Odosense Smart



Odour Monitoring System



Ultimate

Data

Odosense is the real-time odour emission tracking solution. Odosense continuously detects, measures and monitors the odourful gaseous contaminants. Oizom Odour Monitoring Solution comprises of a network of e-noses (Odosense) positioned on the periphery of the site. The solution incoporates Odour Atmospheric Dispersion Modelling for predicting odour impact on the surrounding area depending on meteorological conditions. With the help of meteorological data, Odosense can trace the odourant dispersion plume incited by conditions like wind speed and wind direction. Odosense is a fully solar-powered solution with wireless data transmission. This makes it an ideal choice for landfill sites, wastewater treatment facilities, fertilizers, paper-pulp industries and soil-treatment sites, etc.

Solar Weather Compact and Retrofit Durability Resistant Lightweight Powered Design Network Over-The-Air Real-Time 3-level Tamper Calibration Aanostic Updates Proof

Our Technology

Product Features

Our odour monitoring device works on proven working principles such as NDIR, PID, Electrochemical Analysis, Semiconductor, Optical Measurement. As a part of our proprietary 'Micro Active Sampling' (e-breathing technology), we also have a sophisticated suction-and-exhaust system for air sample collection and monitoring inside a controlled environment. This isolates the effect of the external environment on measurement to achieve 13% higher accuracy than the industry standards.

Product Usecases



Landfill / Dumpyard Diffusion of odorful gases from the landfills/dumpyard can create nuisance in the neighborhood. The odour level can be monitored to carry out precautionary steps for odour suppression.



Emissions of carcinogenic and other hazardous gases from the effluent treatment process can be monitored in real-time and preventive actions can be taken immediately.

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General Specifications

Size	360mm (H) x 328mm (W) x 200mm (D)				
Weight 7.2 Kg (instrument weight)					
Material	Aluminum Magnesium Alloy, Mild-steel (With Powder Coating), FRP				
Certifications	CE & FCC Certified, PTCRB Certified Communication Module				



	Connectivity Options	Specification				
Wireless	GSM	Global 2G / 3G / 4G				
Whereas a	LaDa					
	гока	868 MHZ / 915 MHZ				
	LTE	CAT-M1				
	NB-lot	CAT-NB1				
	Sigfox	868 to 869 MHz, 902 to 928 MHz				
	Wifi	AP Mode and Station Mode				
Wired	Ethernet	Static / DHCP Configuration				
	MODBUS	RS485 RTU / TCP				
	Relay Output	2 Channel				

Technical Specifications

Avg. Power Consumption	5 Watt (Actual consumption depends upon the number of parameters)
Power Input Options	External 110-230V AC 50-60Hz, 40Watt Monocrystal Solar Panel
Operating Temperature	-20 °C to 60 °C

Sensing Parameters

ID	Parameter	Range	Resolution	Min. Detection	Drift	Working Principle	Measurement Principle	Sample Rate	Expected Sensor Life
OZH2S_1	Hydrogen Sulfide (H ₂ S)	0-10 ppm	0.001 ppm	0.01 ppm	±100 ppb / Year	Electrochemical	Active Sampling	325 mL per sample	
OZNH3_1	Ammonia (NH₃)	0-20 ppm	0.3 ppm	0.3 ppm	< 2% / Month				2 years
OZCH3SH_1	Methyl Mercaptan (CH₃SH)	0-10 ppm	0.1 ppm	0.1 ppm	< 2% / Month				
OZSO2_1	Sulfur Dioxide (SO ₂)	0-20 ppm	0.001 ppm	0.01 ppm	±20 ppb / Year				
OZTVOC_1	Total Volatile Organic Compounds (TVOC)	0-40 ppm	0.001 ppm	0.005 ppm	N.A.	PID			5000 hours
OZTEMP_1	Temperature	-40°C to 125 °C	0.01°C	-40°C	N.A.	Solid State Semiconductor Sensing	Passive Monitoring	N.A.	2 years
OZHUM_1	Humidity	100% Rh	0.1%	0.1%	N.A.				

External Modules (optional)



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Wind Sensor Ultrasonic sensor 360°, 0-40 m/s

Accurate Air Quality Monitoring And Advanced Data Analytics

