

# MANY HAZARDOUS GAS APPLICATIONS ONE SIMPLE SOLUTION

## Honeywell BW™ Solo Application Brief

Hazardous atmospheres can exist in many workplace environments; from common, naturally occurring gases such as Hydrogen Sulfide (H<sub>2</sub>S), to more exotic manmade compounds used in commercial manufacturing processes, such as Hydrogen Cyanide (HCN). These invisible threats pose serious health and life safety concerns and must be detected in time to help prevent injury or death.

The Honeywell BW™ Solo single-gas portable detector delivers the protection workers need in many different workplace environments. With a large selection of toxic gas sensors, the Honeywell BW™ Solo guards against common and not-so-common gases. Workers appreciate the small profile, lightweight, simple one-button operation and straightforward indications. A comprehensive selection of options provides the flexibility safety managers require to meet their safety program needs.

The table below lists the current gas type coverage for Honeywell BW™ Solo, along with examples of some of the applications for each.



Gas Type	Applications
Ammonia (NH <sub>3</sub> )	Agriculture, Chemicals, Pulp & Paper, Wastewater, Refrigeration
Chlorine (Cl <sub>2</sub> )	Hazmat, Petrochem, Pulp & Paper, Wastewater
Chlorine Dioxide (ClO <sub>2</sub> )	Refining, Petrochem, Pulp & Paper
Carbon Monoxide (CO)	Any environment with combustion activities
Carbon Monoxide – H <sub>2</sub> Resistant (CO-H)	Steel, Refining, Petrochem
Carbon Dioxide (CO <sub>2</sub> )	Aircraft Maintenance, Food & Beverage, Cannabis, Welding
Ethylene Oxide (ETO)	Chemicals, Manufacturing, Hospitals
Hydrogen (H <sub>2</sub> )	Aircraft Maintenance, Food & Beverage, Cannabis, Welding, Power Generation

Gas Type	Applications
Hydrogen Cyanide (HCN)	Fire Department, Food & Beverage, Hazmat, Mining
Hydrogen Sulfide (H <sub>2</sub> S)	Oil & Gas, Agriculture, Chemicals, Manufacturing, Petrochem, Wastewater
Nitric Oxide (NO)	Agriculture, Chemicals, Mining, Public Works
Nitrogen Dioxide (NO <sub>2</sub> )	Agriculture, Chemicals, Construction, Welding
Oxygen (O <sub>2</sub> )	Agriculture, Construction, Utilities, Hazmat, Wastewater
Ozone (O <sub>3</sub> )	Electrical, Medical, Fuel Depot, Wastewater, Welding
Phosphene (PH <sub>3</sub> )	Agriculture, Food/Beverage, Hazmat, Law Enforcement
Sulfur Dioxide (SO <sub>2</sub> )	Chemicals, Electrical, Petrochem, Pulp & Paper, Steel, Wastewater

## APPLICATIONS

Honeywell BW™ Solo offers gas detection solutions for many different industries. The following applications illustrate some of the diverse needs for gas type coverage.

### CHEMICAL PLANTS



#### APPLICATION ENVIRONMENTS

Vessels, tanks, pipelines, leaking valves, pits, excavations, containment berms.

#### MOST PREVALENT HAZARDS

CO, H<sub>2</sub>S

#### GAS HAZARDS COVERED BY BW™ SOLO

Oxygen deficiency (O<sub>2</sub>), Hydrogen Sulfide (H<sub>2</sub>S), Carbon Monoxide (CO), Chlorine (Cl<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), Ammonia (NH<sub>3</sub>), Hydrogen Cyanide (HCN), Nitric Oxide (NO), Ethylene Oxide (ETO), Hydrogen (H<sub>2</sub>).

The hazards encountered in chemical manufacturing/processing are usually a direct consequence of the products being manufactured or handled at the facility. Atmospheric hazards may be encountered during confined space entry procedures or may be present in the general atmosphere associated with the plant.

Typically, all workers assigned to a particular area will be equipped with single-gas detectors for the measurement of a specific hazard known to be potentially present.

### POWER GENERATION



#### APPLICATION ENVIRONMENTS

Vessels, tanks, pipelines, pits, tunnels, bins.

#### MOST PREVALENT HAZARDS

CO, O<sub>2</sub> deficiency

#### GAS HAZARDS COVERED BY BW™ SOLO

Oxygen deficiency (O<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), Hydrogen Sulfide (H<sub>2</sub>S), Carbon Monoxide (CO), Hydrogen (H<sub>2</sub>).

The types of toxic gas hazards potentially present in power generation plants will vary by the type of power station. Coal fired plants, especially, present the potential for sulfur dioxide exposure. Nuclear powered generating stations can be challenged with oxygen deficiencies due to atmosphere displacement.

Workers must be protected from toxic gas that may be present in the general atmosphere associated with parts of the plant, or that may be encountered in confined spaces, as well as explosive gas, like hydrogen, that is used for cooling generators.



## WASTEWATER TREATMENT



### APPLICATION ENVIRONMENTS

Digesters, lift stations, tanks and other vessels, pits, pumping stations.

### MOST PREVALENT HAZARDS

H<sub>2</sub>S, O<sub>2</sub> deficiency

### GAS HAZARDS COVERED BY BW™ SOLO

Hydrogen Sulfide (H<sub>2</sub>S), Oxygen deficiency (O<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Chlorine (Cl<sub>2</sub>), Ammonia (NH<sub>3</sub>), Carbon Dioxide (CO<sub>2</sub>), Ozone (O<sub>3</sub>).

Wastewater treatment facilities present a number of potentially toxic gas hazards from the wastewater as well as chemicals used in the sanitation process. Additionally, these facilities typically involve entry into confined spaces which can contain toxic or asphyxiation hazards.

Workers typically wear a detector for a common gas across the facilities, such as Hydrogen Sulfide (H<sub>2</sub>S), or for a process-specific location where a different gas is potentially likely, such as Ammonia (NH<sub>3</sub>).

## WIRELESS OPTION FOR ADDED SAFETY

Honeywell BW™ Solo is also available with a Bluetooth Low Energy (BLE) option, enabling wireless connectivity directly to a PC or to a smartphone equipped with the corresponding Honeywell application such as Honeywell Safety Suite or Safety Communicator.

A direct PC connection allows downloading instrument records and enabling options without the use of a docking station.

The Safety Communicator smartphone app forwards worker status information to Safety Suite Real Time, providing a real time view of worker safety.

## MANAGED WITH HONEYWELL SAFETY SUITE

Honeywell BW™ Solo is supported by the Honeywell IntelliDoX® for automated instrument maintenance and data collection. Both BW™ Solo and IntelliDoX® are part of the broad portfolio of Honeywell portable gas detection products managed with Honeywell Safety Suite, a cloud- and pc-based platform that lets you securely manage and review all of your safety information in one place, from almost anywhere.

Safety Suite Device Manager is a robust software solution that combines powerful reporting capabilities and streamlined device management for collecting, analyzing, consolidating and reporting information for gas detector compliance management.

Safety Suite Real Time monitors workers' exposure to gas, weather and physiological conditions in real-time. It also relays data from your fleet of wireless monitors to a centralized system for a comprehensive, real-time view of worker safety.



*Honeywell BW™ Solo is supported by the Honeywell IntelliDoX® for automated instrument maintenance and data collection*

Please contact your Honeywell gas detection representative for more information on what the Honeywell BW™ Solo single-gas portable detector can do for you and your workplace.

**For more information**

[safety.honeywell.com](http://safety.honeywell.com)

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GAS\_BW Solo\_APB\_10/20  
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