

Extrima® EX-certified Hydrogen Leak Detector

Safety delivered.



 **INFICON**

The Fastest, Intrinsically Safe Leak Detector for Explosive Environments

As hydrogen rapidly emerges as a clean energy carrier, its role in replacing natural gas, storing renewable energy, and powering fuel cells continues to expand. However, its widespread use demands stringent safety measures in environments where hydrogen concentrations can become hazardous.

The portable Extrima Ex-certified Hydrogen Leak Detector is the ultimate explosion proof instrument for pinpointing leaks in the toughest of environments, including hazardous locations such as Zone 0 (equivalent to Division 1). The unit is specifically designed to meet the rigorous requirements of the energy sector where hydrogen is used in production, storage, distribution and consumption.

ADVANTAGES AT A GLANCE

- ✓ Intrinsically safe for use in hazardous areas (Ex ia IIC T3)
- ✓ Finds even the smallest leaks (down to 2.5 E-8 mbarl/s)
- ✓ Finds leaks in high hydrogen backgrounds
- ✓ Does not react to other gases but hydrogen
- ✓ Portable, battery operated (more than 8 hours use per charge)
- ✓ Robust, for tough environments
- ✓ Low cost-of-ownership
- ✓ Incorporates the proven Sensistor sensor technology

Built to the Highest Safety Standards

Hydrogen systems often operate in challenging environments, where high concentrations increase the risk of ignition and demand instruments with reliable self-protection. Equally important are robust mechanical design, water resistance, and full-day portability—whether performing production testing in a factory or servicing large outdoor installations. The Extrima Leak Detector is built to meet these requirements, ensuring safe, reliable, and efficient operation in any setting.

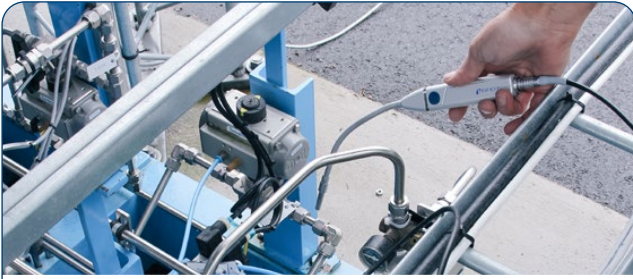
Unmatched Sensitivity and Selectivity

Conventional leak detection methods in the industry, such as pressure drop testing and soap sprays, are effective to a point—but they cannot reliably detect the smallest leaks. Extrima is a highly sensitive hydrogen detector that finds even the tiniest leaks while ignoring interfering gases like VOCs and hydrocarbons. Extrima's proprietary sensor delivers market-leading sensitivity, selectivity, and dynamic response, making leak detection fast, precise, and intuitive.



PORTABILITY INCREASES CAPABILITIES

Extrima has a shoulder strap and probe cables of 3 and 5 m (9.8 and 16.4 ft) for easy leak detection in the field.



FAST PIN-POINTING ON SUSPECTED LEAK AREAS

High sensitivity, short recovery time and auto-range function allow for fast and accurate location and quantification of even minute leaks.

ACCURATE LEAK DETECTION IN HIGH GAS BACKGROUNDS

Thanks to its advanced sensor technology, Extrima can handle high levels of hydrogen backgrounds and operate safely in high gas concentrations environments. Portable and rechargeable, it provides a full day of operation on a single charge, ensuring efficiency without compromising safety.



TYPICAL APPLICATIONS

- Hydrogen systems
- Hydrogen cooled generators
- Fueling stations
- Backup power solutions
- Electrolysers
- Steam reformers
- Fuel cells
- Transmission and distribution pipelines
- Valves, regulators, and pressure gauges
- Fuel systems

ERGONOMIC HAND-PROBE

The PX57 Flex Hand Probe features an ergonomic design and built-in leak indicator for exact leak pinpointing. The sensor, which can be easily protected against fluids, is placed at the probe tip for quick replacement in less than a minute. The PX57 Hand Probe is also available with a rigid neck.

EXTRIMA® EX-CERTIFIED HYDROGEN LEAK DETECTOR

SPECIFICATIONS

Ex classification	Ex ia IIC T3
Minimum detectable leak rate	Range in H ₂ Analysis Mode 0.5 PPM - 0.2% H ₂ Sensitivity in Leak Locating Mode 2.5E-8 mbar/s @100% H ₂
Ambient temperature range	-20 - +50°C (-4 - +120°F)
Humidity	95% RH (non-condensing)
Chemical resistance	JET-fuel, Skydrol® and most common petroleum products
IP-Class	IP-Class: IP67, 30 min @ 1m (IEC 60529)*
Dimension (HxWxD)	128 x 240 x 167 mm (5.03 x 9.44 x 6.57 in.)
Weight	4.5 kg (10 lb.) (hand probe excluded)
Applications	Zones 0, 1 and 2 / Division 1 and 2 (mines and dust excluded) (hydrogen, methane, e-fuels vapours and other hydrocarbon gases in the T1 to T3 range.)
Battery capacity	> 8 hours (full charge)

*Probe tip requires separate protection

ORDERING INFORMATION

PRODUCT	Cat. no.
Extrima Ex certified Hydrogen Leak Detector complete with detector, CX21 probe cable 3 m (9.8 ft.), PX57 Flex Hand Probe with flexible neck, shoulder strap, charger 100-240 V (ac), transport case, antistatic sensor caps, water protective tape	590-600
ACCESSORIES	
PX57 Hand Probe (rigid neck)	590-606
PX57 Flex Hand Probe (flexible neck)	590-607
CX21 Probe cables	
3 m (9.8 ft.)	590-260
5 m (16.4 ft.)	590-265
Antistatic Sensor Caps (50 pack)	590-270
Battery Charger	591-656
Test Leaks	see separate data sheet
SPARE PARTS	
Sensor	590-292



www.inficon.com

reachus@inficon.com

Due to our continuing program of product improvements, specifications are subject to change without notice.
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