



# ALTAIR io™ 4 Connected Gas Detector

Now supports hydrogen resistant CO sensors (CO-H<sub>2</sub> Res)



WE KNOW WHAT'S AT STAKE.

A significant enhancement to the ALTAIR io™ 4 Connected Gas Detector's calibration report on the MSA Grid platform was recently introduced. This update allows the Grid to accurately display which version of the CO sensor is installed (either CO or CO-H<sub>2</sub> Res), providing you with improved fleet management and monitoring capabilities.



## What is CO-H<sub>2</sub>Res?

Hydrogen Resistant CO sensors (CO-H<sub>2</sub> Res) refer to specialized sensors that have increased resilience when being used in the atmosphere in which hydrogen exposure tends to happen more frequently than in the industrial average. This resilience allows for significantly reduced cross-sensitivity and therefore can help enhance the accuracy of the gas readings. CO-H<sub>2</sub> Res sensor can therefore limit the amount of false alarms and help improve work continuity while allowing users to conduct their work in a safe manner. This capability which originated from the steel processing industry is currently more and more common as hydrogen usage is spreading for many industries, including the OGP sector.



**Reduced Cross Sensitivity**



**Enhanced Safety**



**Resilience**

## Why is a hydrogen resistant CO sensor important?

Industry regulations may require the monitoring of CO levels. Current CO sensors may be susceptible to decreased sensitivity was exposed to hydrogen. MSA XCell® CO-H<sub>2</sub> Res Sensor has 10 times less sensitivity to hydrogen (<5% cross-sensitivity) as compared to some current CO sensors.

What does it mean?

- As an example, a standard CO sensor when exposed to 100 ppm of hydrogen (but in the absence of CO) returned a CO reading of 48 ppm (due to cross-sensitivity), which in some instances will trigger an alarm (in this case a false alarm), stopping the user from work and possibly causing an evacuation.
- A CO-H<sub>2</sub> Res sensor in the same situation (i.e., 0 ppm CO; 100 ppm H<sub>2</sub>) returned a CO reading of 5 ppm, which was a more accurate reading.
- All CO detector users should be aware that cross-sensitivity values are intended for reference only and may change under varying environmental conditions, varying concentrations, varying sensor lots, and varying sensor age.



### Key Benefits of the Update:

- Reduced cross sensitivity: Increased readings accuracy and reduced amount of false alarms
- Resilience: Extremely robust filter helps you see the gas of interest
- Regulatory Compliance: Helps you stay compliant with industry standards and regulations related to H<sub>2</sub>S-LC concentrations.

To find out more about how this update can benefit your operations and enhance safety protocols, please contact us today.



### About ALTAIR io™ 4 Connected Gas Detector

The ALTAIR io™ 4 gas detector is a secure, smart device designed for out-of-the-box connectivity, housed in an ultra-rugged design. It features our industry-leading XCell® sensor platform, known for its exceptional lifetime and durability. The ALTAIR io™ 4 gas detector is designed from the ground up to work seamlessly with the MSA Grid and the ALTAIR io™ Dock, helping to achieve hassle-free compliance, effortless fleet management, and unprecedented visibility into your worker safety.

### ALTAIR io™ 4 device features:

- **Improve worker accountability:**  
Easily assign the ALTAIR io™ 4 to employees with just a tag and helping to increase accountability. Help employees use their devices correctly, maintain them properly, and adhere to your safety policies.
- **Simplify Compliance with Testing Regulations:**  
Streamline the process of monitoring devices that need calibration, testing, or repair which may minimise downtime and increase operational readiness.



- **Rugged, durable design and Industry-Leading XCell® Sensors:**  
The ALTAIR io™ 4 gas detector is more durable versus other MSA Safety devices and offers the ability to detect up to four gases, including flammable gases (e.g., methane), oxygen, carbon monoxide, and hydrogen sulfide, with additional sensors available upon request.

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