

# Meeting HYDROGEN HAZARDS in Plant Environment

## FAST ULTRASONIC LEAK DETECTION FOR OPTIMAL HYDROGEN DETECTION

Hydrogen is a combustible gas that is difficult to detect and easily ignitable on contact with open flames, electrical sparks, and static discharge. It is lighter than air and consequently challenging to detect in open, well ventilated areas.

Gassonic's fast ultrasonic gas leak detection offers a new layer of protection that reduces the risk of gas leak and fire ignition hazards. When combined with General Monitors' gas and flame detection solutions, ultrasonic technology enhances hydrogen detection efficiency, increasing the likelihood that a hazard is mitigated before it escalates.

The principle of ultrasonic technology is that it quickly detects the ultrasonic noise generated by the escaping gas at a distance from the leak source. A distinct advantage of the technology is that it detects the gas at leak initiation regardless of ventilation rate, gas dilution, or the direction of the leak – and

without the gas having to make physical contact with a sensor element. This makes it the ideal choice for instant detection of pressurized hydrogen leaks in vessels and pipes in open and ventilated areas.

The detector, which is based on robust microphone technology, has a detection radius for hydrogen up to 8 meters at a leak rate of 0.01 kg/s. In addition, the Gassonic Observer features the Senssonic™ integrated acoustic self-test, which periodically verifies the integrity of the electronic circuitry and operation of the acoustic sensor. The detectors are SIL suitability rated and holds relevant C-UL and ATEX certifications.

Please contact your local General Monitors' representative for further information about how to implement the optimal mix of detection technologies for hydrogen gas and flame detection.



**SIL SUITABLE**

Gassonic Observer  
ultrasonic gas leak detector



Gassonic is the world leader in high-quality ultrasonic gas leak detection and is today part of the General Monitors family of companies. Together we have served the F&G Industry for more than 50 years.



**GENERAL MONITORS**  
*Protection for life.*

**GASSONIC**  
A General Monitors Company