# AQBot<sup>™</sup> SO<sub>2</sub>



## Industrial Grade Single Parameter Air Quality Monitor



AQBot<sup>™</sup> is an industrial air quality monitor with automation capabilities. AQBot<sup>™</sup> 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<sup>™</sup> 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**



#### Why Monitor Sulfur Dioxide?

SO<sub>2</sub> is a dense, colorless, toxic, non-flammable, reactive gas composed of one sulfur atom bonded to two oxygen atoms. It has a suffocating unpleasant strong distinct odor. Exposure to high levels of SO<sub>2</sub> can lead to long-term effects on the respiratory system, especially in children, the elderly, and people already suffering from respiratory issues. The largest source of SO<sub>2</sub> in the air is the combustion of fuels in power plants and other smaller sources include industrial processes such as extraction of metal from ore, aluminum smelting, refining of oil, pulp mills, and emission from locomotives, ships, and heavy equipment that burn sulfur-containing fuels. Considering workplace safety, employers must ensure that the emissions are monitored and necessary mitigation measures are undertaken.

#### **Product Applications**



Mining Industry From extraction, including blasting and crushing.



Thermal Power Plants Boiler Emissions (Not for stack monitoring)

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### The best in class Sulfur 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<sup>™</sup> enables the Industrial Internet Of Things (IIoT) which is the backbone of Industrial Revolution 4.0. 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

### **AQBot Specifications**

ID	PARAMETER	RANGE	RESOLUTION
OZSO2_1	Sulfur Dioxide (SO <sub>2</sub> )	0-10 ppm	0.001 ppm
OZSO2_2		0-100 ppm	0.2 ppm
OZSO2_3		0-2000 ppm	5 ppm

- 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



# **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





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