

CO₂ GAS ANALYZER

CarbonHound Lite | NDIR ON-LINE PROCESS ANALYZER



- Measure CO₂ in Nat Gas, Biogas, Landfills
- Built for Division 2 & Zone 2 hazardous locations
- Low maintenance with solid state design
- NDIR sensor life measured in years
- Outdoor weather packaging
- Color touchscreen HMI with data logger

Applications

• Gas Processing Facilities • Natural Gas Pipeline • Chemical Plants • Gas Well Testing & Analysis • Landfills & Biogas

Product Description

The petrochemical, gas processing, biogas, landfill and gas pipeline industries has always needed an accurate and dependable, low maintenance and cost effective CO₂ analyzer for quality and process control purposes. KECO has met these requirements with the proven microprocessor based analyzer. The CarbonHound provides continuous on-line analysis based on the specific non-dispersive infrared principle of operation. A precision flowmeter regulates the sample flow to approximately approx. 1.5 SCFH. Next, the sample is introduced to the specific infrared detection element that provides an output proportional to the concentration of carbon dioxide. This signal is digitized and analyzed by the advanced microprocessor HMI (Human Machine Interface) and related software resulting in a 4-20 mA output, relay alarms, and RS-485, TCP/IP Ethernet. The color touch screen LCD display provides the current reading, previous reading, any alarm conditions, historical and real-time charts, procedure prompts (i.e., calibration procedure), and failure indicators (local and remote capability). Quality materials are selected for compatibility and are utilized throughout fabrication. Special attention is given to wetted parts that come in contact with the process stream and are selected to be non-reactive.

KECO

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Typical Specifications

RANGE

- 0 - 0.5% (0 - 5000 ppm), 0 - 5%, 0 - 10%, 0 - 20%, 0 - 50%, 0 - 100% Vol.

RESOLUTION

- 0.01% for readings up to 10% volume
- 0.1% for readings from 10% up to 100% vol.

REPEATABILITY

- $\pm 3\%$ of Full Scale

ACCURACY

- $\pm 3\%$ of Full Scale

PRESSURE

- $\pm 5\%$ of the calibration pressure to maintain accuracy limits

TEMP PERFORMANCE

- $\pm 10\%$ of reading up to 50% full scale and $\pm 15\%$ of reading from 50% to 100% full scale

RESPONSE TIME

- T90 = less than 60 seconds

POWER

- 110/220VAC 50/60 Hz or 24VDC (1.1 amps max)

OUTPUT

- 4-20mA DC (self-powered)
- RS-485 Modbus
- TCP/IP Ethernet Modbus
- Concentration alarms via Modbus
- Diagnostic Alarms via Modbus

ELECTRICAL CLASS

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

HUMIDITY

- 0-95% RH non-condensing

RELAY RATINGS

- SPDT Relays, 250 VAC at 10 amps (conc. alarm, diagnostic alarm)

OPERATION TEMPERATURE

- -10°C to 50°C

OPERATION PRESSURE

- Max pressure input 100 psig (optional pressure regulator/gauge available)

DIMENSIONS (Approx.)

- Height: 20 inches
- Width: 12 inches
- Depth: 7 inches

WEIGHT

- Approx. 40 Lbs

FEATURES

- Data Logger (SD card separate)
- Enclosure for outdoor environments (UL listed, CSA rated, IP66)

OPTIONS

- Alarm relays (SPDT, 250 VAC @ 5 Amps)
- Isolation of 4-20 mA and Ethernet.
- Solar System (panels, mounting pole, batteries, controller)
- H2S Scrubber for vent
- 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, by-pass 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)

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