AQBot™ TVOC

OIZOM
REDEFINING RESOURCES

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_3), Hydrogen sulfide (H_2S), Methane (CH_4), Carbon Monoxide (CO), Formaldehyde (CH_2O), Particulate Matter (PM_1, $PM_{2.5}$, PM_{10}, PM_{100}), 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 TVOC?

VOCs are a group of organic compounds that are easily vaporized. There are abundant VOC emitted from industrial activities however, among which some are colorless and some odou rless. Exposure to toxic VOCs may lead to severe health issues such as chronic respiratory diseases, damage to the kidney, liver, and/or central nervous system, and even cause cancer. Industrial sectors such as chemical, petrochemical, automotive, and pharmaceutical experience release VOCs which can prove to be fatal under prolonged exposure and high concentration. Real-time monitoring of TVOC levels helps in determining their source as well as formulating an action plan to control VOC emissions. 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

Textile Industry
High temperature ovens-drying and coating

Leather Industry
Finishing operations- drying

Fisheries Industry
From rotting of fish in storage and processing
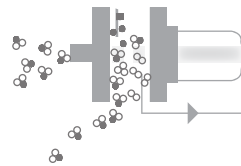
AQBot™ TVOC

The best in class TVOC 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
OZTVOC_1	Total Volatile Organic	0-40 ppm	0.001 ppm
OZTVOC_2	Compounds (VOC)	0-200 ppm	0.10 ppm

Photoionization Detection (PID)

🛠 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