

TRACE HYDROGEN SULFIDE ANALYZER



Get **ACCURATE MEASUREMENTS** quickly & reliably.

MODEL 3010BR

When hydrogen sulfide is present in natural gas with O_2 , CO_2 and moisture, a very corrosive, and destructive mixture forms, containing carbonic acid and sulfuric acid. If left untreated, it can inflict costly damage and shorten the life of any pipeline infrastructure, even to the point of causing a rupture.

The **MODEL 3010BR** consists of state-of-the-art engineering designs that deliver accurate readings when measuring trace levels of this corrosive, hazardous gas. The Analyzer contains our patented *ELIMINATOR CELL BLOCK*TM, where all sample handling components (flow meter, needle valve and a 3-way Sample/Span/Off Selection Valve) are integrated into a solid metal block with internal drilled passages and an incredibly gas-efficient sensor pocket. The *BLOCK* provides the most efficient gas path by significantly minimizing the space and distance required to move sample from the Sample Tap to the sensor – a critical advantage when working with a 'sticky' gas. This results in faster response times and greater reliability.

The **COMMAND CENTER™** is available for use with the **MODEL 3010BR**. This special platform gives users access to several powerful software-based tools for collecting data and managing important analyzer functions. The **MODEL 3010BR** is CSA-approved for Class 1, Div. 1, Groups B,C,D hazardous areas.

There is no other comparable PPM H_2S measurement solution on the market that can provide customers with this level of performance and engineering.

PERFORMANCE made possible by *State-of-the-Art* **ENGINEERING**

MODEL 3010BR TECHNICAL SPECIFICATIONS & FEATURES

9.5" (24.1 cm)

5.0" (12.7 cm)

PHYSICAL

Dimensions:	13.0″W x 9.5″H x 5.0″D (compact size) (33.0 cm x 24.1 cm x 12.7 cm)
Weight:	16.0 lbs (7.26 kg)
Digital Display:	4-digit LCD (reads full scale from
	0.00 ppm to 200 ppm or 0.00 ppm to 2000 ppm)
Mounting:	Wall mount or 2.0" pipe
Gas Connections:	¼" 316 S.S. compression fittings
Wetted parts:	316 S.S. fittings, electro-less nickel-plated cell blo

13.0" (33.0 cm) ock.

gold-plated contacts, acrylic flow meter & Vitron O-rings

2 - year warranty for Parts & Labor for any defects in materials or workmanship. 1-year warranty for H,S sensors

TECHNOLOGY

Method of Measurement: Electrochemical Hydrogen Sulfide Sensor **ELIMINATOR CELL BLOCK™** with a Complete Integral Sample System **COMMAND CENTER™**, which includes:

- Datalogger for H₂S Readings, includes graph of complete readings over a 15-day period or Excel file containing raw numerical data for custom analysis
- Error Status Display alerts users to any error(s) detected by the Analyzer
- User Selectable Alarm Logic, including Alarm Delay & Bypass
- Brown-out history stores the last 5 brown-out incidents and recoveries
- Power-up history stores the last 10 times the unit was powered-up
- USB virtual COMport and Modbus bi-directional RS485 communication to interface wth advanced features

PERFORMANCE

Minimum detection limit: 50 ppb of Hydrogen Sulfide 90% full scale response times for these specified ranges:

- <120 sec for 0 100 ppm @1.5 SCFH* (0.75 Lpm)
- <120 sec for 0 2000 ppm @1.5 SCFH* (0.75 Lpm)

Repeatability: $\pm 1\%$ of range or ± 0.2 ppm of H₂S, whichever is greater

Response to Methyl Mercaptan: 40% of actual concentration Response to Sulfur Dioxide: 18% of actual concentration Diurnal Temperature Specification: <±2% of scale over temperature range

Data Collection Capacity provides 15 days of data recording @1 datapoint per minute

Inlet gas pressure: 0.5 - 150 psig (0.03 - 10.3 bar) **RFI-protected**

ALARMS

2 fully adjustable H₂S concentration alarms with Relay Contacts

Alarm delays are programmable from 0 – 300 minutes Alarm hold-off / bypass is programmable from 0 – 120 min

OPERATION

Output Ranges (user selectable):

0 – 10 ppm, 0 – 50 ppm, 0 – 100 ppm, 0 – 200 ppm, **Optional Ranges (user selectable):**

0 – 500 ppm, 0 – 1000 ppm, 0 – 2000 ppm,

Ambient Operating Temperature Range: non-heated: 25°F to 115°F (3.9°C to 46°C) heated option: -20°F to 115°F (-29°C to 46°C)

with optional Extreme Weather Enclosure:

-40°F to 115°F (-40°C to 46°C) Recommended flow rate: 1.0 to 1.5 SCFH* (0.5 – 0.75 Lpm) *SCFH = standard cubic feet/hour

1 – 5 VDC and 4 – 20mA isolated analog output signals Advanced analog output calibration for use when syncing with an EFM or other external device

AREA CLASSIFICATION

Area Classification: CSA-approved for Class 1, Div. 1, Groups B,C,D hazardous areas

POWER

Requirements: Choice of 12 - 24VDC or 115VAC; <70 mA @12VDC (non-heated)

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HIGH PERFORMANCE

RELIABILITY INTUITIVE DESIGN