AQBot™ CO

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 Carbon Monoxide?

CO is a colorless, odorless, non-irritating, and tasteless, poisonous gas found in the atmosphere. Incomplete combustion of carbon-containing fuels such as coal, gasoline, natural gas, oil, and wood produces this critical air pollutant. Initial symptoms of CO poisoning may include flu-like symptoms such as headache, dizziness, weakness, nausea, and fatigue. In case of prolonged exposures, this may advance to vomiting, loss of consciousness, and collapse. Various industrial processes such as metal manufacturing, mining of metal ore and coal, food processing industries, power generation, oil and gas extraction and refining functions oil and gas from either land or sea, production of chemicals, manufacturing of concrete and plaster also contribute to CO emission. Real-time CO monitoring helps to control the emissions when preventive actions are taken by health and safety authorities.

Product Applications

Cement Industry
Rotary Kiln and Vertical Shaft Kiln, Clinker

Thermal Power Plants
Fuel combustion in boiler

AQBot™ CO

The best in class Carbon Monoxide 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
OZCO_1	Carbon Monoxide	0-5 ppm	0.01 ppm
OZCO_4	(CO)	0-50 ppm	0.05 ppm
OZCO_2		0-100 ppm	0.1 ppm
OZCO_3		0-1000 ppm	0.75 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