

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 (NH₃), Hydrogen sulfide (H₂S), Methane (CH₄), Carbon Monoxide (CO), Formaldehyde (CH₂O), Particulate Matter (PM₁, PM_{2.5}, PM₁₀, PM₁₀₀), 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 Nitrogen Dioxide?

NO₂ is a reddish-brown acidic gas having a pungent irritating odour comprising of one nitrogen atom and two oxygen atoms. It is corrosive, strongly oxidizing and can combust with compounds such as hydrocarbons. When inhaled, NO_x causes damage to lung tissue and a reduction in the functioning of the respiratory system, making children, people with lung diseases such as asthma, and people who work or exercise outside more susceptible to adverse health impacts. Emissions from vehicles are the largest source of nitrogen oxides, followed by emissions from power plants, diesel-powered heavy equipment, and other movable engines, industrial boilers, etc. Other sources of NO_x include petrol and metal refining, food processing, and manufacturing industries. Real-time NO₂ concentrations data can help safety officials to check for sources and take mitigating measures.

Product Applications



Cement Industry

Rotary Kiln & Vertical Shaft Kiln,
Clinker



Mining Industry

From extraction (blasting and
crushing)

The best in class Nitrogen Dioxide 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
OZNO2_1	Nitrogen Dioxide	0-10 ppm	0.001 ppm
OZNO2_2	(NO ₂)	0-100 ppm	0.2 ppm
OZNO2_3		0-500 ppm	0.5 ppm



Electrochemical Sensing



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
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



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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