

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) for remote diagnosis, FOTA updates, and cloud calibration

Power

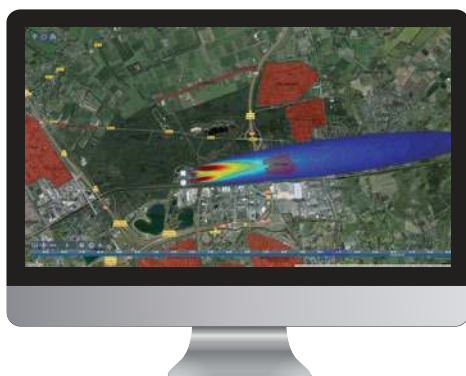
Avg. Power Consumption	5 Watt (Actual consumption depends upon the number of parameters)
Power Input Options	External 110-230V AC 50-60Hz, 40Watt Monocrystal Solar Panel
SMPS Specs	24V, 2Amps output UL-62368 & CAN/CSA C22.2 Certified
Battery Backup Time	12 Hours
Battery Specs	Lithium iron phosphate (LiFePO ₄) battery cell with rated voltage 12.8V Capacity 6Ah

Technical Specification

Processor	Quad Core ARM Cortex
Memory	2GB RAM / 8GB eMMC ROM
Device Interface	On-device Software / API
Operating Temperature	-20 °C to 60 °C
Operating Humidity	0-95% RH

Connectivity Options		Specification
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
Wired	Wifi	AP Mode and Station Mode
	Ethernet	Static / DHCP Configuration
	Modbus	RS485 RTU / TCP
	Relay Output	2 Channel

Odour Atmospheric Dispersion Modelling



Odour Source Tracking & Complaint Management



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	0.1 ppm	±100 ppb / Year	Electrochemical	Active Sampling	325 mL per sample	2 years
OZNH3_1	Ammonia (NH ₃)	0-20 ppm	0.3 ppm	0.3 ppm	< 2% / Month				
OZCH2O_1	Formaldehyde (CH ₂ O)	0-10 ppm	0.05 ppm	0.05 ppm	< 2% / Month				
OZCH3SH_1	Methyl Mercaptan (CH ₃ SH)	0-10 ppm	0.1 ppm	0.1 ppm	< 2% / Month				
OZNO2_1	Nitrogen Dioxide (NO ₂)	0-20 ppm	0.001 ppm	0.01 ppm	±20 ppb / Year				
OZSO2_1	Sulfur Dioxide (SO ₂)	0-20 ppm	0.001 ppm	0.01 ppm	±20 ppb / Year				
OZCL2_1	Chlorine (Cl ₂)	0-20 ppm	0.05 ppm	0.05 ppm	< 2% / Month				
OZHCL_2	Hydrogen Chloride (HCl)	0-100 ppm	1 ppm	1 ppm	< 2% / month	PID		5000 hours	
OZTVOC_1	Total Volatile Organic Compounds (TVOC)	0-40 ppm	0.001 ppm	0.005 ppm	N.A.				
OZCH4_1	Methane (CH ₄)	500-1500 ppm	1 ppm	500 ppm	N.A.	Molecular Property Spectrometer			2 years
OZN_1	Ambient Noise	Upto 140 dB	1 dB	0.5 dB	N.A.	Capacitance	Passive Monitoring	N.A.	
OZTEMP_1	Temperature	-40 °C to 125 °C	0.01°C	-40°C	N.A.	Solid State Semiconductor Sensing			
OZHUM_1	Humidity	100% Rh	0.1%	0.1%	N.A.				
OZPRES_1	Barometric Pressure	300-1100 hPa	0.18 Pa	300 hPa	N.A.				

External Modules (optional)

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