



ISO 9001: 2008
Certified

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MODEL 1000-H₂S-CO₂

HYDROGEN SULFIDE / CARBON DIOXIDE ANALYZER

DESCRIPTION

Detcon Model 1000-H₂S/CO₂ dual process analyzers provide simultaneous and continuous measurement of both H₂S and CO₂ concentrations.

Available ranges for H₂S are from 0-10 ppm up to 0-5%. Available ranges for CO₂ are from 0-0.3% up to 0-100%. CO₂ detection is made using Detcon's sub-miniature NDIR optical sensor element. H₂S detection is made using Detcon's 3-electrode electrochemical sensor element. The analyzer features microprocessor-based signal-conditioning transmitters with local digital display, fault supervision, calibration mode indicator, alarm relays and an RS-485 serial port. The instrument package is rated for use in electrically classified areas: Class I; Division 1; Groups B, C, and D.



FEATURES

- ▷ Continuous Measurement with Superior Uptime
- ▷ Readily Field Replaceable Sensors
- ▷ Simple Operation and Field Calibration
- ▷ Standard Outputs: 4-20 mA, RS-485, 3 Relays
- ▷ Class I, Div. 1 Groups B, C, D rated

APPLICATIONS

- ▷ Gas Well Testing & Analysis
- ▷ Gas Well Production Sites
- ▷ Gas Treatment Plants
- ▷ Gas Transmission Custody Transfer Compliance

SPECIFICATIONS

Sensor Type

3-Electrode Electrochemical for H₂S
Non-dispersive Infrared for CO₂

Measurement Range - High Range

0-10ppm up to 100ppm for H₂S
1,000ppm up to 5% for high-range H₂S
0-0.3%/1.0%/3.0%/5.0%/10%/
25%/50%/100% for CO₂

Accuracy/Repeatability

The greater of: ±10% of reading or
±2.5% of range

Response/Clearing Time

T₅₀ <30 seconds, T₉₀ <1 minute for H₂S
Max output to over-range gas: <10 seconds
T₅₀ <30 seconds, T₈₀ <60 seconds for CO₂

Operating Temperature Range

-40°F to +122°F; -40°C to +50°C

Operating Pressure Requirements

Inlet: 10 ±2 psig
Vent: Atmospheric ±1 psig

Outputs

Linear 4-20 mA DC
RS-485 Modbus™
3 Relays (alarm 1, alarm 2, & fault)
Contacts rated 5 amps

Power Input

117/220 VAC
18-36 VDC

Electrical Classification

Explosion proof
Class 1, Division 1, Groups B, C, D

Warranty

H₂S Sensor: 6 months
CO₂ Sensor: 5 years prorated*
Transmitter: 2 year

Analyzer Weight

80 lbs.

Shipping Weight

140 lbs

Dimensions

29" x 29" x 8"

*2 years = free of charge, 3rd year = 25% of replacement cost, 4th year = 50% of replacement cost, 5th year = 75% of replacement cost

ORDERING INFORMATION

Gas cylinder and gas cylinder regulator sold separately.

Detcon requires that an application data sheet be completed and submitted to the engineering department prior to quotation and or order confirmation. This process assures that each customer's use of Detcon Model Series 1000 analyzers is reviewed and approached with confidence that the product will perform as specified.

The analyzer application data sheet can be accessed on line at www.detcon.com or you may request a copy by contacting sales@detcon.com via email.

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