# **Odosense<sup>®</sup> Smart**



**Odor Monitoring Device** 



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. With the help of meteorological data, Odosense can trace the odourant dispersion plume incited by conditions like wind speed and wind direction.



Ultimate Durability



Weather Resistant





Compact and Lightweight



Agnostic



Powered



Over-The-Air Updates



3-level Calibration

# **Our Technology**

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.

# **Odosense**<sup>®</sup> Usecases





Landfills



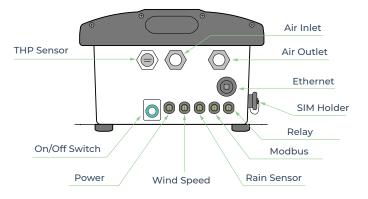
### **Parameters**

ID	Parameter	Range	Resolution	Min. Detection	Drift	Working Principle	Measurement Principle	Sample Rate	Expected Sensor Life
OZH2S_1	Hydrogen Sulfide (H <sub>2</sub> S)	0-1.5 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				
OZCH3SH_1	Methyl Mercaptan (CH₃SH)	0-10 ppm	0.1 ppm	0.1 ppm	< 2% / Month				2 years
OZSO2_1	Sulfur Dioxide (SO <sub>2</sub> )	0-10 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.				

Note - If a custom range and resolution of a sensor is required, please contact our team.

#### **External Modules (optional)**

# **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	

Wind Sensor

💩 Ultrasonic sensor 🞯 360°, 0-40 m/s

#### Communication

Data Interval	2-30 (configurable) minutes		
Data-push Protocol	HTTP post request to host-server		
Data-pull	HTTP request on device IP		
Firmware Updates	Over-The-Air Firmware Update		
Standby Connectivity	GSM (2G/3G/4G) for remote diagnosis, FOTA updates, and cloud calibration		

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

#### Accurate Air Quality Monitoring And Advanced Data Analytics





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