



OxyHound

The OxyHound is a real-time oxygen analyzer designed for accurate O₂ monitoring in industrial environments. It uses optical quench luminescence for precise, low-maintenance gaseous oxygen measurement. The flexible fiber-optic sensor is easy to service in the field. Replacing older electrochemical and paramagnetic technologies, it offers improved durability and stability.

Using quench luminescence, it calculates oxygen levels through advanced phase-shift analysis.

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KECO OxyHound



Applications

- Gas Processing Facilities
- Natural Gas Pipeline
- Chemical Plants
- Gas Well Testing & Analysis
- Landfills
- Biogas
- Vapor Recovery Units



Benefits

- Accurate O₂ measurement using quench luminescence
- Fast response for real-time monitoring
- Resistant to H₂S, CO₂, and contaminants
- Easy, field-serviceable fiber-optic sensor
- Multiple outputs for simple integration



Operational Impact

- Improves process reliability and stability
- Reduces downtime and maintenance needs
- Lowers long-term operating costs
- Enhances safety in gas systems
- Optimizes industrial and renewable processes



Specifications

RANGE

- 0-200 ppm
- 0-5%
- 0-50%
- 0-100%

LIMIT OF DETECTION

- 0.5 ppm (200 ppm), 0.001% (5%), 0.03% (50 & 100%)

RESOLUTION

- 10 ± 0.5 ppm, 100 ± 0.8 ppm, 200 ± 1.5 ppm
- $0.002\% \pm 0.0006\%$, $0.046\% \pm 0.0008\%$, $0.2\% \pm 0.001\%$
- $1\% \pm 0.02\%$, $20.9\% \pm 0.1\%$, $50\% \pm 0.4\%$

ACCURACY

- $\pm 1\%$ of full scale

TEMP RANGE (ambient air and sample)

- 0C to 40C

RESPONSE TIME (T90)

- <10 seconds response to O2

DRIFT

- <2.0 ppm within 30 days @ 60 sec. sample rate

POWER

- 110/220VAC 50/60 Hz or 24VDC

OUTPUT

- 4-20mA DC (self-powered)
- RS-485 Modbus
- TCP/IP Ethernet Modbus

ELECTRICAL CLASS

- Class I, Div 2 (Zone 2) Groups B, C, D

*Based on laboratory conditions, atm pressure @ 20C

OPERATION PRESSURE

- Max pressure input 100 psig (constant pressure required)
- Minimum pressure input 5 psig (constant pressure required)

DIMENSIONS (subject to change)

- Height: 20 inches
- Width: 10 inches
- Depth: 7 inches

WEIGHT

- 25 lbs

FEATURES

- Data Logger (SD card not included)
- Weather-resistant packaging
- Sample flow meter (pressure regulator optional; sample flow rate is 1.5 SCFH on sample requirement)
- Calibration port with three-way valve (switch between process and calibration gas)

OPTIONS

- Alarm relays (SPD, 250 VAC @ 5 Amps)
- KECO Cloud Connect: remotely monitor analyzer on any web-connected device using LTE-M
- Solar System (panels, mounting pole, batteries, controller)
- Fugitive Emission Control Unit for vent
- Sampling System (Simple): Pressure regulator/gauge
 - Sample System for Gasses Entrained with Light Liquids: Pressure regulator/gauge, Liquid Block, bypass with needle valve
 - Sampling System for LPG, LNG (heated)
 - Sample Probe to be installed at tap point
 - Self-standing rack (includes sun/rain shield, drip pan, fork lift holes, foundation mount holes; can mount analyzers on front and back)

CROSS-SENSITIVITY DATA

- No degradation or cross-interference from H2S, CO2, NH3, gaseous SO2, sulfate, chloride, or other ionic species
- Compatible with hydrocarbons such as natural gas (even with CO2 and H2S present), propylene, ethylene, polypropylene, methanol, and ethanol mixtures
- Not compatible with organic solvents including toluene, acetone, chloroform, benzene, methylene chloride, or any strong oxidizers such as gaseous chlorine

KECO provides design and application engineering assistance for the User's analyzer requirements. For a quotation, please complete Analyzer Quote Request Form at kecosystems.com/quote

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