ARA-X4

ARA-X4 is a robust multi gas monitor, providing unrivalled protection and elevated worker safety, with effortless efficiency across a diverse range of environments.



Overview

The ARA-X4 multigas monitor from ION Science is a rugged, 4-gas compliance instrument designed for hazardous environments. Certified against ATEX, IECEx, and North American standards, and featuring an IP67 ingress protection rating, ARA-X4 offers a reliable, cost-effective, and user-friendly solution for worker safety. Ideal for confined space entry and personal health protection, it provides real-time monitoring of O_2, CO, H_2S, HCN, SO_2, and LEL levels, ensuring compliance with safety regulations.

ARA-X4's low-maintenance design ensures ease of servicing, reducing long-term ownership costs and is an essential tool for safety managers, industrial hygienists, and process operators who need a trusted, effective, and compliant gas detection solution.

Key Features

- **Multiple Sensor Options**
  Flexibility to choose O_2 (leaded or lead-free), CO, H_2S, LEL (Pellistor or IR), HCN, and SO_2 sensors to suit specific application needs
- **Instrument Warranty**
  Reliable instrument performance backed by a 5-year warranty
- **Safe Mode**
  Displays a "SAFE" icon when no alarms are triggered, ensuring peace of mind for operators
- **User-Friendly Design**
  Highly visible alarm status clearly identifies alarms from a distance, supporting informed safety decisions.
- **Flip Screen**
  Automatically or manually flips the display to match instrument orientation, making readings easy to view while the device is worn.
- **Simple PC Software**
  Easy to navigate for streamlined data logging download and instrument configuration



ARA-X4 Wearable Gas Detector



Green LED confidence flash every 60 seconds to confirm instrument status

Optional SAFE mode displays a shield icon until an alarm level is triggered, then displays the gas readings

LCD screen display "flips" based on instrument orientation for easy readability

Multiple display language options: English, French, German, Spanish, Italian, Portuguese, Dutch and Chinese

The screen displays a highly visible red backlight, making it unmistakably clear when an alarm is triggered, ensuring easy recognition even in high gas concentrations

Diagnostic feature allows for self testing and fast identification of faults, reducing instrument downtime

Configurable sensor options providing flexibility in different industrial applications for trained personnel

Replaceable PTFE filter ensuring easy maintenance and service

Offers 60,000 data logs and 50 event logs



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Additional Features

ARA-X4 is designed with user convenience and efficiency in mind. Its easily accessible filter simplifies maintenance, allowing workers to quickly replace it without the need for complex disassembly. Unlike other models on the market that require full unit disassembly, ARA-X4 ensures minimal downtime and reduced risk of water or dirt ingress to the sensors.

To accommodate different user needs, ARA-X4 offer both leaded and lead-free oxygen sensor options. The lead-free sensor provides a longer lifespan and a more environmentally friendly choice, while the leaded sensor offers a cost effective alternative.

For added flexibility, the configurable user setup allows trained personnel to modify the device's sensor configuration based on specific workplace hazards. This adaptability ensures that the monitor remains suitable for different work environments, and one solution suits all.

Maintaining accurate calibration is critical for safety compliance. ARA-X4 is available to purchase with a calibration and bump test docking station, making it easy for workers to carry out quick and reliable performance verification. This reduces the risk of user error, and ensures the device is always operating at peak accuracy.

Additionally, ARA-X4 captures and stores event logs whenever an alarm is triggered. These logs can be easily downloaded and reviewed, providing a detailed record for compliance reporting, incident investigations, and safety audits.

Sensor Specifications

Sensor	Range	Resolution	Low Alarm	High Alarm	Warranty	Expected Lifetime
O_2 (leaded)	O_2: 0 to 25%	0.1%	19.5%	23.5%	2 years	> 24 months in air
O_2 (lead-free)	O_2: 0 to 25%	0.1%	19.5%	23.5%	3 years	> 60 months in air
CO	CO: 0 to 500 ppm	1 ppm	35 ppm	200 ppm	2 years	> 24 months in air
H_2S	H_2S: 0 to 100 ppm	0.1 ppm	10 ppm	15 ppm	2 years	> 24 months in air
CO/H_2S Dual	CO: 0 to 500 ppm H_2S: 0 to 100 ppm	CO: 1 ppm H_2S: 0.1 ppm	CO: 35 ppm H_2S: 10 ppm	CO: 200 ppm H_2S: 15 ppm	2 years	> 24 months in air
LEL (Pellistor)	LEL: 0 to 100% LEL	0.1%	10%	20%	1 year	> 24 months in air
LEL (IR)	LEL: 0 to 100% LEL	0.1%	10%	20%	3 years	> 60 months in air
HCN	HCN: 0 to 50 ppm	0.1 ppm	4.5 ppm	10 ppm	1 year	> 24 months in air
SO_2	SO_2: 0 to 20 ppm	0.1 ppm	5 ppm	10 ppm	1 year	> 24 months in air



Common Markets

- Oil & Gas
- Petrochemical
- Pharmaceutical
- Utilities
- Wastewater
- Manufacturing
- Hazmat / First Response



Spares & Accessories



ARA IR Link and USB Cable

Infrared communication link and USB cable for connecting ARA detectors to a computer.

P/N 908201



ARA-X Docking Station

Charge, bump test, calibrate, configure and download data, standalone or via ARA-X Manager

P/N 926200



ARA-X4 Calibration Cap

Calibration cap for applying test gas during bump tests and calibration of the ARA-X4.

P/N 926243

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Technical Specifications

Gas Sensor Options	**Electrochemical:** CO H_2S Dual Tox (CO/H_2S) O_2 (lead or lead-free options) SO_2 HCN **Flammable Sensors:** LEL Pellistor (CH_4) LEL NDIR (CH_4) IEC60079-29-1***
Event Log Storage	50 bump logs 50 calibration logs 50 event logs 60,000 data logs
Battery	Li-ion battery, DC 3.7V, 2000mAh
Battery Life	LEL Pellistor Model: 18 hours LEL IR model: 60 days*
Status Indicator:	**Visual:** LEDs and red backlight **Audible:** 95 dB @ 30cm **Vibrating Alarm:** Vibrator (temperatures greater than -10 °C)
Display	LCD: 45 x 45 mm, internal backlight (red and green), FTSN, COG 128 x 128 graphic LCD, FPC
Environmental Specification	Operational temperature -20 °C to +55 °C, 5 ~ 95% RH
Ingress Protection	IP67
Communication	IR Communication to ARA-X4 PC software via IR link
Weight & Dimensions	<300 g 67 x 140 x 34 mm
Certification	**ATEX/IECEx:** Ex ia op is IIC T4 Ga or Ex da ia IIC T4 Ga **North America:** CL. I DIV 1, GRP. A,B,C,D T4 CL. I ZN 0. AEx ia op is IIC T4 Ga or CL. I ZN 0. AEx da ia IIC T4 Ga
Warranty	5 years**

This publication is not intended to form the basis of a contract and specification can change without notice.

*Based on 11 hours of use per day.

** Excluding consumables and sensors. Please refer to warranty statement for full details.

*** Tested to IEC60079-29-1 performance requirement for detectors for flammable gases.

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