

Polludrone[®] Lite



Low Cost Air Quality Monitor



Polludrone is a Continuous Ambient Air Quality Monitoring System (CAAQMS). It is capable of monitoring various environmental parameters related to air quality, noise, odour, weather, radiation. It measures the particulate matter and gaseous concentrations in the ambient air in real-time. Using external probes, it can also monitor other auxiliary parameters like traffic, disaster and weather monitoring.



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

The Polludrone Lite air quality monitor works on proven working principles like NDIR, Electrochemical Analysis, Semiconductor, Optical Measurement, and Laser-Scattering. 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.

Polludrone[®] Usecases



Smart Campus



Industrial Research

Parameters

ID	Parameter	Range	Resolution	Min. Detection	Drift	Working Principle	Measurement Principle	Sample Rate	Expected Sensor Life
OZPM_1	Suspended Particulate Matters with size less than 2.5μ (PM _{2.5})	Upto 5000 μg/m ³	0.1 μg/m ³	1 μg/m ³	N.A.	Optical Particle Counter	Active Sampling	1 L /min	5000 hours
OZPM_2	Suspended Particulate Matters with size less than 10μ (PM ₁₀)								
OZCO2_1	Carbon Dioxide (CO ₂)	0-5000 ppm	1 ppm	400 ppm	±5 ppm / Year	NDIR		325 mL per sample	2 years
OZCO_1	Carbon Monoxide (CO)	0-5 ppm	0.01 ppm	0.01 ppm	< 1ppm/year	Electrochemical			
OZN_1	Ambient Noise	Upto 140 dB	1 dB	0.5 dB	N.A.	Capacitive	Passive Monitoring	N.A.	3 years
OZLI_1	Light Intensity	Up to 1,00,000 Lux	1 Lux	1 Lux	N.A.	Photo-conductivity			
OZUV_1	UV Radiation (0-12 UVI)	0.1-100,000 uW/cm2	0.1 uW/cm ²	0.1 uW/cm ²	N.A.				
OZVLI_1	Visible Light Intensity	Up to 5000 Lux	0.1 Lux	0.1 Lux	N.A.	Solid state semi conductor sensing			
OZTEMP_1	Temperature	-40 to 125°C	0.01°C	-40 °C	N.A.				
OZHUM_1	Humidity	100% Rh	0.1%	0.1%	N.A.			2 years	
OZPRES_1	Barometric Pressure	300-1100 hPa	0.18 Pa	300 hPa	N.A.				

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

External Modules (optional)



Rain Sensor

- Tipping Bucket
- In mm / inch



Wind Sensor

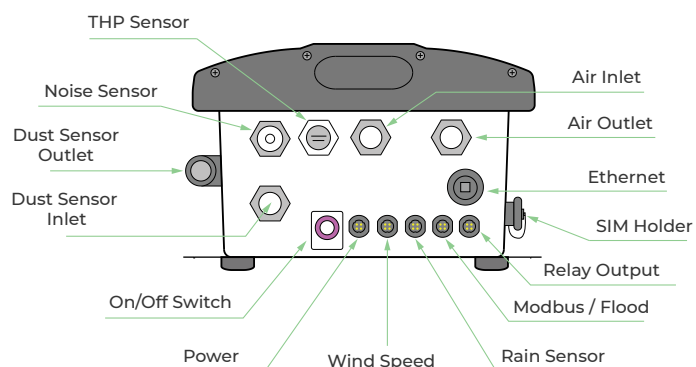
- Ultrasonic sensor
- 360°, 0-60 m/s



Flood Sensor

- Ultrasonic sensor
- Upto 765 cm

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

Accurate Air Quality Monitoring And Advanced Data Analytics



Get in touch



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