AQBot Specifications

OIZOM
REDEFINING RESOURCES

GENERAL

Processor	Quad-Core ARM Cortex A-72
Memory	2GB RAM, 8GB eMMC ROM
Internal data storage	Up to 12 months
Device interface	On-device software, API, Display
Display specification	6 digit 7 Segment Display

ELECTRICAL

Power supply	AC: 90VAC- 265VAC 50/60Hz
Power consumption	3.5 W (average)
Wiring connections	Pre-wired supplied with 2m cable

COMMUNICATION

Wireless communications	Global 2G/3G/4G, LoRa, LTE, NB-IoT, Sigfox, Wifi (Any one)
Wired communications	Ethernet, Modbus TCP, Modbus RTU, RS-485, CANbus (Any one)
Analog output	1 x 4~20mA Current Loop with 12-bit Resolution
Relay outputs	2 programmable relays, volt free relay contacts (1NO, 1 NC)
Beacon/sounder	Built-in, RED flashing light with alarm sounder 95db @ 1m

GENERAL PERFORMANCE

Operation temperature	-20 to +60°C
Operation humidity	0 - 90%RH, non-condensing
Storage conditions	10 - 40°C
Net weight	2.8 kg
Dimensions	210mm (W) × 258mm (H) × 105mm (D)
Installation method	Wall mount / Pole mount
Housing	NEMA-4X Fire-retardant FRP enclosure
Weather protection	Weather Resistant IP66 Enclosure

SENSING

Target gas	Refer parameter table
Gas sample mode	Natural diffusion
Warm up time	1 hour (cold start) for gas monitoring
Response time (t_{90})	< 60 Seconds
Signal refresh rate	5 Seconds
Measuring range	Refer parameter table
Accuracy	<±5%FS (at 20±5°C/ 50±20%RH)
Sensor life	Refer parameter table

ID	Parameter	Range	Resolution	Min. Det.	Working Principle	Sensor Life
OZNH3_1 OZNH3_2 OZNH3_3	Ammonia (NH_3)	0-20 ppm 0-100 ppm 0-1000 ppm	0.3 ppm 0.3 ppm 2 ppm	0.3 ppm 0.3 ppm 2 ppm	Electrochemical Sensing	2 Years
OZCH4_1	Methane (CH_4)	500-1500 ppm	1 ppm	500 ppm	Molecular Property Spectrometer (MPS)	2 Years
OZH2S_1 OZH2S_2 OZH2S_3 OZH2S_4	Hydrogen Sulfide (H_2S)	0-10 ppm 0-50 ppm 0-200 ppm 0-2000 ppm	0.001 ppm 0.05 ppm 0.2 ppm 2 ppm	0.01 ppm 0.05 ppm 0.2 ppm 2 ppm	Electrochemical Sensing	2 Years
OZTVOC_1 OZTVOC_2	Total Volatile Organic Compounds (VOC)	0-40 ppm 0-200 ppm	0.001 ppm 0.05 ppm	0.005 ppm 0.05 ppm	Photo Ionization Detection (PID)	5000 Hours
OZPM_1 OZPM_2 OZPM_3 OZPM_4	Particulate Matter ($PM_{2.5}$) Particulate Matter (PM_{10}) Particulate Matter (PM_1) Particulate Matter (PM_{100})	Upto 5000 µg/m³ Upto 5000 µg/m³ Upto 5000 µg/m³ Upto 30 mg/m³	0.1 µg/m³	1 µg/m³	Optical Particle Counter	5000 Hours
OZN_1	Noise	up to 140 dBA	1 dB	0.5 dB	Capacitive	2 Years
OZCl2_1 OZCl2_2	Chlorine (Cl_2)	0-20 ppm 0-50 ppm	0.05 ppm 0.1 ppm	0.05 ppm 0.1 ppm	Electrochemical Sensing	2 Years
OZHCl_1 OZHCl_2	Hydrogen Chloride (HCl)	0-50 ppm 0-100 ppm	0.5 ppm 1 ppm	0.5 ppm 1 ppm	Electrochemical Sensing	2 Years
OZCH2O_1 OZCH2O_2	Formaldehyde (CH_2O)	0-10 ppm 0-50 ppm	0.05 ppm 0.1 ppm	0.05 ppm 0.1 ppm	Electrochemical Sensing	2 Years
OZCH3SH_1	Methyl Mercaptan (CH_3SH)	0-10 ppm	0.1 ppm	0.1 ppm	Electrochemical Sensing	2 Years
OZSO2_1 OZSO2_2 OZSO2_3	Sulfur Dioxide (SO_2)	0-20 ppm 0-100 ppm 0-2000 ppm	0.001 ppm 0.2 ppm 5 ppm	0.01 ppm 0.2 ppm 5 ppm	Electrochemical Sensing	2 Years
OZNO2_1 OZNO2_2 OZNO2_3	Nitrogen Dioxide (NO_2)	0-20 ppm 0-100 ppm 0-500 ppm	0.001 ppm 0.2 ppm 0.5 ppm	0.01 ppm 0.2 ppm 0.5 ppm	Electrochemical Sensing	2 Years
OZCO_1 OZCO_2 OZCO_3	Carbon Monoxide (CO)	0-50 ppm 0-100 ppm 0-1000 ppm	0.1 ppm 0.1 ppm 0.75 ppm	0.1 ppm 0.1 ppm 0.75 ppm	Electrochemical Sensing	2 Years
OZNO_1 OZNO_2	Nitric Oxide (NO)	0-20 ppm 0-100 ppm	0.001 ppm 0.5 ppm	0.01 ppm 0.5 ppm	Electrochemical Sensing	2 Years
OZCO2_1	Carbon Dioxide (CO_2)	0-5000 ppm	1 ppm	400 ppm	NDIR	2 Years