

MODEL 810H2S-P

PORTABLE HYDROGEN SULFIDE TAPE ANALYZER

Selective Portable H2S Measurement from ppb to ppm for Field Verification, Process Troubleshooting, and Laboratory Support

The Blue Dragon Model 810H2S-P is a portable industrial hydrogen sulfide analyzer that uses lead-acetate sensing tape and optical detection for selective H2S measurement. Designed for spot verification, temporary monitoring, troubleshooting, and sheltered general-purpose use, it delivers fast real-time readings with ppb-level sensitivity and configuration-dependent ppm range capability.

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Lead-Acetate Tape Detection

Selective optical measurement of H2S
- 

1 ppb Resolution

Trace-level sensitivity for demanding applications
- 

Portable Industrial Design

Compact analyzer for field and laboratory use



WHY CHOOSE THE MODEL 810H2S-P

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Selective H2S Detection

Lead-acetate tape method for hydrogen sulfide measurement
- 

1 ppb Resolution

Trace-level indication for low-concentration monitoring
- 

±2% FS Accuracy

Reliable full-scale analytical performance
- 

1-Second Analysis

Fast response for real-time decision making
- 

Single-Point Calibration

Simple calibration workflow
- 

AC or DC Power

Flexible operation with optional battery /power configurations

APPLICATIONS

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Natural Gas & LNG

Gas quality verification, custody support, trace H2S checks
- 

Refining & Petrochemical

Process troubleshooting and sulfur-related monitoring
- 

Sulfur Recovery & Gas Treating

Portable verification around treatment systems
- 

Chemical Processing

Spot checks and temporary investigations
- 

Laboratory & Pilot Units

Sheltered analytical support and method verification
- 

Field Service & Maintenance

Commissioning, troubleshooting, and portable measurement

HOW IT WORKS

- 1



Sample

Process gas delivered to analyzer

2



Flow Control

Sample adjusted to 0.3 SCFH typical

3



Humidifier

5% acetic acid membrane humidification

4



Tape Detector

Lead-acetate sensing tape exposed to H2S

5



Optical Reading

Degree of tape darkening measured optically

6



H2S Result

Live concentration shown on display and available to outputs

TECHNICAL SPECIFICATIONS

Measurement Principle	Lead-acetate sensing tape with optical detection
Target Analyte	Hydrogen sulfide (H2S)
Measurement Range	Configurable, order-specific ppb-to-ppm ranges
Resolution	1 ppb
Accuracy	±2% of full scale
Analysis Time	1 second
Linearity	Linear response
Calibration	Single-point manual calibration
Sample Flow	0.3 SCFH typical
Sample Pressure	10–15 psig typical inlet; adjust to about 9 psig at analyzer
Power Supply	AC or DC operation; optional battery depending on configuration
Outputs / Options	Optional 4–20 mA, alarms, RS485/Modbus, range options, data options
Weight	Approx. 10 lb (4.5 kg)
Area Classification	Portable version for general-purpose non-hazardous areas



BUILT FOR FIELD ELEMENTAL ANALYSIS

- ✓ Fast trace-level H2S verification
- ✓ Portable support for process troubleshooting
- ✓ Simple sample-handling architecture
- ✓ Useful for laboratory and field service work
- ✓ Designed for general-purpose sheltered applications