# METHANE ANALYZER

# MethaneHound | NDIR ON-LINE PROCESS ANALYZER





- -Measure methane 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 have always needed an accurate and dependable, low maintenance, and cost-effective CH4 analyzer for quality and process control purposes. KECO has met these requirements with the proven microprocessor-based analyzer. The MethaneHound provides continuous online analysis based on the specific non-dispersive infrared principle of operation. A precision flowmeter regulates the sample flow to approximately 1.5 SCFH. Next, the sample is introduced to the specific infrared detection element that provides an output proportional to the concentration of methane. 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.



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# **Typical Specifications**

#### RANGE

• 0-5%, 0-100% Vol.

# **RESOLUTION**

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

## **REPEATABILITY**

• ±3% of Full Scale

#### **ACCURACY**

• ±3% of Full Scale

#### **PRESSURE**

• ±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 inchesWidth: 12 inchesDepth: 7 inches

## WEIGHT

· Approx. 40 lbs

#### **FEATURES**

- Data Logger (SD card separate)
- Enclosure for outdoor environments (UL listed, CSA rated, IP66)
- Sample flow rate is 1.5 SCFH on sample requirement

# **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