

DE-RISK YOUR HYDROGEN OPERATIONS

Hydrogen requires more than standard gas detection. That's because its unique properties create unique safety challenges:

FIRE AND EXPLOSION RISK

Hydrogen is highly combustible and ignites with significantly less energy than many other fuels.

CONFINED SPACE HAZARDS

Hydrogen is lighter than air and can accumulate at the top of enclosed spaces.

UNDETECTABLE WITHOUT SPECIALIZED EQUIPMENT

Hydrogen is odorless, colorless, and burns with a nearly invisible flame, making fires difficult to detect.

GREATER POTENTIAL FOR LEAKS

As the smallest molecule, hydrogen can escape through very small openings.



Blackline's connected safety technology helps teams get ahead of hydrogen risk with integrated sensor and location technology, real-time alerts, and unparalleled connectivity.

Tools for Hydrogen Risk Mitigation

COMPREHENSIVE GAS DETECTION

- Portable gas detectors and EXO area monitors detect multiple gases simultaneously and link to a connected platform so an alarm in the field can immediately alert someone who can respond.
- Dedicated H2 sensor monitors hydrogen in ppm to detect leaks, including in low-oxygen environments.
- MPS-LEL sensor for broad combustible gas detection in % LEL, including hydrogen.
- Configurable gas cartridges to pair your H2 sensor with the other sensors your site needs.

SAFER CONFINED SPACE ENTRIES

Connected wearables and area monitors show what's in the air during confined space entries—and live stream data to the Blackline Live connected platform—so you know what your people face and can keep them safe.

Devices combine diffusion and powerful internal pump capabilities, so teams can switch between pre-entry checks and continuous monitoring as conditions change.

AUTOMATED LONE WORKER PROTECTION

A hydrogen incident can escalate quickly, leaving a worker unable to manually trigger an alert. Automated alerts include the worker's precise location and gas readings on a live map, giving responders the information they need to act quickly. Alerts can be monitored by your own team in Blackline Live, trained agents in our 24/7 Safety Operations Center, or one of our global Alarm Receiving Centers.

- Fall detection
- No-motion detection
- Missed check-ins
- Time and location-stamped alerts
- Alerts received by monitoring personnel in under a minute
- A manual emergency SOS latch also lets workers immediately call for help when they're able





See the Risk. Know Who's Affected. Respond Faster.

Detecting hydrogen is only the beginning. When an alert occurs, connected technology gives monitoring teams the information and communication tools they need to understand what's happening and get workers help.

KNOW WHERE YOUR PEOPLE ARE

Integrated location technology and direct-to-cloud data streaming provide a live view into workers, devices and alerts—even across large or remote sites.

- Cellular or satellite connectivity*
- Coverage in 100+ countries
- Integrated location technology
- Deploys in minutes without Wi-Fi or network infrastructure

**Not available in all regions.*

KEEP PEOPLE CONNECTED

Three communication options in one intrinsically safe device help workers call for help and teams coordinate a response:

- Emergency Voice connects workers with a real person when an alert is triggered*
- Push-to-Talk enables fast team communication and collaboration across sites
- Text messaging supports mass notifications like evacuations, and messages from workers to monitoring personnel

**Connects to your control room or Blackline's 24/7 live monitoring service.*

SEE IT ALL IN BLACKLINE LIVE

Blackline Live brings your connected safety solution together in one platform. View workers and devices on a live map, monitor alerts and compliance status, and draw productive and high-risk zones from any internet-connected device.

Connected Safety That Does More

DETECT EARLIER

Confirm hydrogen specifically in ppm with a dedicated H2 sensor, or pair it with MPS for broad combustible gas coverage, all in one device.

PROTECT WORKERS

Combine gas detection with automated person-down alerts, emergency SOS, ZoneAware™, proximity-based alerts, and location technology in one connected solution.

RESPOND FASTER

Real-time alerts, worker location, and human-to-human communication give monitoring teams the information they need to act quickly.

WORK SMARTER

Use Blackline Analytics to understand device compliance, equipment usage, where hazards are occurring, and trends that can help you stay ahead of risk.

CONNECTED SAFETY IN THE FIELD

REGAS technicians often work alone around methane, biomethane and hydrogen infrastructure. See how REGAS improved lone worker protection and compliance with Blackline's connected safety technology.



**Ready to de-risk your
hydrogen operations?
LET'S CONNECT.**

NORTH AMERICA

1 877 869 7212 | sales@blacklinesafety.com

EUROPE

+44 1787 222684 | eusales@blacklinesafety.com

REST OF WORLD

+1 403 451 0327 | sales@blacklinesafety.com

blacklinesafety

blacklinesafety.com/industries/hydrogen