



**FIFTY YEARS
OF GAS
INNOVATIONS
FOR TODAY'S
CHALLENGES**

Honeywell



With almost 50 years' experience in gas sensing innovation, we have over 300 electrochemical, catalytic bead and optical sensing products detecting 28 different gases.

We offer the widest range of gas sensors in the market today. Our sensors are available in variety of formats to satisfy the precise requirements of the specific applications.

**300+ GAS SENSORS
FOR MULTIPLE APPLICATIONS**



INDUSTRIAL SENSING iSERIES

The iseries digital gas sensor is a 'plug and play' compact low-profile sensor. These sensors have an extended operating life of five years along with extended temperature and humidity range. Designed to meet global performance standards and RoHS compliant.



FEATURES

- Digital interface
- Pre-calibrated
- Predictive calibration
- End-of-life indication
- Fault indication
- OEM lock
- Five-year life
- Low profile
- Extended temperature and relative humidity

BENEFITS

- Interchangeable: All sensors have the same dimensions, communication protocol and bias voltage
- Reduces downtime by using intelligent features
- Early warning for sensor malfunction
- Five-year life: long lifespan
- Multiple application possibilities



APPLICATIONS

- Processing plants
- Area and personal protection
- Clean and wastewater treatment

HONEYWELL iSERIES DIGITAL GAS SENSORS

View our offering by clicking [here](#).

LONG LIFE AMMONIA SENSOR

As food security becomes a priority amid a rising global population, agriculture faces the challenge of increasing food production while minimizing environmental impacts.

Our innovative long-life ammonia sensor addresses this issue by maintaining optimal performance, allowing farmers to foster a healthier environment for livestock, thereby enhancing productivity and sustainability. Ammonia sensors play a crucial role in the hydrogen economy by facilitating the safe production and use of ammonia as a hydrogen carrier.



FEATURES

- Sensor lifetime >12 months with continuous background levels of ammonia (1 year of continuous exposure to 30 ppm NH₃)
- Superior stability with very low baseline drift over time (long-term output drift <2 % signal drift/month)
- Sensor recovers >80 % of initial sensitivity after 330K ppm·h test (simulating one year in continuous background levels of ammonia 30 ppm)
- Fast response time T₉₀ < 90 sec (better than most competitors)

BENEFITS

- Need for an ammonia sensor that can operate in a wide range of environmental conditions
- Growing market in fixed & portable gas detection as well as OEMs of refrigeration systems and livestock farming systems
- Applications with continuous background levels of ammonia such as livestock farms, agriculture and the H₂ economy



HONEYWELL 4NH3LL-100 GAS SENSORS

View our offering by [clicking here](#).

ELECTROCHEMICAL TOXIC & OXYGEN SENSORS

Amperometric fuel cell technology utilizing liquid or solid electrolyte and catalyst electrodes.



1 SERIES

Compact, analogue, low profile devices that can sense carbon monoxide, oxygen, hydrogen sulfide, sulfur dioxide, and combustible gases that enable smaller instruments. Designed to meet industry performance standards. Enhanced performance over an extended environmental range.

FEATURES

- Planar design and unique turret seal allows for flatter gas detection.
- Compact, analogue sensor
- Enhanced performance over an extended environmental range.
- RoHS compliant



HONEYWELL 1SERIES GAS SENSORS

View our offering by clicking here.



4 SERIES

Honeywell 4 Series includes sensors which detect oxygen and toxic gases and fully certified pellistors for combustible gas detection.

FEATURES

- Large robust toxic sensor design
- Comprehensive range for safety and emissions applications
- Suitable for fixed-type detection
- Robust and durable to environmental demands



HONEYWELL 4 SERIES GAS SENSORS

View our offering by clicking here.

ELECTROCHEMICAL TOXIC & OXYGEN SENSORS

Amperometric fuel cell technology utilizing liquid or solid electrolyte and catalyst electrodes.



5 SERIES

Honeywell 5 Series premium gas sensors has been designed to ensure optimal performance within the harsh environments of flue gas analysers and combustion efficiency monitors. Sensors are available for oxygen, carbon monoxide, nitric oxide, nitrogen dioxide and sulphur dioxide, along with a hydrogen-compensated carbon monoxide sensor.

FEATURES

- High capacity filters and electrodes designed for use in emissions applications
- Linear across high detection range
- Fast response and recovery
- Durable to harsh gas & exposure needs



HONEYWELL 5 SERIES GAS SENSORS

View our offering by clicking here.



7 SERIES

Honeywell 7-Series range is suited to general gas detection applications including oxygen and toxic gases. Sensors are suitable for use in portable or fixed gas detectors and medical gas applications.

FEATURES

- Compact sensors designed for portable and transportable applications
- Used in wide range of general gas detection applications
- Extensive toxic and oxygen range of gases



HONEYWELL 7 SERIES GAS SENSORS

View our offering by clicking here.

ENVIRONMENTAL SENSING AQ7 SERIES

The demand for lower-cost, easily transportable solutions for environmental applications has grown substantially as public awareness and demand for healthier breathing conditions has increased, leading to a growing need for monitoring air quality across cities.

AQ7 Series gas sensor are well suited for these applications and detect carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃) and sulfur dioxide (SO₂).

FEATURES

- High resolution: Parts Per Billion (PPB)
- Low Detection Limit (LDL)

BENEFITS

- Drop-in replacement for other AAQ competitors' sensors
- Parameters provided with each sensor for accurate environmental compensation
- Accuracy with a high S/N ratio. Our resolution is among the highest in the market
- Excellent stability for outdoor applications allowing monitoring of the smallest increment
- High correlation with the national optical station 80 % to 90 % of readings matching



AQ7 APPLICATIONS

- AAQ mini stations, portable AAQ systems, AAQ UAVs
- Aerial vehicles
- Urban air monitoring networks
- National air monitoring networks
- Roadside air monitoring
- Industrial perimeter monitoring
- Environmental impact assessments
- Research and consultancy projects
- Short-term hot spot monitoring

Sulfur Dioxide SO₂

AQ7SO2

0 to 1 ppm/2 ppb



Sulfur Dioxide NO₂

AQ7NO

0 to 1 ppm/5 ppb



Ozone O₃

AQ7OZ

0 to 1 ppm/5 ppb



Carbon Monoxide CO

AQ7CO

0 to 20 ppm/10 ppb



HONEYWELL AQ7 INDUSTRIAL GAS SENSORS

View our offering by clicking here.

INDUSTRIAL SENSING CRIR SERIES

The CRIR Series are single channel, non-dispersive infrared (NDIR) sensors. Within the CRIR M1 and CRIR E1 is a sensing chamber with an infrared source at one end and a detector fitted with an optical filter at the other. The source emits radiation at wavelengths that include the absorption band of CO₂.



The filter blocks wavelengths that are not sensitive to the presence of CO₂; thereby, increasing selectivity and sensitivity. As the light passes through the sensing chamber, a fraction is absorbed if CO₂ is present. The difference between the light emitted by the source and received by the detector can then be converted to a CO₂ concentration reading.

The Automatic Baseline Correction (ABC) function can automatically calibrate the sensor's lowest reading over a pre-configured interval to 400 ppm CO₂. This enhances long term stability and may eliminate the need for calibration.

FEATURES

- Small size
- Maintenance free for normal indoor applications
- Enhanced long term stability
- Higher accuracy:
 - CRIR M1: ± 40 ppm ± 3 % of reading
 - CRIR E1: ± 50 ppm ± 5 % of reading
- Consistency and repeatability
- Easy integration



APPLICATIONS

- HVAC, demand-controlled ventilation
- Indoor air quality (IAQ) measurement
- Air purification systems
- Smart /IoT (Internet of Things) system

HONEYWELL CRIR INDUSTRIAL GAS SENSORS

View our offering by clicking [here](#).

CARBON MONOXIDE SENSING



ECOSURE

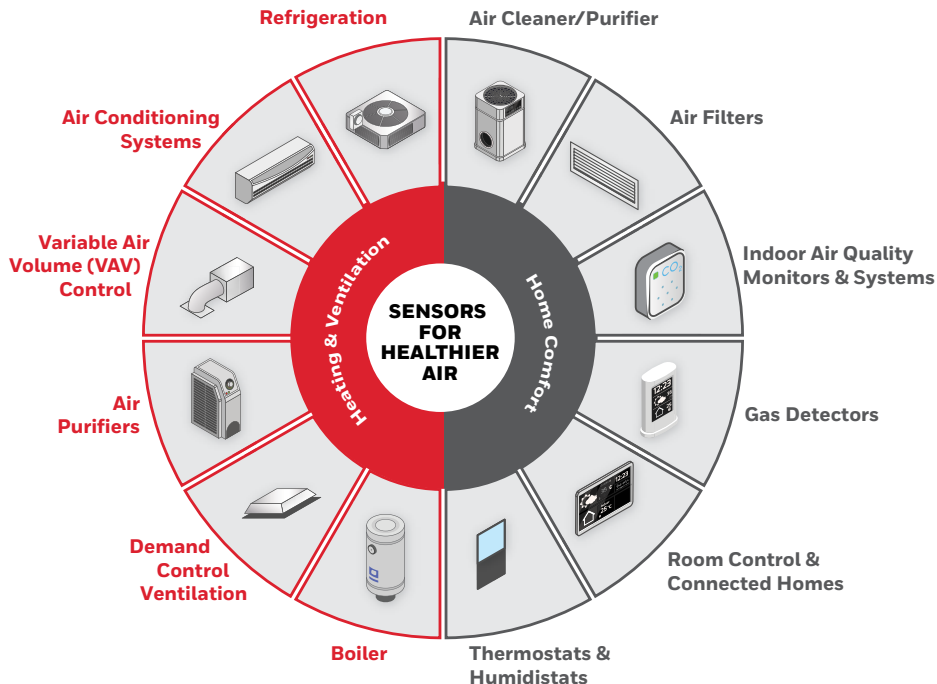
FEATURES

- Designed for unattended operation and long life: > 6 years in normal use
- Range: 0 to 500 ppm
- Overload 1,000 ppm
- Stable performance
- UL certified - UL2075
- Often used in residential, fire detection, and ventilation control application

ECOSURE X

FEATURES

- Designed for unattended operation and long life: > 10 years in normal use
- Range: 4 ppm to 1,000 ppm
- Overload 2,000 ppm
- Stable performance
- UL certified - UL2075
- Often used in residential, fire detection, and ventilation control application



MEDICAL GAS SENSORS iSERIES M

iseries Medical offers high-quality and reliable medical-grade O₂, NO, and NO₂ sensors that are essential for life-saving devices. We collaborate with some of the largest manufacturers of INOS and FeNO devices, ensuring that our technology meets the strictest industry standards.

Our sensors offer significant cost savings compared to NBA options for INOS manufacturers, boasting approximately twice the lifespan, fewer recalibration requirements, and advanced intelligent features.

Additionally, the compact design of our iseries medical sensors enables new design platforms tailored for non-hospital applications, such as ambulatory and home use. iseries M sensors are lead-free and comply with ROHS2 regulations, making them suitable for the European market.

MND2 & MNO2 MediceL Sensors

FEATURES

- NO and NO₂ sensors
- High accuracy
- Lead free
- RoHS2 compliant
- UL Certified - UL2075

Non-medical applications include

- Exhaust gas analysis for automobiles
- Process measurement of O₂ conc. in industrial gas supply systems
- Biogas
- Food processing



BENEFITS

- Extended life: 3 years life versus 1.5 years in current analogue sensors reduces cost of ownership over 3-year period by half
- Reduced recalibration: Gap between recalibration increased from 4 weeks to 12 weeks, reducing maintenance costs by 66 %
- Predictive calibration: GGap between recalibration increased from 4 weeks to 12 weeks, reducing maintenance costs by 66 %
- Plug & play ready: Total saving of 4 mins/inst. at the assembly line
- Simplified electronics: Eliminates the need for additional electronics required for conversion of analogue data to digital
- Covid-ready: Enables the INOS device to be used in COVID care treatments

ENVITEC Oxygen Sensors

FEATURES

- High accuracy, large portfolio
- Extensive reference range
- Lead free (drop-in replacements)
- RoHS & CE certified



Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

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For more information

Honeywell Sensing Solutions services its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing, or the nearest Authorized Distributor, visit [automation.honeywell.com](https://www.honeywell.com/automation) or call:

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WARNING MISUSE OF DOCUMENTATION

- The information presented in this document is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.