

## Industrial Grade Single Parameter Air Quality Monitor



AQBot™ is an industrial air quality monitor with automation capabilities. AQBot™ Series offers a wide range of air quality parameters to choose from. The range of available parameters consists of all the important Gases, Particulates, and Noise related monitoring for Industrial scenarios. AQBot™ product range consists of critical ambient parameters and toxic gases like Total Volatile Organic Compounds (TVOC), Ammonia (NH<sub>3</sub>), Hydrogen sulfide (H<sub>2</sub>S), Methane (CH<sub>4</sub>), Carbon Monoxide (CO), Formaldehyde (CH<sub>2</sub>O), Particulate Matter (PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, PM<sub>100</sub>), Ambient Noise, etc. The AQBot series is designed for easy and inexpensive maintenance.

### Product Features



On Device Display



Ultimate Durability



Weatherproof Enclosure



Compact and Lightweight



Internal Data Storage



SMS and Email Alerts



Real-Time Data



Built-in Relay



Wired Communications



Wireless Communications



Over-The-Air Updates



Data Analytics Software

### Why Monitor Particulate Matter?

“PM” (Particulate Matter) is not a single pollutant but refers to a complex mixture of solids and aerosols of varying shape, size, and chemical composition. It may contain many chemical species like organic compounds, inorganic ions, metallic compounds, elementary carbon, etc. When inhaled, it irritates the eyes, nose, throat, and airways, and the toxic substances in the PM may lead to other adverse health impacts such as nasal cancer, pulmonary fibrosis, etc. Emission of particulate matter into the atmosphere takes place from combustion processes, crushing or grinding activities, resuspension of dust, etc. Stakeholders like safety managers or workshop supervisors can further take necessary precautions with such actionable information.

### Product Applications



#### Construction

Excavation, Demolition and Hauling.



#### Mining Industry

Drilling, blasting and transportation.



#### Cement Industry

Packaging and ash handling system.

# AQBot™ PM

## The best in class Particulate Monitor

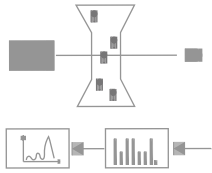
AQBot™ consists of the NEMA 4X approved enclosure to last long in a harsh industrial environment. It offers all industry-standard output signals like MODBUS, CANbus, RS-485, RS-232, etc. In addition, the fixed air quality monitor can also offer other communication modes like GSM (2G / 3G / 4G), GPRS, WiFi, LoRa, Ethernet, Satellite etc. The monitor can easily integrate with existing building monitoring or plant control systems infrastructure. Using such a wide range of communication capabilities, AQBot™ enables the Industrial Internet Of Things (IIoT) which is the backbone of Industrial Revolution 4.0.

## Key Benefits

- Quick sensing for threshold based alerts
- Highly accurate data to detect low ppb concentrations
- Robust built to sustain harsh industrial conditions
- Easy data integrations to match industry standards
- In-built relay operation for automation
- Data transmissions through multiple channels
- Real time data display for keeping a check
- Siren and strobe for audio and visual alerts
- Effortless installations with versatile mounting arrangement

## AQBot Specifications

ID	PARAMETER	RANGE	RESOLUTION
OZPM_1	Particulate Matter (PM <sub>2.5</sub> )	Upto 5000 µg/m <sup>3</sup>	0.1 µg/m <sup>3</sup>
	Particulate Matter (PM <sub>10</sub> )	Upto 5000 µg/m <sup>3</sup>	
	Particulate Matter (PM <sub>1</sub> )	Upto 5000 µg/m <sup>3</sup>	
	Particulate Matter (PM <sub>100</sub> )	Upto 30 mg/m <sup>3</sup>	



Opticle Particle Counter

### Mechanical

Size	210mm(W) x 258mm(H) X 105mm(D)
Weight	2.8 Kg (instrument weight)
Material	NEMA 4X Fire Retardant FRP Enclosure
Certifications	CE, IP66, RoHS, Mcerts
Installation Method	Pole Mount / Wall Mount

### Technical

Processor	Quad Core ARM Cortex
Memory	2GB RAM 8GB eMMC ROM
Device Interface	Display / On-device Software / API / Cloud Platform
Internal Data Storage	Upto 8 GB or 90 days

	Connectivity Options	Specification
Wireless	GSM	Global 2G / 3G / 4G
	LoRa	868 MHz / 915 MHz
	LTE	CAT-M1
	WiFi	AP Mode and Station Mode
Wired	Satellite	Satellite
	Ethernet	Static / DHCP Configuration
	Modbus	RS485 RTU / TCP
	RELAY	2 Channel Relay
	4-20 mA	4-20 mA Current Loop

### Environmental

Operating Temperature	-20 °C to 60 °C
Operating Humidity	0-93% RH
Recommended Humidity	15-90% RH
Storage Conditions	10 - 40°C

Changing the way Industries monitor air quality



Get in touch



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