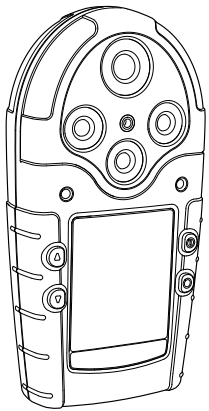


# QUICK REFERENCE GUIDE



## GASALERTMICRO 5 SERIES

1, 2, 3, and 4 Gas Detector

## Honeywell

### Intro

The Quick Reference Guide provides basic information to operate the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR gas detectors.

For complete operating instructions, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <https://safety.honeywell.com> web site.

The GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR gas detectors ("the detector") are designed to warn of hazardous gas levels above user-defined alarm setpoints.

The detector is a personal safety device. It is your responsibility to respond properly to the alarm.

### What's in the box

- Detector complete with specified sensor(s), stainless steel alligator clip and concussion-proof housing
- Rechargeable battery pack or alkaline pack with three AA batteries
- Cradle charger and wall outlet charging adaptor (with rechargeable battery option)
- Sample probe (with motorized pump option)
- Screwdriver
- Calibration/test adaptor and hose
- Quick Reference Guide

### Safety Info - Read First

Use the detector only as specified in the manual and quick reference guide, otherwise the protection provided by the detector may be impaired.

The detector is a personal safety device. It is your responsibility to respond properly to the alarm. Read the following Cautions before using the detector.

### CAUTION

- Caution: For safety reasons, this equipment must be operated and serviced by qualified personnel only. Read and understand the user manual completely before operating or servicing.
- Charge the detector before first-time use. Honeywell Analytics recommends the detector be charged after every workday.
- Charge the battery pack immediately when a low battery alarm occurs.
- Read and adhere to the battery cautions.
- Honeywell Analytics recommends that the combustible sensor be checked with a known concentration of calibration gas after any exposure to contaminants/poisons such as sulfur compounds, silicon vapors, halogenated compounds, etc.
- Honeywell Analytics recommends to bump test the sensors before each day's use to confirm their ability to respond to gas by exposing the detector to a gas concentration that exceeds the alarm setpoints. Manually verify that the audible and visual alarms are activated. Calibrate if the readings are not within the specified limits.
- For an additional bump test caution relating to the European Regulations, refer to user manual.
- Calibrate the detector before first-time use and then on a regular schedule, depending on use and sensor exposure to poisons and contaminants. The sensors must be calibrated regularly and at least once every 180 days (6 months).
- Calibrate only in a safe area that is free of hazardous gas in an atmosphere of 20.9% oxygen.
- Only the combustible gas detection portion of this instrument has been assessed for performance by CSA International.
- The combustible sensor is factory calibrated to 50% LEL methane. If monitoring a different combustible gas in the % LEL range, calibrate the sensor using the appropriate gas.
- Caution: High off-scale LEL readings may indicate an explosive concentration.
- Protect the combustible sensor from exposure to lead compounds, silicones, and chlorinated hydrocarbons. Although certain organic vapors (such as leaded gasoline and halogenated hydrocarbons) may temporarily inhibit sensor performance, in most cases, the sensor will recover after calibration.
- For use only in potentially explosive atmospheres where oxygen concentrations do not exceed 20.9% (v/v). Oxygen deficient atmospheres (<10% v/v) may suppress some sensor outputs.
- Any rapid up scaling reading followed by a declining or erratic reading may indicate a gas concentration beyond the upper scale limit, which can be hazardous.
- Extended exposure of the GasAlertMicro 5, GasAlertMicro 5 PID, or GasAlertMicro 5 IR to certain concentrations of combustible gases and air may stress the detector element that can seriously affect its performance. If an alarm occurs due to a high concentration of combustible gases, recalibration should be performed or, if needed, the sensor replaced.
- The BW pump module (M5-PUMP) is certified for use with the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR models only.
- Protect the PID sensor from exposure to silicone vapors.
- When calibrating O<sub>2</sub> and ClO<sub>2</sub> sensors that are located in the Toxic 2 position of the detector, a single gas calibration cap must be used to ensure accurate calibration. erratic reading may indicate a gas concentration beyond the upper scale limit, which can be hazardous.
- Extended exposure of the GasAlertMicro 5, GasAlertMicro 5 PID, or GasAlertMicro 5 IR to certain concentrations of combustible gases and air may stress the detector element that can seriously affect its performance. If an alarm occurs due to a high concentration of combustible gases, recalibration should be performed or, if needed, the sensor replaced.
- The BW pump module (M5-PUMP) is certified for use with the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR models only.
- Protect the PID sensor from exposure to silicone vapors.
- When calibrating O<sub>2</sub> and ClO<sub>2</sub> sensors that are located in the Toxic 2 position of the detector, a single gas calibration cap must be used to ensure accurate calibration.
- Replace the sensors only in a safe and non-hazardous area that is free of hazardous gas in an atmosphere of 20.9% oxygen.
- Dispose of used lithium cells immediately. Do not disassemble and do not dispose of in fire. Do not mix with the solid waste stream. Spent batteries must be disposed of by a qualified recycler or hazardous materials handler.
- Keep lithium cells away from children.
- Before using common products around sensors, refer to Sensor Poisons and Contaminants on the GasAlertMicro 5/PID/IR User Manual.
- High concentrations of certain toxic gases, for example H<sub>2</sub>S, may have an adverse effect on the LEL sensor. This effect, known as inhibition, is usually temporary but in extreme circumstances can impair the sensitivity of the LEL sensor.
- After any gas exposure that causes an alarm in the toxic gas sensors, the LEL sensor should be verified with a bump test, and recalibrated if necessary.
- Products may contain materials that are regulated for transportation under domestic and international dangerous goods regulations. Return product in compliance with appropriate dangerous goods regulations. Contact freight carrier for further instructions.

### WARNING

- Substitution of components may impair Intrinsic Safety.
- The battery pack (M5-BAT08) is equipped with a lithium battery that may present a risk of fire or chemical burn hazard if misused. Do not disassemble, heat above 212°F (100°C), or incinerate.
- Do not use any other lithium batteries that are not designed for use with the GasAlertMicro 5, GasAlertMicro 5 PID, or GasAlertMicro 5 IR detectors. Use of any other cell can cause fire and/or explosion. To order and replace the M5-BAT07 or the M5IR-BAT08 lithium battery pack, contact Honeywell Analytics.
- Lithium polymer cells exposed to heat at 266°F (130°C) for 10 minutes can cause fire and/or explosion.

### MISES EN GARDE

- Attention : Pour des raisons de sécurité, cet appareil doit être utilisé et entretenu par du personnel qualifié uniquement. Lisez attentivement le manuel d'utilisation avant d'utiliser l'appareil ou d'en assurer l'entretien et assurez-vous d'en avoir bien compris les instructions.
- Chargez le détecteur avant sa première utilisation. Honeywell Analytics recommande de recharger le détecteur après chaque journée d'utilisation.
- Chargez la batterie dès l'émission d'une alarme de batterie faible.
- Lisez et respectez les avertissements donnés à la section Remplacement des batteries et des piles dans le manuel d'utilisation.
- Honeywell Analytics recommande de contrôler le capteur de gaz combustibles à l'aide d'une concentration connue de gaz d'étalonnage après toute exposition à des contaminants/poisons (composés de soufre, vapeurs de silicium, produits halogénés, etc.)
- Avant chaque utilisation quotidienne, Honeywell Analytics recommande d'effectuer un test fonctionnel des capteurs afin de vérifier qu'ils réagissent bien aux gaz présents, en exposant le détecteur à une concentration de gaz supérieure aux seuils d'alarme. Vérifiez manuellement que les alarmes sonore et visuelle sont activées. Étalonnez l'appareil si les relevés ne sont pas conformes aux limites spécifiées.
- Pour une mise en garde supplémentaire sur le test fonctionnel en rapport avec la réglementation européenne.
- Étalonnez le détecteur avant sa première utilisation, puis de manière régulière, en fonction de l'utilisation et de l'exposition du capteur aux poisons et autres contaminants. Les capteurs doivent être étalonnés régulièrement et au moins une fois tous les 180 jours (6 mois).
- Veillez à effectuer l'étalonnage dans une zone sûre, exempte de gaz dangereux, dans une atmosphère contenant 20,9 % d'oxygène.
- Seul l'élément de détection de gaz combustibles de cet appareil a fait l'objet d'une évaluation des performances homologuée par CSA International.
- Le capteur de gaz combustibles est étalonné en usine au méthane, à une concentration de 50 % de la LIE. Si la surveillance porte sur un autre gaz combustible dans la plage % LIE, étalonnez le capteur en utilisant le gaz approprié.
- Attention : Des valeurs LIE hors échelle élevées peuvent indiquer la présence d'une concentration explosive.
- Protégez le capteur de gaz combustibles contre toute exposition aux composés de plomb, aux silicones et aux hydrocarbures chlorés. Bien que certaines vapeurs organiques (comme l'essence au plomb ou les hydrocarbures halogénés) puissent neutraliser provisoirement les performances du capteur, dans la plupart des cas, le capteur retrouvera son fonctionnement normal après étalonnage.
- Cet appareil est destiné uniquement à une utilisation dans des atmosphères potentiellement explosives, dans lesquelles la concentration d'oxygène ne dépasse pas 20,9 % (v/v). Les atmosphères appauvries en oxygène (<10 % v/v) peuvent inhiber certaines sorties du capteur.
- Toute mesure en rapide augmentation suivie d'une diminution ou d'une mesure fantaisiste peut indiquer une concentration de gaz au-delà de la limite d'échelle supérieure, risquant donc d'être dangereuse.
- L'exposition prolongée du GasAlertMicro 5, GasAlertMicro 5 PID ou GasAlertMicro 5 IR à certaines concentrations de gaz combustibles et d'air peut fortement solliciter l'élément du détecteur et nuire gravement à ses performances. En cas d'alarme suite à une forte concentration de gaz combustible, il convient d'effectuer un réétalonnage, voire de remplacer le capteur si nécessaire.
- Le module de pompe BW (M5-PUMP) est certifié pour les modèles GasAlertMicro 5, GasAlertMicro 5 PID et GasAlertMicro 5 IR uniquement.
- Protégez le capteur à photo-ionisation (PID) des expositions aux vapeurs de silicium.
- Pour garantir un étalonnage précis des capteurs d'O<sub>2</sub> et de ClO<sub>2</sub>, placés en position toxique 2 du détecteur, employez un seul capuchon d'étalonnage monogaz.
- Remplacez les capteurs uniquement en zone sûre et non dangereuse, dans une atmosphère exempte de gaz dangereux et contenant 20,9 % d'oxygène.
- Mettez immédiatement au rebut les batteries au lithium usagées. Veillez à ne jamais les démonter ou les jeter au feu. Ne pas les mélanger aux autres déchets solides. Les piles usagées doivent être éliminées par un centre de recyclage agréé ou un centre de traitement des matières dangereuses.
- Conservez les batteries au lithium hors de portée des enfants.
- Avant d'utiliser des produits usuels à proximité des capteurs, reportez-vous à la section Poisons et contaminants des capteurs.
- Des concentrations élevées en certains gaz toxiques, tels que H<sub>2</sub>S, peuvent avoir un effet néfaste sur le capteur LIE. Cet effet, appelé inhibition, est généralement temporaire, mais peut, dans des conditions extrêmes, atténuer la sensibilité du capteur LIE. Après toute exposition à un gaz entraînant le déclenchement d'une alarme des capteurs de gaz toxiques, le capteur LIE devra subir un test fonctionnel et être réétalonné si nécessaire.
- Les produits peuvent contenir des matériaux qui sont réglementés pour le transport en vertu des règlements nationaux et internationaux de marchandises dangereuses. Retourner le produit conformément à la réglementation sur les marchandises dangereuses appropriées. Contactez transporteur pour plus d'informations.

Le détecteur contient des piles alcalines ou une batterie au lithium polymère. Reportez-vous aux avertissements suivants.

### AVERTISSEMENT

- Le remplacement d'un composant de l'appareil peut compromettre la sécurité intrinsèque du détecteur.
- Cet appareil contient des piles alcalines. Ne pas les mélanger aux autres déchets solides. Les piles usagées doivent être éliminées par un centre de recyclage agréé ou un centre de traitement des matières dangereuses.
- Cet appareil contient une batterie au lithium polymère. Mettez immédiatement au rebut les batteries au lithium usagées. Veillez à ne jamais les démonter ou les jeter au feu. Ne pas les mélanger aux autres déchets solides. Les piles usagées doivent être éliminées par un centre de recyclage agréé ou par un centre de traitement des matières dangereuses.
- La batterie (M5-BAT08) est constituée d'une pile au lithium qui pourrait présenter un risque d'incendie ou de brûlure chimique en cas de mauvaise utilisation. Ne pas la démonter ni la chauffer au-delà de 100 °C (212 °F) ou l'incinérer.
- N'utilisez jamais d'autres piles au lithium avec les détecteurs GasAlertMicro 5, GasAlertMicro 5 PID ou GasAlertMicro 5 IR. Toute autre batterie pourrait provoquer un incendie et/ou une explosion. Pour commander ou remplacer la batterie au lithium M5-BAT07 ou M5IR-BAT08, contactez Honeywell Analytics.
- Les batteries au lithium polymère exposées à une température supérieure à 130 °C (266 °F) pendant plus de 10 minutes peuvent provoquer un incendie et/ou une explosion.

### Parts of the GasAlertMicro 5 Series

Item	Description
1	Liquid crystal display (LCD)
2	⊙ Button
3	○ Button
4	Audible alarms
5	Toxic 2 sensor
6	Toxic 1/PID sensor (GasAlertMicro 5 PID), or Toxic 1/IR (CO <sub>2</sub> ) sensor (GasAlertMicro 5 IR)
7	Visual alarm indicators (LEDs)
8	LEL sensor
9	Oxygen sensor
10	▲ Up button
11	▼ Down button
12	Battery pack
13	Alligator clip

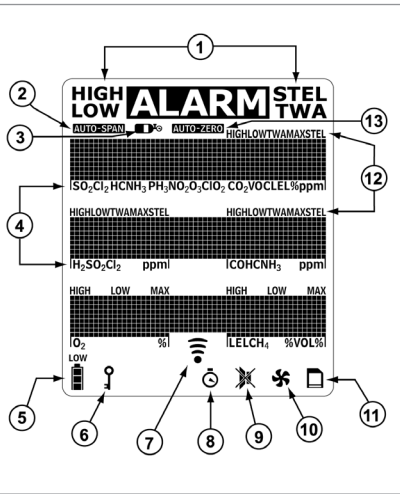
### Activating/ Deactivating the detector

To activate the detector, press ⊙ button. To deactivate the detector, press and hold ⊙ button until the countdown is complete.

For more information about other buttons actions, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <https://safety.honeywell.com> web site.

### Display Elements

Item	Description
1	Alarm condition
2	Automatically span sensor
3	Gas cylinder
4	Gas identifier bars
5	Battery life indicator
6	Passcode lock
7	Data transmission
8	Clock
9	Stealth mode
10	Optional pump indicator
11	Datalog card indicator (optional)
12	Alarm condition (low, high, TWA, STEL, or multi) or view TWA, STEL and peak (MAX) gas exposures
13	Automatically zero sensor



### Bump Test

A bump test is the process of applying a small amount of test gas to force the detector into alarm. A bump test should be performed regularly to confirm the sensors are responding correctly to gas, and that the audible, visual, and vibrator alarms activate during an alarm condition. Calibrate if the readings are not within specified limits.

### CAUTION

Honeywell recommends to bump test the sensors before each day's use to confirm their ability to respond to gas by exposing the sensors to a gas concentration that exceeds the alarm setpoints. Should the user wish to comply with European Regulations, a bump test must be completed before each day's use. Refer to EN 60079-29-2.

#### Follow this procedure when Bump Daily is enabled:

1. Connect the calibration hose to the 0.5U/min regulator on the gas cylinder.
  - Note: If performing a bump test on a pump unit, connect the calibration hose directly to the pump module.
2. Connect the calibration hose to the intake inlet on the calibration cap. Arrows on the calibration cap indicate the direction of gas flow.
3. Attach the calibration cap and tighten the knob.
4. Apply gas. Verify the visual, audible, and vibrator alarms activate.
5. Close the regulator and remove the calibration cap from the detector. The detector will temporarily remain in alarm until the gas clears from the sensors.
6. Disconnect the calibration hose from the cap and regulator.

**IMPORTANT:** Only use the calibration cap for calibrations and bump tests.

### Calibration

Procedure	Display	Procedure	Display
<p><b>Calibrate only in a safe area in an atmosphere of 20.9% oxygen.</b></p> <p>1. Activate the detector. To enter calibration, press and hold ○ and ▼ simultaneously. The detector beeps and flashes to the corresponding countdown. The LCD then displays <b>Starting calibration</b>.</p>	<p><b>Calibration starting in: 3...</b></p>	<p>2. <b>AUTO-ZERO</b> flashes while the detector zeros all of the sensors (except CO<sub>2</sub>) and calibrates the oxygen sensor. If a sensor fails to auto zero, that sensor will bypass the span.</p> <p>If calibrating a GasAlertMicro 5 or GasAlertMicro 5 PID, proceed to step #4.</p>	<p>0</p> <p>20.9</p>
<p><b>Step #3 for Micro 5 IR Only</b></p> <p>3. The <b>Zero CO<sub>2</sub>?</b> screen displays. Press ○ to zero the CO<sub>2</sub> sensor, or press ⊙ to bypass. If ○ is pressed to zero the CO<sub>2</sub> sensor, the following screens display: <b>Apply CO<sub>2</sub> zero gas now</b> (nitrogen must be used to zero the CO<sub>2</sub> sensor).</p>	<p><b>Zero CO<sub>2</sub>?</b></p> <p>● No</p> <p>● Yes</p>	<p>4. The <b>Auto-Zero CO<sub>2</sub></b> screen displays, and <b>AUTO-ZERO</b> flashes.</p>	<p>CO<sub>2</sub></p> <p>Cl<sub>2</sub></p>
<p>5. The following three screens display:</p> <ul style="list-style-type: none"> <li>- <b>Apply span gas now to calibrate</b></li> <li>- <b>or press ○ to select sensor(s)</b></li> <li>- <b>or press ⊙ to skip calibration</b></li> </ul> <p>If none of the buttons are pressed, proceed to step #6.</p> <p>If ○ is pressed, proceed to step #5.</p> <p>If ⊙ is pressed, proceed to the end of step #7.</p>	<p><b>Apply span gas now to calibrate</b></p>	<p>6. Select which sensor to span. Press ▲ or ▼ to scroll to the required sensor and then press ○ to select. Sensors must be spanned in the following order:</p> <ul style="list-style-type: none"> <li>- Exotics (NH<sub>3</sub>, ClO<sub>2</sub>, O<sub>3</sub>, and CO<sub>2</sub>)</li> <li>- Single gases</li> <li>- Quad gases (H<sub>2</sub>S, CO, O<sub>2</sub> and LEL).</li> </ul>	<p>Exit</p> <p>CO<sub>2</sub></p> <p>Cl<sub>2</sub></p>
<p>7. Attach the calibration cap and apply gas at a flow rate of 500 ml/min. Tank flashes while the detector determines which gas is being applied. After 30 seconds, <b>AUTO-SPAN</b> flashes and a countdown displays while the detector completes the span.</p>	<p>SO<sub>2</sub></p> <p>0</p>	<p>8. When the span is complete, the following three screens display:</p> <ul style="list-style-type: none"> <li>- <b>Calibration successful</b></li> <li>- <b>Press ▲ to apply a new cal gas</b></li> <li>- <b>Press ▼ to end span</b></li> </ul> <p>Repeat steps #4-7 to calibrate the remaining sensors. The LCD displays the following options:</p> <ul style="list-style-type: none"> <li>- Press ○ to set the calibration due dates or press ⊙ to bypass.</li> </ul>	<p><b>Calibration successful</b></p>
<p>9. Press ▲ or ▼ to change the calibration due date. Press ○ to accept the value and proceed to the next due date. If a sensor fails or does not span, the calibration due date cannot be changed for that sensor. The LCD displays the following options:</p> <ul style="list-style-type: none"> <li>- Press ○ to change the calibration due dates or press ⊙ to bypass.</li> </ul>	<p>CO<sub>2</sub> 180</p>	<p>10. Press ▲ or ▼ to change the alarm setpoint. Press ○ to save the value and proceed to the next setpoint. Define the remaining setpoints. The detector beeps twice when all of the alarm setpoints have been defined or bypassed.</p>	<p><b>ALARM TWA</b></p> <p>CO<sub>2</sub> 5000</p>
<p>10. When calibration is complete, Saving calibration displays.</p>	<p><b>Saving calibration</b></p>	<p><b>Note:</b> Only use the calibration cap and single gas calibration cap during calibration and bump tests. For additional information about performing calibrations and bump tests, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <a href="https://safety.honeywell.com">https://safety.honeywell.com</a> web site.</p>	

## User Options Menu

To access the user options, press and hold  and  simultaneously until the detector completes the countdown. To scroll through the options press  or . Press  to select the option.

Exit: Exits the user options menu.

For more information about the User Options Menu, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <https://safety.honeywell.com> web site.

## Maintenance

To maintain the detector in good operating condition, perform the following basic maintenance as required.

- Calibrate, bump test, and inspect the detector on a regular schedule.
- Maintain an operations log of all maintenance, bump tests, calibrations, and alarm events.
- Clean the exterior with a soft damp cloth. Do not use solvents, soaps, or polishes. Refer to Sensor Poisons and Contaminants table.
- Do not immerse the detector in liquids.

For more information about Maintenance, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <https://safety.honeywell.com> web site.

## Replacing Battery Cells and Packs

To avoid personal injury and/or property damage, adhere to the following battery cautions:

## WARNING

- This instrument contains alkaline batteries. Do not mix with the solid waste stream. Spent batteries must be disposed of by a qualified recycler or hazardous materials handler.
- This instrument contains a lithium polymer battery. Dispose of lithium cells immediately. Do not disassemble and do not dispose of in fire. Do not mix with the solid waste stream. Spent batteries should be disposed of by a qualified recycler or hazardous materials handler.
- Replace the alkaline cells or rechargeable battery pack immediately when the detector emits a low battery alarm.
- Use only batteries that are recommended by Honeywell.
- Use only approved alkaline batteries that are properly installed in the battery pack. Refer to Specifications.
- To order lithium battery packs (M5-BAT08/M5-BAT07), contact Honeywell.
- Charge the batteries and battery packs using only a recommended Honeywell charger. Failure to adhere to this caution can lead to fire and/or explosion.
- The detector must be deactivated to charge the battery pack.
- Do not calibrate the detector immediately after charging is complete.
- Both the lithium battery pack and the alkaline battery pack are user-changeable in hazardous locations, but the alkaline battery cells inside the pack can only be replaced in a safe area that is free of hazardous gas.
- The M5-BAT08 and M5-BAT07 battery packs are equipped with lithium batteries that can present a risk of fire or chemical burn hazard if misused. Do not recharge, disassemble, heat above 212°F (100°C), or incinerate.
- Do not use any other lithium batteries with the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR detectors. Use of any other cell can cause fire and/or explosion.
- Lithium polymer cells exposed to heat at 266°F (130°C) for 10 minutes can cause fire and/or explosion.
- Keep lithium cells away from children.

For more information about replacing battery cells and packs, refer to the GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR User Manual provided on the Honeywell <https://safety.honeywell.com> web site.

## Specifications

**Instrument dimensions:** 14.5 x 7.4 x 3.8 cm (5.7 x 2.9 x 1.5 in.)

**Weight:** 370 g (13.1 oz.)

**Operating temperature:**

- VOC: -10°C to +40°C (14°F to +104°F)<sup>1</sup>
- Other gases: -20°C to +50°C (-4°F to +122°F)
- Combustible gas sensor: Certified by CSA International to ±3%
- LEL accuracy from -10°C to +40°C (4°F to 104°F)

**Storage temperature:** -25°C to +60°C

**Operating humidity:**

- O<sub>2</sub>: 0% to 90%<sup>1</sup> relative humidity (non-condensing)
- VOC: 0% to 95% relative humidity (non-condensing)
- Combustibles: 5% to 95% relative humidity (non-condensing)
- Cl<sub>2</sub>: 10% to 95% relative humidity (non-condensing)
- HCN, ClO<sub>2</sub>: 15% to 90%<sup>1</sup> relative humidity (non-condensing)
- Other gases: 15% to 90%<sup>1</sup> relative humidity (non-condensing)

**Pressure:** 95 to 110 kPa<sup>1</sup>

**Dust and moisture ingress:** IP65/66<sup>1</sup>

**Alarm setpoints:** May vary by region and are user-defined

**Detection range:**

- O<sub>2</sub>: 0 - 30.0% vol. (0.1% vol. increments)<sup>1</sup>
- CO: 0 - 999 ppm (1 ppm increments)
- CO (TwinTox sensor): 0 - 500 ppm (1 ppm increments)
- H<sub>2</sub>S: 0 - 500 ppm (1 ppm increments)
- H<sub>2</sub>S (TwinTox sensor): 0 - 500 ppm (1 ppm increments)
- Combustible (LEL): 0 - 100% LEL (1% LEL increments) or 0 - 5.0% v/v methane; certified by CSA International to C22.2 No. 152 and ISA 1.2.13.0.1 within 0 - 60% or 3.0% v/v methane
- PH<sub>3</sub>: 0 - 5.0 ppm (0.1 ppm increments)
- SO<sub>2</sub>: 0 - 150 ppm (1 ppm increments)
- Cl<sub>2</sub>: 0 - 50.0 ppm (0.1 ppm increments)
- NH<sub>3</sub>: 0 - 100 ppm (1 ppm increments)
- NO<sub>2</sub>: 0 - 99.9 ppm (0.1 ppm increments)
- HCN: 0 - 30.0 ppm (0.1 ppm increments)
- ClO<sub>2</sub>: 0 - 1.00 ppm (1.00 ppm increments)
- O<sub>2</sub>: 0 - 1.00 ppm (0.01 ppm increments)
- VOC: 0 - 1000 ppm (1.0 ppm increments)
- CO<sub>2</sub> IR: 0 - 50,000 ppm (50 ppm increments) or 0-5.0% v/v CO<sub>2</sub>

**Sensors not certified for use with the GasAlertMicro 5 IR:** ClO<sub>2</sub>, HCN, NO<sub>2</sub>, PH<sub>3</sub>, Cl<sub>2</sub>

**Sensor type:**

- H<sub>2</sub>S/CO: Twin plug-in electrochemical cell
- Combustibles: Plug-in catalytic bead
- VOC: Photoionization detector (PID)
- CO<sub>2</sub>: IR detector
- Other gases: Single plug-in electrochemical cell

**O<sub>2</sub> measuring principle:** Capillary controlled concentration sensor

**Alarm conditions:** TWA alarm, STEL alarm, low alarm, high alarm, multi alarm, over limit (OL) alarm, sensor alarm, pump alarm, MMC/SD fail alarm, low battery alarm, confidence beep, automatic deactivation alarm

**Audible alarm:** 95 dB at 0.3 m (1 ft.) variable pulsed dual beepers

**Visual alarm:** Dual red light-emitting diodes (LEDs)

**Display:** Alphanumeric liquid crystal display (LCD)

**Backlight:** Activates briefly during startup, when there is insufficient light to view the display (if enabled), and during alarm conditions

**Self-test:** Initiated during activation

**Calibration:** Automatic zero and automatic span

**Oxygen sensor:** Automatic span during startup (if enabled)

**User field options:** Confidence beep, latching low and high alarms, passcode protection, enable/disable safe display mode, combustible sensor measurement, sensor enable/disable, language selection, enable/disable automatic O<sub>2</sub> calibration, set span concentration values, set STEL calculation period, set TWA method, gas measurement resolution, enable/disable automatic backlight, adjust clock/calendar, set datalogging rate (datalog models only), CO<sub>2</sub> sensor measurement

**Datalog Models Approved for GasAlertMicro 5 IR and GasAlertMicro 5 PID Models:** Delkin 128 MB SD card and 64 MB Unigen SD card

**Datalog Models Approved for GasAlertMicro 5 IR Models:** Delkin 128 MB MMC, Delkin 128 MB SD card, Transcend 128 MB SD, and 64 MB Unigen SD card

<sup>1</sup>*Standard release data. This product has extended characteristics. For specifications refer to EAC Ex certificate and Pattern Approval document.*

## Battery operating time

**Toxic, O<sub>2</sub>, and LEL sensor configuration:** Three alkaline cells or one lithium battery pack at 20°C/68°F provides 20 hours operating runtime

**Toxic, O<sub>2</sub>, LEL, and PID sensor configuration:** Three alkaline cells or one lithium battery pack at 20°C/68°F provides 15 hours operating runtime

**Toxic, O<sub>2</sub>, LEL, and CO<sub>2</sub> sensor configuration:** Three alkaline cells or one lithium battery pack at 20°C/68°F provides 15 hours operating runtime

## Approved batteries

**Approved batteries for GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR product:**

- Alkaline (M5-BAT02): as per standards EN 60079-11, EN 60079-0, UL913, CSA C22.2 No. 157
- Lithium-ion polymer (M5-BAT07): as per standards EN 60079-11, EN 60079-0, UL913, CSA C22.2 No. 157
- Lithium-ion polymer (M5-BAT08): as per standards EN 60079-11, EN 60079-0, EN 60079-29-1, EN 50104, UL913, CSA C22.2 No. 157, EN 45544-1 and EN 45544-2.

**Rechargeable battery (M5-BAT08):**

Lithium polymer -20°C ≤ Ta ≤ +50°C. Temperature code: T4

**Alkaline batteries:<sup>1</sup>**

Duracell MN1500 -20°C ≤ Ta ≤ +50°C. Temperature code: T4 (129.9°C)

Energizer E91VP -20°C ≤ Ta ≤ +50°C. Temperature code: T3C (135.3°C)

**Battery charger:** GasAlertMicro 5/PID/IR battery charger

**First-time charge:** Lithium 6 hours

**Normal charge:** Lithium 6 hours

**Warranty:** 2 years including sensors (1 year NH3 sensor and PID lamp)

**Year of manufacture:** The detector’s year of manufacture is determined from the serial number. The second and third number after the first letter determines the year of manufacture. Example: H311-001000 = 2011 year of manufacture.

<sup>1</sup>*Standard release data. This product has extended characteristics. For specifications refer to EAC Ex certificate and Pattern Approval document.*

## Approvals

**GasAlertMicro 5 and GasAlertMicro 5 PID (Zone O):** Approved by CSA to both U.S. and Canadian Standards

**Standards:** CAN/CSA C22.2 No. 157 and C22.2 152

ANSI/UL – 913 and ANSI/ISA – S12.13 Part 1

**ABS Type Approved:** VA-348169-X

**CSA** Class I, Division 1, Group A, B, C, and D. Class I, Zone O, Group IIC.

**ATEX** CE 0539  II 1 G Ex da ia IIC T4 Ga KEMA 06 ATEX 0206 EN 60079-0, EN 60079-1, EN 60079-11

**IECEX** Ex da ia IIC Ga IECEX CSA 06.0011X

IEC 60079-0, IEC 60079-1, IEC 60079-11

**INMETRO** Ex d ia IIC T4 Ga DNV 12.0138 X

**KTL** 12-KB4B0-0055X, 18-KB4B0-0672X

**GasAlertMicro 5 IR (Zone 1):** Approved by CSA to both U.S. and Canadian Standards

**Standards:** CAN/CSA C22.2 No. 157 and C22.2 152

ANSI/UL – 913 and ANSI/ISA – S12.13 Part 1

**ABS Type Approved:** VA-348169-X

**CSA** Class I, Division 1, Group A, B, C, and D. Class I, Zone O, Group IIC.

**ATEX** CE 0539  II 2 G Ex d ia IIC Gb KEMA 06 ATEX 0206 EN 60079-0, EN 60079-1, EN 60079-11,

Ex d ia IIC Gb IECEX CSA 06.0011X

IEC 60079-0, IEC 60079-1, IEC 60079-11

**INMETRO** Ex d ia IIC T4 Gb DNV 12.0138 X

**KTL** 18-KB4B0-0673X

For more information on Approvals and Conformity Declarations refer to <https://safety.honeywell.com>

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and ICES-003 Canadian EMI requirements. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Information Required for European Regulations Compliance

Should the user wish to comply, the detector must be operated in the following manner.

**Daily bump test:** A bump test must be completed before each day’s use.

**Condition of use:** The detector may only be used with the concussion-proof boot (GA-BM5-1 if it is a diffusion unit, or GA-BM5-2 if it is a pump unit).

**Stealth mode:** Stealth mode must be disabled.

**Latching alarms:** The latching alarm option must be enabled.

**Warm up time:** 60 seconds; ≤ 90 seconds for pump unit

**Stabilization time for methane sensor:** ≥ 120 seconds

**Stabilization time for oxygen sensor:** ≥ 120 seconds

**Methane response time t<sub>90</sub>:** 10 seconds

**Oxygen response time t<sub>90</sub>:** 15 seconds for oxygen deficiency

**Oxygen response time t<sub>90</sub>:** 14 seconds for oxygen surplus

**Changing measurement range from % LEL to % Vol:** If changing the measurement unit from % LEL to % Vol. or from % Vol. to % LEL, a calibration must be completed and the alarm setpoints changed. For calibration information refer to Calibration chart and for alarm setpoint information refer to the GasAlertMicro 5/PID/IR User Manual.

**Effect of other toxic gases on the LEL sensor:** High concentrations of certain toxic gases, for example H<sub>2</sub>S, may have an adverse effect on the LEL sensor. This effect, known as inhibition, is usually temporary but in extreme circumstances can impair the sensitivity of the LEL sensor. After any gas exposure that causes an alarm in the toxic gas sensors, the LEL sensor should be verified with a bump test, and recalibrated if necessary.

**Approved batteries for GasAlertMicro 5, GasAlertMicro 5 PID, and GasAlertMicro 5 IR product:** Lithium-ion polymer (M5-BAT08): as per standards EN 60079-11, EN 60079-0, UL913, CSA C22.2 No. 157

**General Use:** For use only in potentially explosive atmospheres where oxygen concentrations do not exceed 20.9% (v/v). Oxygen deficient atmospheres (<10% v/v) may suppress some sensor outputs.

## Limited Warranty and Limitation Liability

Honeywell Analytics warrants the product to be free from defects in material and workmanship under normal use and service for a period of two years, beginning on the date of shipment to the buyer. This warranty extends only to the sale of new and unused products to the original buyer. Honeywell’s warranty obligation is limited, at Honeywell’s option, to refund of the purchase price, repair or replacement of a defective product that is returned to a Honeywell authorized service center within the warranty period. In no event shall Honeywell’s liability hereunder exceed the purchase price actually paid by the buyer for the Product.

This warranty does not include:

- fuses, disposable batteries or the routine replacement of parts due to the normal wear and tear of the product arising from use;
- any product which in Honeywell’s opinion, has been misused, altered, neglected or damaged, by accident or abnormal conditions of operation, handling or use;
- any damage or defects attributable to repair of the product by any person other than an authorized dealer, or the installation of unapproved parts on the product; or the obligations set forth in this warranty are conditional on:
  - proper storage, installation, calibration, use, maintenance and compliance with the product manual instructions and any other applicable recommendations of Honeywell.
- the buyer promptly notifying Honeywell of any defect and, if required, promptly making the product available for correction. No goods shall be returned to Honeywell until receipt by the buyer of shipping instructions from Honeywell; and
- the right of Honeywell to require that the buyer provide proof of purchase such as the original invoice, bill of sale or packing slip to establish that the product is within the warranty period.

THE BUYER AGREES THAT THIS WARRANTY IS THE BUYER’S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HONEYWELL SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR BASED ON CONTRACT, TORT OR RELIANCE OR ANY OTHER THEORY.

Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any provision of this warranty is held invalid or unenforceable by a court of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision.

## Contact

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	analytics.ap@honeywell.com
	<a href="https://safety.honeywell.com">https://safety.honeywell.com</a>

## WEEE Directive and Battery Directive

This symbol indicates that the product must not be disposed of as general industrial or domestic waste.

This product should be disposed of through suitable WEEE disposal facilities.

For more information about disposal of this product, contact your local authority, distributor or the manufacturer.

## Factory Calibration Certificate

We are committed to providing quality product. This instrument has undergone rigorous testing throughout its manufacture. This is the final report by the people that take pride in the products they build.

This instrument has been factory inspected, tested, and calibrated in accordance with the conditions and requirements of our registered Quality System, Operating Standards, and Sales Agreements.



Place Factory Calibration  
Certification here

<https://sps.honeywell.com>

