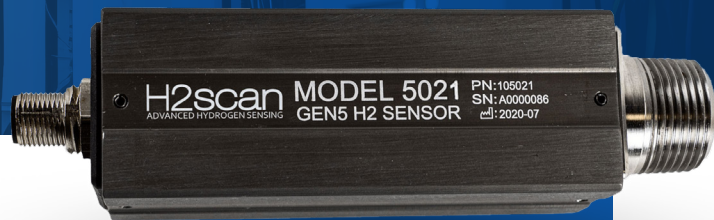# H2scan
ADVANCED HYDROGEN SENSING

HY-ALERTA™ 5021
BATTERY ROOM AREA MONITOR

Solid State, Maintenance-Free Battery Room Hydrogen Monitor.

The most advanced technology provides the lowest cost of ownership. Sensors only detect hydrogen, eliminating false positives. Expensive replacements are unnecessary, with a sensor life cycle of over ten years. The auto-calibration feature eliminates maintenance events. H2scan hydrogen sensing solutions offer various communication options, including IoT solutions, analog communications, and digital outputs.

The Model 5021 Meets All Code Requirements

- **Compliance:** According to codes and standards, hydrogen must be kept below 25% of the Lower Flammability Level (1% of room volume) for all battery types, including lead acid, nickel-cadmium, lithium, and other technologies.
- **Battery Room Safety:** Ideal for use in battery rooms and enclosures to prevent the dangerous accumulation of hydrogen gas.
- **Exhaust Fan Activation:** Communicates to activate exhaust fans.
- **Continuous Monitoring:** Keeps hydrogen levels below 25% LEL.
- **Annunciation Compliance:** Modbus communication to meet annunciation requirements.
- **Communication Continuity:** Reports communications continuity.
- **Easy Connection:** Provides easy low-voltage connection to 2-hour backup power

Benefits

- **Advanced Technology:** Provides the lowest cost of ownership.
- **Hydrogen-Specific Detection:** Sensors only detect hydrogen, eliminating false positives.
- **Long Sensor Life:** The sensor life cycle is over ten years, eliminating the need for expensive replacements.
- **Maintenance-Free:** The auto-calibration feature eliminates maintenance events.
- **Flexible Communication:** H2scan hydrogen sensing solutions include various communication options, such as IoT solutions, analog communications, and digital outputs.

Applications

- Data center UPS
- Utility applications and substations
- Energy storage batteries

Features

- Solid state technology
- Auto calibrating
- 10-year warranty

- Field configurable settings
- No cross sensitivity: No false positives from other gases

- Long-term reliability: Does not degrade over time

- High resistance: Will not saturate with exposure to hydrogen and is not vulnerable to poisoning

Lowest TCO. 10-15 year service life— *set it and forget it!*
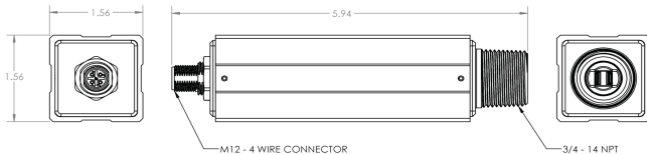
Product Details

IEC 61326-1   CE FC

Standards and Certifications

IEC 60068-2-2 & EN 50155 Section 13.4.4	IEC 60068-2-27
IEC 60068-2-11 & DIN EN ISO 12944	IEC 55022 IFCC Part 15 EN 55011 Class A Group 1
IEC 60529	IEC 61000-4-2, 61000-4-3, 6100-4-6, and 61000-4-8
IEC 60068-2-6 table C2	IEC/ EN 61010-1
IEC 60068-2-64 paragraph A.2, category no. 2	IEC 61326-1

Performance Specifications

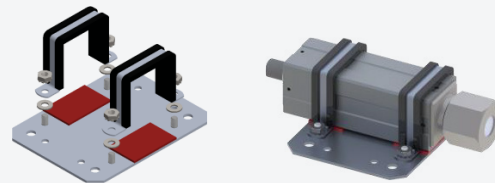|	
Low H2	0%
High H2	5%
Lower Detection Limit (LDL)	0.4% H2
Response Time	<5 min
Accuracy (Absolute Error)	0.3% H2
Repeatability (Absolute Error)	0.3% H2

HY-ALERTA™ 5021 Dimensions

Mounting Kit Operations

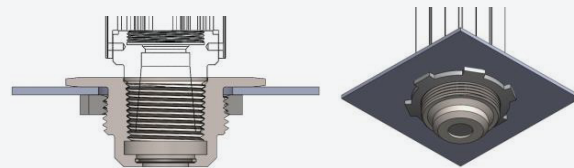The Hy-ALERTA 5021 sensors have two mounting options that make it easy for installation:

General Purpose Mount

This mount can be mounted to a ceiling or other structure using the included mounting plate with pre-drilled holes.

Enclosure Bulkhead Style Mount

Designed for mounting to indoor or outdoor enclosures, providing flexibility in installation locations.

These mounting options ensure the Hy-ALERTA 5021 sensor can be easily integrated into various environments, whether in rooms, enclosures, or outdoor settings, facilitating straightforward deployment setup.