OILMAN Gas Detection and the Connected Worker User Guide

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Product Information: Gas Detection and the Connected Worker

The gas detection equipment mentioned in this article provides a new level of context around the data provided by the instrument sensors. By connecting the gas detector to a smart device, users can access valuable insights and information about gas levels and potential dangers. This connected gas detector offers extended functionality and is designed to enhance safety in industrial plants and refineries.

Docking Stations for Gas Detectors Docking stations are commonly used with gas detectors in industrial plants and refineries. These docking stations serve multiple purposes

- Download data from the gas detector
- Charge the battery of the gas detector
- Calibrate the gas detector

The docking station simplifies these tasks by offering semi-automatic features. Depending on the instrument design, the docking station can download snapshots of readings, alarms, bump tests, and calibrations at regular intervals.

Actionable Data and Data Security
While docking stations facilitate data collection, many of them do not have integrated central databases for storing and accessing the gathered information. However, it is important to prioritize putting actionable data in the hands of safety professionals. Developing a common platform for this data would greatly improve its accessibility and usability.

The Future of Gas Detection
The author suggests that the future of gas detection lies in the development of connected gas detectors. These devices would offer even more functionality and insights to users. By creating a common platform for data sharing, widespread availability of this technology can be achieved.

Product Usage Instructions

Using the Gas Detector

1. Ensure that the gas detector is fully charged before use.
2. Turn on the gas detector by following the manufacturer's instructions. This may involve pressing a power button or activating a switch.
3. Hold the gas detector in your hand and keep it close to your body for accurate readings.
4. The gas detector will continuously monitor the air for gas levels. If any dangerous levels are detected, the gas detector will alert you through visual and audible alarms.
5. Take immediate action if the gas detector indicates high gas levels or potential danger. Evacuate the area if necessary and inform the appropriate authorities.

Using the Docking Station

1. Connect the gas detector to the docking station using the provided cable or docking mechanism.
2. Ensure that the docking station is connected to a power source.
3. Follow the manufacturer's instructions to initiate data download from the gas detector to the docking station. This may involve selecting specific data types or setting intervals for data retrieval.
4. Allow the docking station to complete the data download process.
5. If required, perform calibration of the gas detector using the docking station. Follow the manufacturer's

instructions for calibration procedures.
6. Once data download and calibration are complete, disconnect the gas detector from the docking station.

Data Management and Security

1. Transfer the downloaded data from the docking station to a central database or secure storage system, if available.
2. Ensure that appropriate data security measures are in place to protect sensitive information
3. Make actionable data easily accessible to safety professionals by developing a common platform for data sharing and analysis.
4. Regularly review and analyze the collected data to identify trends, potential risks, and areas for improvement.
5. If any abnormalities or issues are observed with the gas detector or data, contact the manufacturer's customer service for assistance.

Industry leading Software

In our increasingly connected world, portable gas detectors have been slow to keep up with the latest digital trends. In the age of IoT, you can control your toaster and home thermostat using an app on your smartphone, but what about your portable gas detector?
When wearing a portable gas detector on the job, whether it's a single gas H2S monitor or a five-sensor multi- gas instrument, we really don't pay much attention until the alarm sounds. This misses a trove of information about your work environment and your safety within it.
When a gas detector is paired wirelessly with a smartphone, usually via Bluetooth technology, you get access to so much more information. And better yet, you can easily share these data points with the rest of your team. Depending on your preferences, this exchange can even happen in real-time using a cloud-based portal.

- Consider the smart watch. Popular health tracking apps allow you to review not only things like pulse, respiration, steps, calories burned, etc., but these activities are also placed in context, helping you make the most of this information. In addition to the time of day, the GPS feature shows you your location within a few meters, among a host of other parameters.
- These digital devices are "always on," which means they record information and observe their surroundings 24/7. If we apply the same approach to portable gas detection equipment, we could mine more information from our work environments. Whether at a particular job site or within a large plant, wouldn't it be helpful to have consistent access to these data points? For example, if we consistently get elevated flammable gas readings near a building or piece of equipment, we can take proactive steps to improve worker safety.
- When we add in the 'connected' gas detector, we are providing an entirely new level of context around the data provided by the instrument sensors. In order to display the insights available, gas detection equipment manufacturers need to develop a simplified user interface, while quickly disseminating data to those that need it most.
- Docking stations for gas detectors are a common feature in industrial plants and refineries. They allow users to

download data, charge the battery, and calibrate their instruments. These are necessary tasks, made easier by the semi-automatic nature of these devices. Depending on the instrument design, the docking station will be able to download ‘snapshots’ of the readings, alarms, bump tests, and calibrations. These may be minute-by-minute or at some other interval.

- But what do we do with this information once we’ve gathered it? Many, if not most, docking stations are not integrated with a central database, let alone one that’s easily accessible. And while we don’t want to dismiss data security concerns, putting actionable data in the hands of safety professionals should be viewed as a priority.
- Using a portable gas detector extends our senses, alerting us to dangers when they are present. As a tool, they are invaluable. The extended functionality of a ‘connected’ gas detector is right around the corner, with many elements already available. Developing a common platform for this data would be a major step towards widespread availability.

Photo above courtesy of PK Safety

Author Profile

Rick Pedley President and CEO – PK Safety Rick Pedley, PK Safety’s President and CEO, joined the family business in 1979. PK Safety, a supplier of occupational safety and personal protective equipment, has been operating since 1947 and takes OSHA, ANSI, PPE, and CSA work safety equipment seriously. PK Safety’s customer service can be reached at 800-829-9580 or online at **https://www.pksafety.com/contact-us**.

Author Articles

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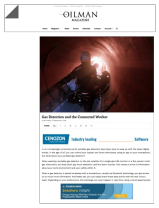	OILMAN Gas Detection and the Connected Worker [pdf] User Guide Gas Detection and the Connected Worker, Gas, Detection and the Connected Worker, the Connected Worker, Connected Worker, Worker