

Dustroid[®] Pro

Ambient Dust Monitor



Dustroid is an Online Particulate Monitoring system to measure the concentration of dust particles in the ambient air. It is capable of monitoring various particulate size ranging from 1 micron to 100 microns such as Ultrafine Suspended Particulate Matter (UFPM), Suspended Particulate Matter (SPM), Respiratory Suspended Particulate Matter (RSPM) and Total Suspended Particulates (TSP).



Ultimate
Durability



Weather
Resistant



Compact and
Lightweight



Heated
Inlet



Real-Time
Data



Retrofit
Design



Network
Agnostic



Over-The-Air
Updates

Our Technology

Dustroid Pro is technologically equipped and works on the Active Sampling method to count particulate matters using a highly accurate laser beam. Additionally, it has a heated inlet for dehumidification of air-sample. Its Anti-static inlet avoids loss of particulate during sampling. It offers remote calibration capabilities along with auto device firmware updates. The intelligent optical particle counter can measure data with high accuracy and transmit the same through various data communication modules like GSM, WiFi, LoRa, etc. The data is transmitted to the Oizom cloud in near real-time.

Dustroid[®] Usecases



Mining And Quarrying



Sea Ports

Parameters

Sensor	ID	Range	Resolution	Min. Detection	Working Principle	Expected Sensor Life
Suspended Particulate Matters with size less than 2.5 μ (PM _{2.5})	OZPM_1	Upto 5000 μ g/m ³	0.1 μ g/m ³	1 μ g/m ³	Optical Particle Counter	5000 hours
Suspended Particulate Matters with size less than 10 μ (PM ₁₀)						
Ultra Fine Particulate Matters with size less than 1 μ (PM ₁)						
Total Suspended Particulates (TSP) (PM ₁₀₀)						
Ambient Noise	OZN_1	Upto 140 dB	1 dB	0.5 dB	Capacitive	2 years
Temperature	OZTEMP_1	-40 to 125°C	0.01°C	-40 °C	Solid State Semiconductor Sensing	
Humidity	OZHUM_1	100% Rh	0.10%	0.10%		
Barometric Pressure	OZPRES_1	300-1100 hPa	0.18 Pa	300 hPa		

External Modules



Anemometer

OZWSD_1

Wind Speed: 0-40 m/s

Wind Direction: 0-359°

Working Principle: Ultrasonic



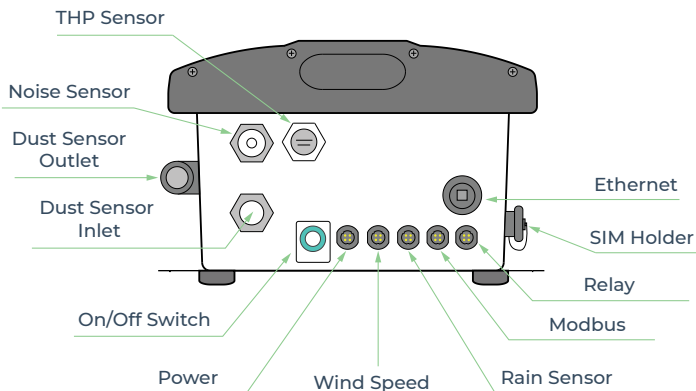
Rain Gauge

OZRAIN_1

Resolution: 0.25 mm

Working Principle: Tipping Bucket

Specifications



Size 360mm (H) x 328mm (W) x 200mm (D)

Weight 6.5 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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