

Gas Analysis Solutions

Measuring Oxygen, Hydrogen and Other Gases

GE offers oxygen and hydrogen analyzers that are accurate, reliable, and cost effective. Low cost of ownership is achieved by long term sensor stability, simple, easy installations and infrequent field calibration.

Applications and Benefits

- O₂ blanketing/inerting for petrochemical applications for greater safety assurance
- Optimization of chemical reaction processes
- Trace O₂ in process gases, glove boxes and welding for improved process quality
- Hydrogen purity monitoring in electricity generator for improved efficiency
- Multiple analysis of trace O₂, H₂, and H₂O in steel annealing for improved product quality
- Trace O₂ in high purity gases and air separation for improved product quality
- Trace O₂ in pipeline natural gas for improved gas quality



do you need oxygen too?
Contact us for all your oxygen analysis needs.



Thermoparamagnetic Oxygen Analysis

The Panametrics XMO2 thermoparamagnetic sensor provides the most stable and drift-free oxygen measurement available on the market today.

- % O₂ LEL for inerting
- % O₂ control for optimizing reaction processes
- O₂ in N₂ applications



The Panametrics APX offers the enhanced performance in hydrocarbon gases with automatic compensation for background gas effects.



Galvanic Fuel Cell Oxygen Analysis

The Panametrics oxy.IQ with galvanic fuel cell oxygen sensor provides high accuracy and low cost. It is a versatile, intrinsically safe loop-powered transmitter for ppm or % measurement in acid gases or in non-acid gases.

- ppm O₂ in natural gas
- ppm O₂ in process gases
- % O₂ in inerting applications and process control
- ppm O₂ in glove boxes and semiconductor tools
- ppm and % O₂ in N₂ generators



Nondepleting Electrochemical Oxygen Analysis

The Delta F oxygen cell is a nondepleting electrochemical sensor. With proper maintenance of the electrolyte solution, it will maintain its original calibration for years.



The nondepleting electrochemical sensor requires only infrequent calibration and provides high accuracy in low ppm and ppb measurements. It can be used with the multifunction moisture.IQ analyzer for simultaneous measurement of oxygen, moisture, temperature, and pressure. Optional auxiliary inputs can support H₂ measurement with the XTMC.

Zirconium Oxide Oxygen Analysis

The CGA351 zirconium oxide oxygen analyzer measures O₂ from 0.1 ppm to 100% in high-purity inert gases. Its advanced zirconium oxide sensor provides fast speed of response with drift-free performance and minimal maintenance requirements. It is ideal for applications such as:

- 0.1 to 10 ppm O₂ in high purity nitrogen or argon in air separation plants
- trace ppm O₂ in glove boxes
- heat treating processes
- gas generators
- welding applications



Thermal Conductivity Hydrogen Analysis

The Panametrics XMTC binary gas analyzer measures gases such as H₂, CO₂, CH₄, He and argon by thermal conductivity. Typical applications include:

- %H₂ in hydrogen cooled electricity generation
- %H₂ in H₂/N₂ atmosphere gas in steel annealing/galvanizing
- %H₂ in hydrogen recycle gas in petrochemical reforming
- % CH₄ in CO₂ in biogas or landfill gas
- % CO₂ in fermentation processes
- % helium in argon for specialty glass production



Start-up Assistance and Calibration Services

We have field service teams located globally to assist with start-up, regular maintenance and calibration. Contact us for services or for a custom service agreement.



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