AQBot[™] NO



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



Why Monitor Nitric Oxide?

NO (nitric oxide or nitrogen monoxide) is a colorless, non-flammable, oxidizing, poisonous gas with a slightly irritating odour. It consists of one nitrogen atom bonded to one oxygen atom. It is highly reactive due to the presence of one unpaired electron. Thus, this results in rapid oxidation (within a few minutes) to form NO₂. The main effect of breathing in raised levels of nitrogen dioxide results in an increased likelihood of respiratory problems. Also, NO₂ inflames the lining of the lungs, and it can reduce immunity and cause lung infections. Sources of NOx include petrol and metal refining, food processing, and manufacturing industries such as the production of fertilizers. Necessary precautionary measures should be taken by authorities to ensure the health and safety of the workers in the workplace as per HSE guidelines.

Product Applications



Textiles Industry Sizing process



Thermal Power Plants Natural gas/oil/coal based fuel combustion.



Fisheries Industry From rotting of fish in storage and processing

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The best in class Nitric Oxide 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
OZNO_1	Nitric Oxide (NO)	0-5 ppm	0.001 ppm
OZNO_2		0-100 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



