabling comprehensive data visualisation and analytics.

## Product Features



### In-built display

View data directly on the device without relying on any smart devices.



### Compact and lightweight

Lightweight and compact system that can be easily set up and transported.



### Real-time Data

Continuous monitoring and real-time data transfer at configurable intervals.



### Easy-to-carry

Carry anywhere you go and monitor air quality anytime.



### Weather Resistant (IP65)

Durable enclosure designed to withstand extreme weather conditions.



### Network Agnostic

Supports a wide range of connectivity options GSM/LTE/WiFi/LoRa/Ethernet/Satellite.



### Alerts and notifications

Receive timely notifications when parameters exceed predefined limits.



### Patented Technology

Works on innovative e-breathing technology for higher data accuracy.



### Internal Storage

Internal data storage capacity of up to 16 GB or 90 days.



### Identity And Configuration

Geo-tagging allows you to get the exact location of the device, consisting of latitude and longitude coordinates.



### Long battery life

Monitor the environmental parameters up to 24 hours without worrying about battery life.



### Easy-to-set-up

Set up the device in no time and start getting accurate data.

# Key Benefits



## Quick Sensor stabilisation

Get real-time Gas data within 30 minutes\* and Noise and PM data within 5 minutes.



## Quick & Seamless Installation

Easily deployable at the surface level or on industrial tripods for real-time monitoring.



## Multi-parameter Monitoring

Compatible with a wide range of parameters, including PM, Gases, and Meteorological parameters.



## Secure Cloud Platform

Secure platform for visualising and analysing data with easy API integration for immediate action.



## Robust and Rugged

Durable enclosure to sustain extreme climatic conditions.

Easy transferred of data to handheld device or centralize kiosk

# Real Cases



## Utilities power plants

Comprehensively assess gaseous emissions and the environmental impact of utilities and industrial plants activities to make data-driven measures for minimising their environmental threats and impact.



## Environmental Audit

Conduct environmental audits and improve your ESG scores by optimising the environmental health and safety of the citizens.



## Groundwater

Monitor odour intensity and ground water at plant to regulate odour emission by appropriate maintenance on time.



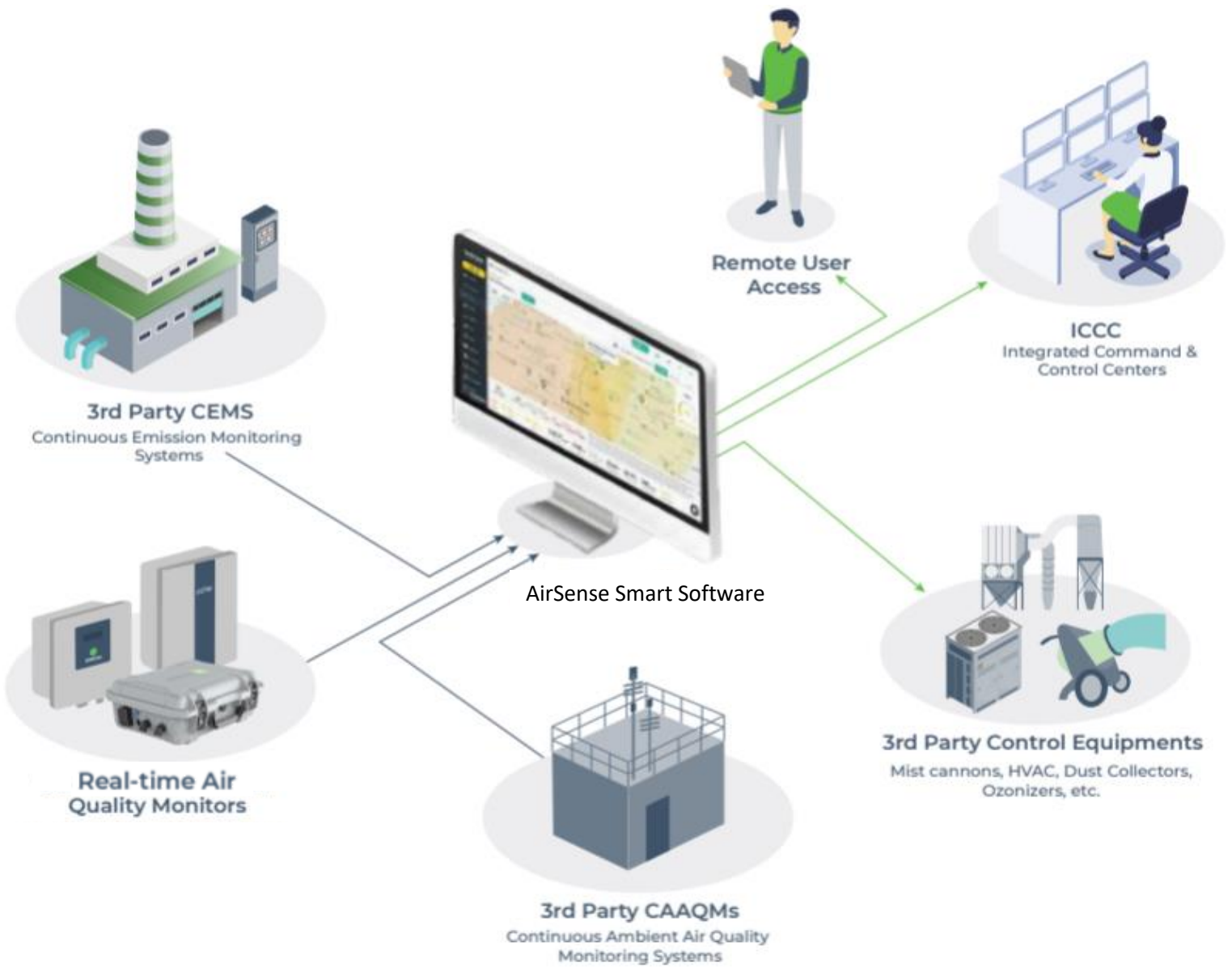
## Landfill and construction projects

Monitor harmful gas emissions and dust levels during construction activities to protect the working environment and nearby communities.

# AirSense Parameters

Parameter	ID	Range	Resolution	Min. Det.	Working Principle	Expected Sensor Life
 Ammonia (NH3)	OZNH3_4*	0-10 ppm	0.02 ppm	0.02 ppm	Electrochemical	2 Years
	OZNH3_2*	0-100 ppm	0.3 ppm	0.3 ppm		
	OZNH3_3	0-1000 ppm	2 ppm	2 ppm		
 Methane (CH4)	OZCH4_2	50-10,00,000 ppm	1 ppm	500 ppm	Molecular Property Spectrometer (MPS)	2 Years
 Hydrogen Sulphide (H2S)	OZH2S_5*	0-10 ppm	0.01 ppm	0.01 ppm	Electrochemical	2 Years
	OZH2S_2	0-50 ppm	0.05 ppm	0.05 ppm		
	OZH2S_3	0-200 ppm	0.2 ppm	0.2 ppm		
	OZH2S_4	0-2000 ppm	2 ppm	2 ppm		
 Total Volatile Organic Compounds (VOC)	OZTVOC_1*	0-40 ppm	0.001 ppm	0.005 ppm	Photo Ionization Detection (PID)	24 Months #
	OZTVOC_2	0-200 ppm	0.05 ppm	0.05 ppm		
 Particulate Matter (PM2.5, PM10, PM1, PM100)	OZPM_1*	Upto 5000 µg/m <sup>3</sup> for PM <sub>1</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> Upto 30 mg/m <sup>3</sup> for PM <sub>100</sub>	0.1 µg/m <sup>3</sup>	1 µg/m <sup>3</sup>	Optical Particle Counter	18 Months
 Noise	OZN_1*	Up to 140 dB	1 dB	0.5 dB	Capacitive	2 Years
 Chlorine (Cl2)	OZCl2_1*	0-20 ppm	0.05 ppm	0.05 ppm	Electrochemical	2 Years
	OZCl2_2	0-50 ppm	0.1 ppm	0.1 ppm		
 Hydrogen Chloride (HCl)	OZHCl_1	0-50 ppm	0.5 ppm	0.5 ppm	Electrochemical	2 Years
	OZHCl_2	0-100 ppm	1 ppm	1 ppm		
 Formaldehyde (CH2O)	OZCH2O_1*	0-10 ppm	0.05 ppm	0.05 ppm	Electrochemical	2 Years
	OZCH2O_2	0-50 ppm	0.1 ppm	0.1 ppm		
 Methyl Mercaptan (CH3SH)	OZCH3SH_1*	0-10 ppm	0.1 ppm	0.1 ppm	Electrochemical	2 Years
 Sulphur Dioxide (SO2)	OZSO2_4*	0-20 ppm	0.01 ppm	0.01 ppm	Electrochemical	2 Years
	OZSO2_2	0-100 ppm	0.2 ppm	0.2 ppm		
	OZSO2_3	0-2000 ppm	5 ppm	5 ppm		
 Nitrogen Dioxide (NO2)	OZNO2_4*	0-10 ppm	0.01 ppm	0.01 ppm	Electrochemical	1Year
	OZNO2_2	0-100 ppm	0.2 ppm	0.2 ppm		2 Years
	OZNO2_3	0-500 ppm	0.5 ppm	0.5 ppm		2 Years
 Carbon Monoxide (CO)	OZCO_5*	0-10 ppm	0.02 ppm	0.02 ppm	Electrochemical	1Year
	OZCO_4	0-50 ppm	0.05 ppm	0.05 ppm		2 Years
	OZCO_2	0-100 ppm	0.1 ppm	0.1 ppm		2 Years
	OZCO_3	0-1000 ppm	0.75 ppm	0.75 ppm		2 Years
 Nitric Oxide (NO)	OZNO_3*	0-10 ppm	0.02 ppm	0.02 ppm	Electrochemical	2 Years
OZNO_2	0-100 ppm	0.5 ppm	0.5 ppm			
 Carbon Dioxide (CO2)	OZCO2_1*	0-5000 ppm	1 ppm	400 ppm	Non-Dispersive Infrared	2 Years
 Oxygen (O2)	OZO2_1*	(0-25) %VOL	0.1 %VOL	0.1 %VOL	Electrochemical	2 Years
 Ozone (O3)	OZO3_2*	(0-8) %VOL	0.01 ppm	0.01 ppm	Electrochemical	1Year

# Solution Architecture



# AirSense Smart Software

## Data Visualisation and Analytics Platform



AirSense Smart Software visualisation and analytics platform for real-time air quality data acquisition. Our Environmental Data Interpretation Engine, powered by Artificial Intelligence & Machine Learning algorithms, provides highly accurate data and actionable insights, empowering users to make well-informed decisions. AirSense uses secured HTTPS servers for data storage. Alternatively, this data can also be stored on-premises local servers.

AirSense dashboard module lets users visualise the device's data in various widgets for easy understanding. With analytics and report modules, users can compare the data and get automated reports of the various air quality parameters.

## AirSense Capabilities



**Real-time Data**



**Easy to Integrate**



**Smart alerts**



**Advanced Analytics**



**Automated Reports**



**Process Automation**

## Privacy First Platform



**Data Privacy**

The data shared with the client uses an encryption server through HTTPS Secure Socket layers. AirSense also uses AES encryption for connection that adds to data safety.



**Data Ownership**

AirSense creates a secured and encrypted password combination for the user login. It ensures 100% privacy of the data and doesn't share without relevant permissions.



**Data Transparency**

Data collected from equipment runs through the Environment Data Interpretation Engine. It processes various algorithms and eliminates environmental impact interferences on the



SANS



IEC 62443-4-1



Security Tested



100w Cybersecurity Practices



TCM SECURITY



**1441 517-2149**

**healthyAirbda@gmail.com**