Honeywell Announces a New Hydrogen Leak Detection Sensor (HLD)

Honeywell’s HLD Series Enhances Safety in Hydrogen Powered Systems.

February 17th, 2025

Honeywell is excited to announce the release of its latest safety sensor, the Hydrogen Leak Detector, specifically engineered to enhance the safety of Hydrogen Powered Systems.

Although there have been advancements in hydrogen fuel cell technology, maintaining operational safety remains an utmost concern. Historical incidents involving hydrogen leaks have highlighted substantial safety risks, underscoring the necessity for dependable hydrogen detection technologies. An advanced hydrogen leak detection system is essential for preventing catastrophic failures and ensuring the safe integration of hydrogen technology across diverse industries.

While hydrogen offers numerous advantages, addressing associated safety risks is essential. Gases are colorless, odorless, highly flammable, and rapidly diffused, which can easily be undetected. Its small molecular size enables it to escape easily through seals and joints, resulting in flammable environments that have a low ignition threshold. Additionally, hydrogen flames are nearly invisible, complicating detection efforts. Without adequate monitoring, leaks can result in fires, explosions, and significant operational hazards.

The Hydrogen Leak Detector (HLD) Sensor uses Honeywell's advanced compensation algorithm to detect Hydrogen leaks in different applications. Designed with precision and reliability in mind, the HLD Sensor employs cutting-edge Thermal Conductivity Detection (TCD) technology to deliver lasting performance for many applications that require a highly accurate solution without manual intervention for ten years. Its advanced detection capabilities ensure the identification of hydrogen leakage as low as 50 PPM or greater. Honeywell HLD Sensors can be utilized in many industries, such as automotive, industrial safety equipment, and residential power generators.

As we continue to innovate in the realm of safety sensing, Honeywell remains committed to providing advanced solutions that empower industries and improve safety standards worldwide. We look forward to seeing the impact of Hydrogen Leak Detector across many Hydrogen applications and beyond. For detailed technical information, please reach out to your Honeywell representative.

About HLD Sensor

The Honeywell Hydrogen Leak Detector is a thermal conductivity-based hydrogen gas sensor with high reliability, stability, and resistance to chemical poisoning. It is used to detect hydrogen leakage in various applications. The sensor is designed to provide the ppm level of Hydrogen gas present in a clean-air environment with high accuracy over a wide range of temperatures and humidity. The HLD sensor is typically adjacent to the Hydrogen Storage Tank, Hydrogen Gas Piping, Fuel Cell, or Vehicle Cabin. The following are examples of Hydrogen applications:

-Hydrogen Powered Heavy Duty Trucks
-Hydrogen Powered Buses
-Hydrogen Power Generators
-Hydrogen Powered Automobiles
-Hydrogen Powered Construction Equipment
-Hydrogen Powered Aircraft

Honeywell Sensing & Safety Technologies
830 E. Arapaho Rd
Richardson, TX 75081sps.honeywell.com/ast

Affected Part Numbers

PRODUCT NAME	PART NUMBER
Hydrogen Leak Detector (HLD), 250K baud rate, 0xE4 CAN ID	HLD-111-111-001

Timeline of Events

Activity	Date
First Order Date	Feb 17, 2025
First Ship Date	April 3, 2025

Regions Affected

☒ Asia Pacific (APAC)
☒ Europe, Middle East, Africa (EMEA)
☒ Greater China (GrCH)
☒ Latin America (LATAM)
☒ North America (NA)

Contact Information

Please contact your Honeywell representative for additional information regarding this communication.

- **Product marketing:**
  - Global: Ayman Hamid, ayman.hamid@honeywell.com
  - NA: Laila Rowther, Customer Marketing Manager, Laila.Rowther@Honeywell.com
  - EMEA: Steven Mitchell, Customer Marketing Manager Steven.Mitchell2@Honeywell.com
  - Greater China: Andy Song, Offering Manager, Andy.Song@Honeywell.com
  - APAC: Atul Paul, Customer Marketing Manager, atul.paul@honeywell.com

- **Application engineering:**
  - Global: Hermann Sidhu, Sr. Global Application Engineer, hermann.sidhu@honeywell.com

Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is the buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Honeywell assumes no responsibility for its use.

Honeywell Sensing & Safety Technologies
830 E. Arapaho Rd
Richardson, TX 75081sps.honeywell.com/ast

PLN product code 01/23