

Honeywell BW Flex Multi-Gas Detector – 5 Gases



A personal multigas detector for monitoring 5 hazards

The **Honeywell BW Flex** is a portable multi-gas detector designed to continuously monitor the atmosphere around the user. The version shown monitors five parameters simultaneously: combustible gases expressed as a percentage of the lower explosive limit (% LEL), oxygen (O₂), carbon monoxide (CO), hydrogen sulfide (H₂S), and carbon dioxide (CO₂).

This configuration allows a single compact device to cover the main risks encountered during industrial operations, maintenance work, work in confined spaces, or in potentially hazardous atmospheres.

Unlike a zone monitoring beacon such as the BW RigRat, the BW Flex is **worn directly by the operator** to monitor their immediate environment and alert them if a threshold is exceeded.

Simultaneous LEL, O₂, CO/H₂S, and CO₂ Detection

The BW Flex can monitor five hazards with four sensors thanks to a dual-sensor cell dedicated to CO and H₂S. Our configuration combines this cell with a catalytic LEL sensor, an O₂ sensor, and an NDIR infrared sensor for CO₂.

Gas / Measurement	Measurement range	Resolution
Flammable gases – LEL	0 to 100% LEL	1% LEL
Oxygen – O ₂	0 to 25% vol.	0.1% by volume
Carbon monoxide – CO	0 to 1,000 ppm	1 ppm
Hydrogen sulfide – H ₂ S	0 to 100 ppm	0.1 ppm
Carbon dioxide – CO ₂	0 to 5% by volume / 50,000 ppm	0.01% vol. / 100 ppm

The inclusion of an **NDIR CO₂ sensor** is a key feature of this configuration. It allows you to supplement the four measurements traditionally associated with industrial multigas detectors by adding carbon dioxide monitoring.

Need a different configuration? The BW Flex is available with various sensors to address other gas hazards. We can advise you on configurations suited to your work environment and the gases you need to monitor.

Quick Readouts and Field-Ready Alarms

The BW Flex features a high-resolution display that allows you to view both measured concentrations and the detector's status simultaneously. Its interface and status indicators are designed to enable quick readings during operations. It monitors the status of its sensors and displays functional test and calibration due dates, as well as end-of-life alerts. This information makes it easier to track the detector's status and plan maintenance in advance.

If a threshold is exceeded, the user is alerted by a combination of **audible, visual, and vibrating alarms**. The audible alarm reaches 95 dB, and the alarms can signal low and high thresholds as well as OEL/MAEL exposure limits depending on the gases involved.

Compact, rugged, and suitable for industrial environments

Weighing approximately **189 g with the alligator clip**, the BW Flex remains compact for a detector capable of monitoring five parameters simultaneously. Its housing is rated **IP66 and IP68** for protection against dust and water.

It is designed for both indoor and outdoor use and is [ATEX-certified](#) for potentially explosive atmospheres.

Bluetooth, Data Logging, and Management

Bluetooth Low Energy (BLE) connectivity enables communication with compatible software tools to configure the device, view its information, and facilitate the management of a fleet of detectors.

The BW Flex also features a data logging function that can store up to 45 days of data based on a 15-second sampling interval and an 8-hour daily operating time.

Battery Life of the Version with Catalytic LIE Sensor

The version we sell is equipped with a **catalytic LIE sensor**. Its battery life can reach approximately **12 to 15 hours between charges**, depending on the device's configuration, usage, time spent in alarm mode, and battery condition.

A full charge typically takes about 4 to 6 hours. To preserve battery life and extend its service life, we recommend charging the detector when it is turned off.

Technical Specifications of the Honeywell BW Flex

Type	Multigas detector portable
Number of monitored hazards	5
Number of sensors	4
Gases / measurements	LEL, O ₂ , CO, H ₂ S, and CO ₂
LEL technology	Catalytic sensor
CO ₂ Technology	NDIR Infrared Sensor
CO / H ₂ S	Dual Electrochemical Sensor
Alarms	95 dB audible, visual, and vibrating
Protection Rating	IP66 / IP68

Battery life	Up to 15 hours with catalytic LIE sensor, depending on usage
Charging time	Approximately 5 hours, with the detector turned off
Communication	Bluetooth Low Energy (BLE)
Data logging	Up to 45 days at 15-second intervals, based on 8 hours per day
Dimensions with alligator clip	108.2 × 61.5 × 43.2 mm with alligator clip
Weight with alligator clip	Approx. 189 g with alligator clip
Operating temperature	-20 to +50 °C for the proposed configuration
Certification	ATEX (Sira 20ATEX2012X) / IECEx
Warranty	2 years (including sensors and battery)

Functional Test, Calibration, and Maintenance

As with any gas detector, **regular functional testing** verifies sensor response and alarm activation. Calibration must be performed if the functional test fails and according to the schedule defined for the device, its use, and the applicable site requirements. Sensors, filters, and wear parts must also be inspected to maintain the detector's performance over time.

We recommend performing a functional test before each day of use to verify sensor response and alarm activation. Calibration must be performed if the test fails or according to the schedule specified for the device.