

# Modernizing Gas Detection with a Platform Approach

Quickly assess the maturity of your program

## The next evolution of safety is the intelligent gas detection platform.

Detecting gas in the work environment is about more than just regulatory compliance — it's about saving lives. Those who work or manage employees in potentially volatile environments understand that dependable, fast detection is essential for workplace and community health and safety.

As regulations become more complex and the number of gases and potential exposures grows, it is increasingly critical for companies to focus on continuous improvement in safety operations. Leaders are adopting digitallyenabled platforms built on a foundation of high-quality, reliable hardware, enabling predictive maintenance, enhanced visibility, increased responsiveness, and actionable insights. By connecting devices to the cloud using an Internet of Things (IoT) approach, a gas detection platform helps you improve:

- **Device management:** Worker safety starts with consistent, reliable management of your gas detection device fleet. With a platform approach, you can enable predictive and preventive maintenance or choose a device-as-aservice strategy where replacements are shipped automatically based on diagnostics.
- Monitoring and response: Knowing that an event occurred is not enough. You need to know what is happening and where preferably in real time. By connecting devices to a location-aware monitoring solution, you can maintain visibility across your entire workforce and respond more quickly in the event of an incident. To achieve this goal, it's important to choose devices with the right connectivity options for even the most difficult environments.
- **Safety strategy:** Combining cloud-enabled software with real-time data enables safer operations in highhazard workflows, supports faster emergency response, and helps protect people and communities in critical situations. Data and analytics help you understand the big picture and identify key areas for improvement.



This assessment is designed to help you identify opportunities to improve your gas detection program by modernizing your technology approach. Choose the best answer for each question, even if it's not a perfect fit.

#### 1. How efficient is your organization's management of gas detection equipment?

- a. Our efficiency levels are optimal. We can manage, monitor, and update all our equipment from a unified dashboard, and easily predict and mitigate issues before they occur.
- b. There's room for improvement. Some aspects of our management are streamlined and automated, but there are still too many manual, labor-intensive processes.
- c. It could be much more efficient. Maintenance is a highly manual process, and devices are managed individually rather than as a whole.
- 2. What level of visibility do you have into gas detection and worker safety on a day-today basis?
  - a. We have real-time visibility into the location and status of every worker, through a unified system, and monitor their well-being on an ongoing basis.
  - b. We don't monitor gas detection in real time but know when an alarm is triggered and can respond within a comfortable margin of safety.
  - c. We find out about gas detection incidents after they are dealt with and log them manually.

# 3. Which of the following statements best describes the role of data and analytics in your gas safety program?

- a. We capture the full spectrum of data in real time and analyze it using advanced tools so we can gain insights to optimize worker safety continuously and proactively.
- b. We use the data that's necessary for addressing immediate safety concerns but could get more value out of it if we had the right tools.
- c. We capture the minimum amount of data that is required for compliance.

#### 4. How reliable is the connectivity of your gas detection devices?

- a. Strong. We have reliable connectivity in every situation where it is needed.
- b. OK. We could use improved coverage in some situations.
- c. Not at all reliable. We have not yet incorporated gas detector connectivity into our safety program.

## 5. How would you describe your organization's overall approach to gas detector maintenance?

- a. Automated. Our devices connect to the cloud, and our vendor replaces them automatically based on data analytics.
- b. Scheduled. We track maintenance on a spreadsheet and have employees bring in their devices for periodic calibrations, but it is still a highly manual process with room for improvement.
- c. Reactive. We maintain devices when they break, when calibration gas expires, or other obvious issues occur.



### 6. How effective is your gas detection equipment management?

- a. Highly effective. We have integrated, centralized gas detection equipment management software and a dashboard that simplifies management.
- b. Somewhat effective. We have a unified platform for device management, but still spend too much time manually managing our gas detector fleet and employees.
- c. Ineffective. We do not have centralized equipment management in place and rely on separate tools for managing and maintaining gas detectors, hazards, and employees.

# 7. Do you have precise location and status monitoring to keep track of gas alarms and employee locations?

- a. Yes. We rely on live monitoring software that gives us real-time alerts so we can easily see and respond to incidents, as well as map devices and workers accurately.
- b. Somewhat. Workers check in periodically, but we don't have the ability to monitor their location or status continuously.
- c. No. We do not have real-time worker and device-monitoring capabilities in place and have difficulty responding quickly to hazardous situations or equipment failures.

## 8. How much trust do you have in the reliability of your gas detection equipment?

- a. We trust that our equipment is exceptionally reliable, and that it is helping keep our workers safe because we know about potential failures before they happen, and our detectors are replaced automatically.
- b. Our equipment is somewhat reliable, and we trust it to protect our workers most of the time but lack documentation regarding exposures and maintenance status of any given monitor.
- c. Our equipment is definitely due for an upgrade.

## 9. How would you rank your overall safety culture?

- a. Excellent. Safety is a top priority throughout the organization. We invest in continuous improvement and the latest technology.
- b. Good. Safety is a high priority, but there is room for improvement. In some cases, safety should be a higher-investment priority.
- c. Needs improvement. Safety is seen as a cost center, and we tend to rely on older approaches and equipment, which can make safety operations more costly and complex than they need to be.

## 10. How would you describe the safety strategy within your organization?

- a. We're highly strategic. We take a long-term view and use data and analytics to drive and measure continuous improvement.
- b. We're moderately strategic. We're committed to improvement, but we don't always have the data or insights we need to know what to do next.
- c. We're mostly focused on the day-to-day. Maintaining the status quo is our focus at present.



## **Results**

- 1. If your results were mostly A: Your organization is on the path to a mature operational model. You're ready to lead the industry in safety operations with an integrated platform.
- 2. If your results were mostly B: Your organization is invested in improving safety operations, but you may be missing critical data and capabilities for achieving your vision. Improving your ability to collect and use the right information, along with enhanced monitoring and modeling, will support your transition to a modern program.
- 3. If your results were mostly C: Your organization may have a more traditional, minimalist approach to safety operations. With the right platform, you could greatly reduce maintenance complexity, improve equipment reliability, and gain better visibility into safety incidents and long-term trends.

Whether your organization has a minimalist approach to safety operations or a mature, operational model already in place, iNet<sup>®</sup> can help you achieve the next level of gas safety.

## Discover the iNet® safety platform

iNet is a scalable safety platform comprised of gas-detecting instruments, software, data, and services uniquely designed to provide the best tools, workflows, data, and insights at the right time. Built on a foundation of industry-leading Industrial Scientific hardware, the company delivers improved operational outcomes by protecting your employees and equipment, enabling safe and efficient operations. By connecting hardware and data to the cloud, you can take advantage of powerful software applications that enable hardware-as-a-service, real-time worker monitoring, aggregate instrument and user behavioral data analysis and reporting, and environmental monitoring and modeling capabilities.

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Industrial Scientific is on a mission to end death on the job through portable gas detection, hardware as a service, and advanced analytics that help prevent exposure to hazards and deliver unmatched clarity into safety and operational performance. Since 1985, Industrial Scientific has helped customers around the world automate critical safety workflows to ensure that their people go home safely each night. **For more information, visit www.indsci.com.** 

