

AQSnet70

Indoor Air Quality Monitor

Datasheet

> Overview

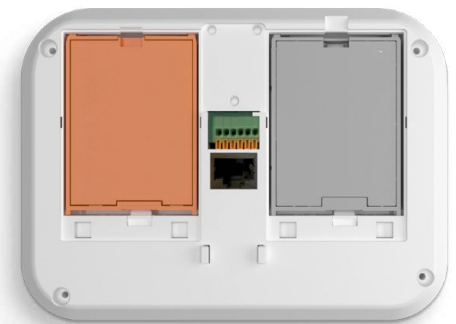
The AQSnet70 is a versatile indoor air quality monitoring device capable of measuring a wide range of parameters, including CO₂, PM2.5, PM10, TVOC, temperature, humidity, light, noise, and air pressure. It features two interchangeable modules, allowing for flexible configurations with additional sensors or extended battery life.

The AQSnet70 supports WiFi (2.4G only) for cloud connections. It also integrates seamlessly with building automation systems through protocols such as Modbus, BACnet, and MQTT.

Designed for real-time insights, the AQSnet70 pairs with the dashboard to provide comprehensive data access and analysis.

> Features

- ◆ Minimalist design.
- ◆ Replaceable capsules.
- ◆ Flexible power supply options.
- ◆ Multiple connectivity options.
- ◆ Up to 16 measurements in one device.
- ◆ Over 1.5 years of local data storage.
- ◆ Sensor and battery capsules are interchangeable.
- ◆ App: A straightforward application for device configuration.
- ◆ Visual and Audio Indicators: Equipped with a traffic light and buzzer to signal threshold levels.



> Specifications

Sensors and Measurement Parameters

Sensor Type	Range	Resolution	Accuracy	Technology
Carbon Dioxide (CO ₂)	400-3000 ppm	1 ppm	± 40 ppm ± 3 %	Non-dispersive Infrared
Temperature	-40 °C to +125 °C	0.1 °C	± 0.2 °C	Digital CMOSens® technology (MEMS)
Humidity	0-100% RH	0.01% RH	± 1.8% RH	Digital CMOSens® technology (MEMS)
Light	0.01-83,000 lux	0.01 lux	± 0.2 %	Photodiode
Noise	36-95 dB	1 dB	± 3 dB @ 23±5 °C	Digital
Air Pressure	300-1100 hPa	0.01 hPa	± 1 hPa	Piezoresistive Absolute Pressure Sensor (MEMS)
Ozone (O ₃) (selective)	0-5 ppm	0.001 ppm	± 5% F.S	Solid Polymer Electrochemical
Nitrogen Dioxide (NO ₂) (selective)	0-5 ppm	0.001 ppm	± 5% F.S	Solid Polymer Electrochemical
Carbon Monoxide (CO) (selective)	0-1000 ppm	5 ppm	± 5 ppm or ± 10 %	Micro Fuel Cell

Connectivity and Power Supply

Wi-Fi	2.4 GHz 802.11 b/g/n
Supported Protocol	Modbus RTU/IP
	BACnet MSTP/IP
	MQTT
Power Supply	10-30V DC, 24V AC, PoE, Type-C

General Specifications

Dimension	150 * 112 * 32 mm
Weight	235g
Operating Temperature	0 °C-50 °C
Operating Humidity	10%-90% RH (non-condensing)
Data Storage	1-minute data average, with over 1.5 years of storage capacity
Installation	Wall or ceiling mount

Certification

CE, FCC, RoHS, REACH, Works with WELL

> Order Information

Base Unit Order Information:

Product Type	Part Number
Base Unit	05-AQSn70-Base-01

Sensor Module Order Information:

Single-Gas Sensor Module

Gas Type	Part Number	Range	Resolution
All Gas	05-AQSn70-AQI-10-01	0-10 ppm	0.001 ppm
	05-AQSn70-AQI-200-01	0-200 ppm	0.01 ppm
CO	05-AQSn70-CO-10-01	0-10 ppm	0.001 ppm
	05-AQSn70-CO-500-01	0-500 ppm	0.01 ppm
	05-AQSn70-CO-1000-01	0-1000 ppm	0.1 ppm
ETO (C ₂ H ₄ O)	05-AQSn70-ETO-10-01	0-10 ppm	0.001 ppm
	05-AQSn70-ETO-200-01	0-200 ppm	0.01 ppm
H ₂	05-AQSn70-H ₂ -1000-01	0-1000 ppm	0.1 ppm
	05-AQSn70-H ₂ -5000-01	0-5000 ppm	0.1 ppm
	05-AQSn70-H ₂ -5%-01	0-5% vol.	0.001% vol.
H ₂ S	05-AQSn70-H ₂ S-5-01	0-5 ppm	0.001 ppm
	05-AQSn70-H ₂ S-10-01	0-10 ppm	0.001 ppm
	05-AQSn70-H ₂ S-100-01	0-100 ppm	0.01 ppm
HCHO	05-AQSn70-WQ-HCHO-1-OS-01	0-1 ppm	0.001 ppm

Gas Type	Part Number	Range	Resolution
NH ₃	05-AQSnet70-NH ₃ -10-01	0-10 ppm	0.001 ppm
	05-AQSnet70-NH ₃ -100-01	0-100 ppm	0.01 ppm
O ₃	05-AQSnet70-O ₃ -5-01	0-5 ppm	0.001 ppm
	05-AQSnet70-O ₃ -50-01	0-50 ppm	0.01 ppm
	05-AQSnet70-O ₃ -100-01	0-100 ppm	0.01 ppm
PH ₃	05-AQSnet70-PH ₃ -5-01	0-5 ppm	0.001 ppm
	05-AQSnet70-PH ₃ -20-01	0-20 ppm	0.01 ppm
SMELL	05-AQSnet70-SMELL-10-01	0-10 ppm	0.001 ppm
SO ₂	05-AQSnet70-SO ₂ -5-01	0-5 ppm	0.001 ppm
	05-AQSnet70-SO ₂ -100-01	0-100 ppm	0.01 ppm
TVOC	05-AQSnet70-TVOC-10-01	0-10 ppm	0.001 ppm
	05-AQSnet70-TVOC-200-01	0-200 ppm	0.01 ppm
	05-AQSnet70-TVOC-500-01	0-500 ppm	0.01 ppm

* If you have other gas detection requirements, please contact us for customization.

Multi-Gas Sensor Module

Module Type	Part Number	Parameter	Range	Resolution
PM-TVOC	05-AQSnet70-PM-TVOC-01	PM2.5	0-1000 µg/m ³	1 µg/m ³
		PM10	0-1000 µg/m ³	1 µg/m ³
		TVOC	0-500	1
		NOx	0-500	1

Disclaimer

The AQ Sense performance data stated above is based on data obtained under test conditions using the AQ Sense gas distribution system and AQ Sense test software. In the interest of continuous product improvement, AQ Sense reserves the right to change design features and specifications without notice. We are not responsible for any loss, injury or damage caused by this. AQ Sense assumes no responsibility for any indirect loss, injury or damage resulting from the use of this document, the information contained therein or any omissions or errors herein. This document does not constitute an offer to sell. The data it contains are for informational purposes only and cannot be considered a guarantee. Any use of the given data must be evaluated and determined by the user to comply with federal, state and local laws and regulations. All specifications outlined are subject to change without notice.

Warning

AQ Sense devices are designed for use in a variety of environmental conditions. However, due to the principles and characteristics of sensors and to ensure normal use, users must strictly follow this article during storage, assembly and operation of the device. Although our products are highly reliable, we recommend checking the device's response to the target gas prior to utilization to ensure on-site use. At the end of the products service life, please do not discard any electronics in the domestic waste, instead follow the local governments electronic waste recycling regulations for disposal.



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AQSnet70 Indoor Air Quality Monitor_Datasheet_V1.0_20250826

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