

In industries where toxic or explosive gasses are present, there are standard operating procedures in place to minimize the risk of an explosion and toxic exposure during hot work and/or maintenance. During these operations, hazardous zone declassification is required and additional protective measures are implemented.

Facilities with toxic or explosive gas are subject to risk reduction requirements. Often when changes in a facility are required, the traditional fixed gas detection system may be out for service or not sufficient to support a zone declassification.

Stand-alone, portable gas detectors are a major component of accomplishing a safe zone declassification during non-routine operations. Combined with traditional personal gas detectors and remote viewing capabilities, stand-alone gas detectors help set a safe perimeter around the workplace.

The Honeywell BW $^{\text{M}}$ Rig Rat transportable gas monitor is a user-friendly, cost-effective solution to keep work environments compliant and safe during repair and inspection.

APPLICATIONS

Area monitoring

Perimeter and zone declassification in facilities

Confined space entry

Inert gas applications

Fence line monitoring

Welding tents and other oxygen depletion

Compressed air monitoring

Leak monitoring

Shutdown controls



ENSURE SAFETY AND COMPLIANCE DURING REPAIR AND INSPECTION

APPLICATIONS

Area Monitoring

As workers move in and out of the work area, area monitoring should be performed when a person is both away and warn before re-entry into the zone.

A portable gas detector measures the breathing zone and often the ignition source is not in the breathing zone, but within sparks or machinery several feet away.

Stand-alone monitors and portable gas detection protects both the infrastructure and the worker. They provide key elements of protection from gas, flame, and noise.

Perimeter and Zone Declassification in Facilities

Shutdown and maintenance in production sites are often performed while other units in the facility are operating, therefore utilizing area monitors for perimeter monitoring around the maintenance area and linking these to relay activation is a safe way to reduce risks.

Confined-Space Monitoring

24/7 confined-space monitoring during shutdowns is a critical aspect in the timely execution of a turnaround. Remotely managing the hotwork and confined space entry reduces the cost of a turnaround dramatically.

Inert Monitoring

Pipe inspection and repair utilizing a stand-alone monitor, such as the BW^{TM} RigRat, with its patented intelligent inert operation mode and remote viewing capabilities, allows users to control the inertization faster without any alarms when inert gas is not utilized.

Fence Line Monitoring

Monitoring the footprint fence of a facility can be critical in multiple scenarios, such as in multiple facilities where the source of release may be located.

The use of weather data, gas, and noise levels are used to make decisions on process control and documentation of exposure levels.

If there are complaints, these can be correlated with the wind, gas, and noise levels.

Compressed Air Monitoring

During compressed air tank filling, a monitor can be attached to the inlet to stop the compressor if gas concentrations are high and filling should stop to avoid breathing air contamination.

Shut Down Controls

If areas are classified as critical during an unscheduled production stop, transportable units can be utilized for additional protection and emergency shutdown support.

Leak Monitoring

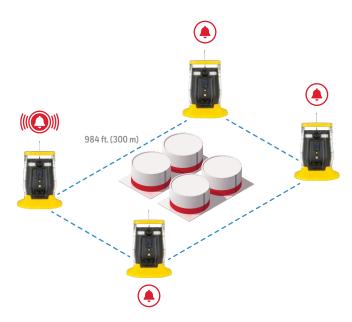
From the time a leak is detected until the leak has been repaired, the BW RigRat can be utilized to monitor the area to determine and monitor the leak size. It can also be used to monitor the leak after repair to ensure the leak is fully mended.

Noise Level Mapping

The BW RigRat's unique built-in noise sensor allows users to assess background noise levels for a quick overview of the potential risks and to reduce the HSE team's noise monitoring program planning.



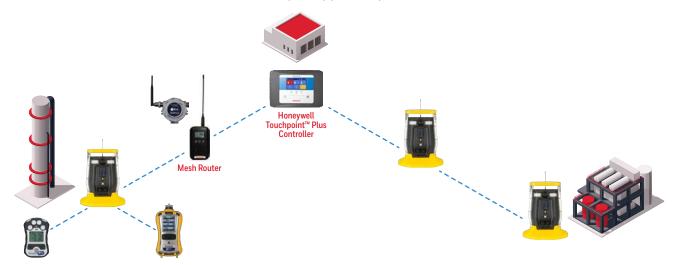
HONEYWELL BWT RIGRAT WIRELESS SYSTEM CONFIGURATIONS



CLOSED-LOOP

- Mesh 868 MHz, 900 MHz, or 2.4 GHz system
- Network hops: one alarmed, all alarmed
- Work mode: router

- One Honeywell BW[™] RigRat can connect up to eight Honeywell BW RigRats
- Up to 16 units in one system
- Wireless distance on ground level: 300 m (984 ft) (868 MHz to 900 MHz) or 150 m (492 ft) (2.4 GHz)
- Parallel network configuration means no detector is selected as a coordinator and thereby any detector can be taken out of the system without reconfiguration of the wireless network



HONEYWELL BW™ RIGRAT + PORTABLE GAS MONITORS + CONTROLLER

- Mesh 915/868 MHz
- Network hops: 3
- Work mode: RTR (Router)
- Capacity: 64 points (56 STD + 8 RTR)
- Supports RAEPoint
- Supports MultiRAE, MultiRAE Lite, and MicroRAE
- Connects to Honeywell software
- Ideal for turnaround and rig operations

PRODUCT RANGE

Choose the user-friendly Honeywell BW™ RigRat to costeffectively keep your work environments compliant and safe. Adaptable to many operations, it features a large and easyto-read display, rugged design, intelligent alarm for inert applications, and exceptional battery runtime that extends operation time in the field from hours to weeks.



TPPLW controller

Honeywell offers a wide range of controller solutions for a diverse array of industries and applications including: commercial properties, industrial applications, semiconductor manufacturers, energy plants, and petrochemical sites.

- 64 wireless channels
- Eight 4 mA to 20 mA input channels
- C1D2 certified
- 14 programmable relay
- Touch screen
- Metrological data
- Trend screen



BW^M RigRat stand-alone monitor

- Six sensors
- I/O ports
- Up to two months run time depending on configuration
- Multiple wireless offerings
- Noise sensor
- GPS





Portable gas detectors

Wireless portable products offer:

- Remote monitoring of personnel
- Man-down alarm
- Panic alarm
- · Location coordinates for software
- · Offline monitoring alarm

For More Information

safety.honeywell.com

Honeywell Gas Analysis and Safety

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