AQBot™ H$_2$S

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$_2$S), Methane (CH$_4$), Carbon Monoxide (CO), Formaldehyde (CH$_2$O), 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 Hydrogen Sulphide?

H$_2$S is colorless, flammable, poisonous, and corrosive gas with one sulfur atom bonded to two hydrogen atoms. It is also known as sewer gas, swamp gas, or manure gas. H$_2$S has a noticeable rotten-egg odour detectable at concentrations as low as 0.5 ppb. Prolonged exposure to H$_2$S can have several hazardous effects, like low blood pressure, headache, dizziness, nausea, and vomiting, as well as coughing and difficulty in breathing. While higher levels can cause shock, convulsions, coma, and death. Industrial processes such as production of coke, viscose rayon production, wood pulp, etc. emit H$_2$S in the air. Other sources include sulfur extraction processes, tanning, mining, sugar-beet processing, and hot-asphalt paving. Real-time monitoring of H$_2$S levels helps in determining the source of the odour as well as formulating an action plan to control odour for workplace safety.

Product Applications

Wastewater Treatment Plants
Sludge storage and anaerobic digestion

Leather Industry
Beamhouse, unhairing and liming process

Fisheries
From rotting of fish in storage and processing

AQBot™ H₂S

The best in class Hydrogen Sulphide 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
OZH2S_1	Hydrogen Sulfide	0-1.5 ppm	0.001 ppm
OZH2S_2	(H₂S)	0-50 ppm	0.05 ppm
OZH2S_3		0-200 ppm	0.2 ppm
OZH2S_4		0-2000 ppm	2 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 ℃ to 60 ℃
Operating Humidity	0-93% RH
Recommended Humidity	15-90% RH
Storage Conditions	10 - 40℃

Changing the way Industries monitor air quality