Odosense® Lite

Real-time odour monitor

Odosense is the real-time odour monitoring system. It is designed to continuously monitor various odourful and toxic gases. Odosense utilises a combination of sensor technology alongside data analysis techniques to get real-time readings that measure low, medium, and high odour intensity. 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
- Solar Powered
- Retrofit Design
- Real-Time Data
- Tamper Proof
- Network Agnostic
- Over-The-Air Updates
- 3-level Calibration

Our Technology

Our Odour monitor works on proven working principles like NDIR, Electrochemical Analysis, Semiconductor, Optical Measurement. As a part of our proprietary 'Micro Active Sampling' (e-breathing technology), we 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® Usecases

STP / WWTP

ETP

Parameters

Sensor	ID	Range	Resolution	Min. Detection	Drift	Working Principle	Expected Sensor Life
Sulfur Dioxide (SO_2)	OZSO2_1*	0-10 ppm	0.001 ppm	0.01 ppm	±20 ppb / Year	Electrochemical	2 years
	OZSO2_2	0-100 ppm	0.2 ppm	0.2 ppm	< 2% / Month		
	OZSO2_3	0-2000 ppm	5 ppm	5 ppm	< 2% / Month		
Hydrogen Sulfide (H_2S)	OZH2S_1*	0-1.5 ppm	0.001 ppm	0.01 ppm	±100 ppb / Year		
	OZH2S_2	0-50 ppm	0.05 ppm	0.05 ppm	< 2% / Month		
	OZH2S_3	0-200 ppm	0.2 ppm	0.2 ppm	< 2% / Month		
	OZH2S_4	0-2000 ppm	2 ppm	2 ppm	< 2% / Month		
Ammonia (NH_3)	OZNH3_1*	0-20 ppm	0.3 ppm	0.3 ppm	< 2% / Month		
	OZNH3_2*	0-100 ppm	0.3 ppm	0.3 ppm	< 2% / Month		
	OZNH3_3	0-1000 ppm	2 ppm	2 ppm	< 2% / Month		
Temperature	OZTEMP_1*	-40 to 125°C	0.01°C	-40 °C	N.A.	Solid State Semiconductor Sensing	2 years
Humidity	OZHUM_1*	100% Rh	0.1%	0.1%	N.A.		
Barometric Pressure	OZPRES_1*	300-1100 hPa	0.18 Pa	300 hPa	N.A.		

**Indicates standard delivery timeline.*

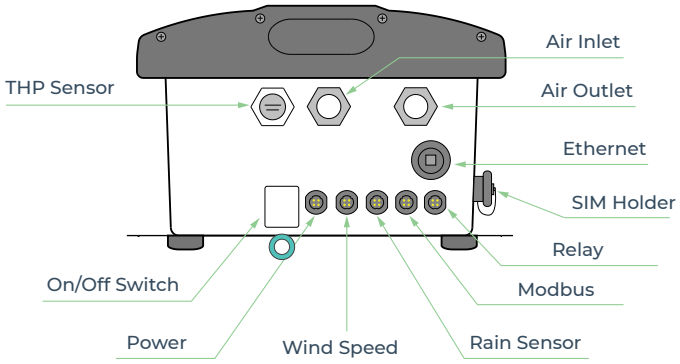
External Modules

Anemometer
OZWSD_1*
Wind Speed: 0-40 m/s
Wind Direction: 0-359°
Working Principle: Ultrasonic

Rain Gauge
OZRAIN_1*
Resolution: 0.25 mm
Working Principle: Tipping Bucket

Vibration Sensors
PPV: +/- 2G
Range frequency: 0.5 - 250 Hz
Range velocity: ±50 mm/s (±2 in/s)
Working Principle: MEMS

Specifications



General Specs

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, NEMA 4X, IP66, RoHS

Communication

Data Interval	2-30 minutes (configurable)
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	Global 2G / 3G / 4G
	LoRa	868 MHz / 915 MHz
	LTE	CAT-M1
	NB-Iot	CAT-NB1
	Sigfox	868 to 869 MHz, 902 to 928 MHz
	Wifi	AP Mode and Station Mode
	Satellite	-
Wired	Ethernet	Static / DHCP Configuration
	Modbus	RS485 RTU / TCP
	Relay Output	2 Channel

Changing the way Industries monitor air quality

Get in touch

House No.2, Garden View Corporate House,
Opp. Bodakdev Auda Garden, Ahmedabad, India
contact@oizom.com / connect@oizom.com
+91 88666 60025 / 39