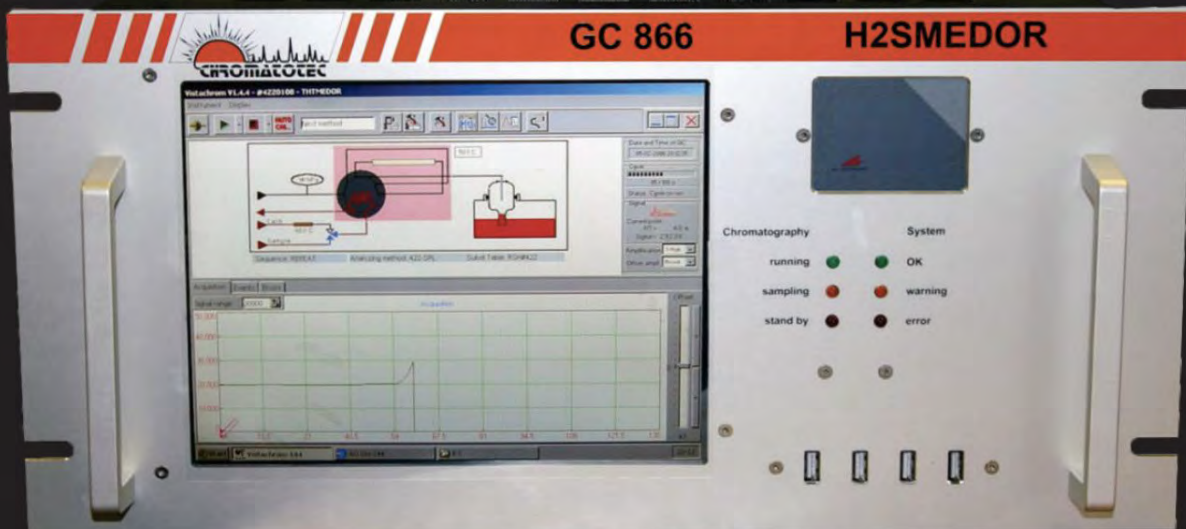


H₂S MEDOR Sulfur Monitoring



CAS believes that focusing on the details without losing sight of the scope is an integral piece of a successful project. With a solid history of supporting our clients, we understand the challenges from design to operation. Our passion stems from our desire to provide a turnkey solution to our clients. This approach ensures a precise, cost-effective, properly implemented project. Through dedication, commitment, integrity, and hard work, our team is ready to serve you.

General Description

The H₂S MEDOR (results in 120 s) analyzer has been developed specifically to address the challenges of online, continuous Natural Gas (NG) monitoring. The MEDORs are fully automated, rugged, industrial analyzers that provide an ideal solution for companies and operators seeking to increase data capture and maximize efficiency. This integrated solution provides unsurpassed separation of sulfur compounds and exceptional stability of results, combined with the ease of an automatic platform. The MEDORs perform in the most stringent applications with the lowest cost of ownership on the market. Our partners globally have validated the H₂S MEDOR as the most accurate and reliable analyzer in the industry for online monitoring of H₂S.

The H₂S MEDOR is a robust, automatic gas chromatograph dedicated to H₂S and Total Sulfur analysis in different matrices. Two versions of the instrument exist: the H₂S MEDOR ppm which measures at ppm levels and the H₂S MEDOR ppb which measures at ppb levels. Sulfur compounds analysis is accomplished through loop injection via automatic valve onto chromatographic columns heated in an isothermal oven. Electrochemical detection is achieved by a gas-liquid reaction, a proven gas chromatography technique for excellent separation of chemical species. This sulfur specific detector allows no interference from other compounds. Hydrogen sulfide and Total Sulfur results are validated automatically by an internal permeation standard to ensure repeatability and accuracy.

All MEDORs offer an advanced color display, intuitive user interface, flexible I/O, and built-in data acquisition. All instrument set up, control, and access to stored data and diagnostic information are available through the front panel, or via RS232, Ethernet, or USB com ports either locally or by remote connection using the included VISTACHROM® software. High and low threshold alarms for odorizing processes are user adjustable. Proprietary VISTACHROM® software enables remote monitoring and injection control as well as full traceability with onboard archiving of results.

- ASTM D7493-08: Standard Test Method for Online Measurement of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatograph Electrochemical Detection
- Ranges: ppb, ppm
- Serial com ports
- Four front panel USB ports for peripheral devices
- Comprehensive internal data logging with 40GB storage
- Hard drive storage of date and time stamped chromatograms
- Full traceability through archiving of results and QC
- Ethernet connectivity for remote access and monitoring
- Adjustable threshold alarms Online, continuous sampling Low maintenance
- Automatic validation of results by Internal Permeation Tube
- Large, vivid, and durable color graphics display with user-friendly interface

H₂S MEDOR Sulfur Monitoring

Specification Sheet



General Specifications

Compound(s) Analyzed:

H₂S (Hydrogen Sulfide), Option for Total Sulfur Analysis

Detection Range(s):

ppm model: 1 to 1000 ppm

ppb model: 5 to 1000 ppb

Lower Detectable Limit(s):

ppm model: 1 ppm H₂S

ppb model: 5 ppb H₂S

Relative Standard Deviation:

Concentration: RSD <2 % over 48 h

Retention time: RSD <0.6 % over 48 h

Cycle time(s):

H₂S: 60 s

H₂S and Total Sulfur: 120 s

Internal Calibration Flow Rate:

50 ml/min

Sample Inlet Flow Rate and Pressure:

10 l/h (160 ml/min); 1 bar

Carrier Gas Flow Rate and Pressure (UHP N₂):

5 ml/min; 1 bar

Electrical Specifications

Power Requirements:

120V/230V, 50/60 Hz

Consumption:

Average 150 VA, Peak 360 VA

Communication Specifications

Included I/O:

MODBUS/JBUS or MGS1 (RTU or ASCII)

RS232

RS485

Ethernet

4 USB com ports

Optional I/O:

4-20mA output

0-10V output

Certifications

ASTM D7493-08

ISO 6326/2 norm

DIN 51855/7

EN ISO 19739

Physical Specifications

Operating Temperature Range:

18 to 25 °C, no more than +1 °C change per hour

Dimensions (H x W x D):

8.7" x 19" x 23.6" (22.2cm x 48.2cm x 60cm)

Net Weight:

48.5 lbs (22kg)

Options

Calibration Options:

Automatic validation and calibration

Internal Permeation Tube system (CALIBRATION - system; standard for ppb model)

Multiple stream analysis with Multiplexer (2 to 6 streams)

Calculation Module (Average)

User definable alarm thresholds

Mounting Options:

Rack mount brackets with chassis slides

Rack mount brackets with stationary shelf

Enclosed instrument rack with HVAC

Other Options:

24V power for transportable analysis

Explosion proof Exp box- Ex Specification

Class 1 Div 2, Groups C, & D

Maintenance kit

UPS (Uninterrupted Power Supply)

Climate - control

Applications

Natural gas:

H₂S level monitoring

Verification of H₂S removal processes

Catalyzer protection

Environmental:

Monitoring of H₂S emissions

Stack monitoring

Ambient air monitoring