

ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

H2S MEDOR®

A Online analysis and monitoring of H2S





Model: M51022

Model: M51022 - ATEX

Main applications:

Trace and ultra trace detection in Natural Gas / LPG / Gaseous Fuels H2S in crude oil / Diesel / Fuel oil / Condensates / water Deodorisation/Desulfurisation control ppb Catalyzer protection H2S in pure gas: H2 with special application

Targeted compounds:

H₂S

In option: other sulfur compounds and total sulfur with other MEDOR version

Main markets:





H2S
Refineries / Petrochemical
Gas transportation
Process
Sales metering station
Emissions

Standard:

ASTM D5504-20, D7493-22 & D7165-22 ISO 19739:2004, DIN 51855/7

Certifications:

GOST, ATEX, IECEx, QPS







Chromatotec® is specialized in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (ppm, ppb, ppt).

Please visit our website for more details.





INTERNATIONAL Standards Worldwide



H2S MEDOR®

Online analysis and monitoring of H2S

Description:

The H2S MEDOR® is an autoGC-ED (MEDOR® Electrochemical wet cell Detector) for the analysis and monitoring of H2S in natural gas and gaseous fuels.

Three versions exist:

- H2S MEDOR® ppb for 0 1 ppm
- H2S MEDOR® ppm for 0-10 / 0-50 / 0-100 ppm
- H2S MEDOR® % for 0-10 %

Principle:

- · Automatic sampling using a loop
- · Automatic loop injection on column
- · Isothermal gas chromatograph
- Detection of H2S eluting from the column performed by MEDOR® Detector: Electrochemical wet cell Detector which is SSD Sulfur Spe-
- · Signal provided by electrochemical reaction between the wet cell electrolyte and the sulfur compounds

Key points:

Fully compliant with ASTM D 7493-22 : Standard Test Method for Online Measurement of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatograph and Electrochemical Detection.

Continuous monitoring with automatic online sampling.

Analytical performances:

- · Specific, linear and very sensitive to H2S
- Results validation by automatic standard injection
- · Extremely low maintenance
- · Very long life time detector with electrolyte, up to 10 years
- · Low gas consumption, can be reduced in option
- · More than 10 years data storage : full chromatogram
- · No cylinders required thanks to internal calibration tube and gas generators
- Automatic control with process device
- · Intelligence system with tunable and interactive alarms levels

Powerfull VISTACHROM Chromatotec® software:

- · Remote monitoring & injection control
- · Full traceability with on board archiving of results and chromato-
- · QC Set up and control of threshold alarms
- · Data export by MODBUS
- · Time stamp results

Options:

- Multiple stream selector (up to 16 streams with one analyser)
- Modeling software with weather station for live odor/chemical impact
- Explosion proof version Exp or Exd for ATEX, IECEx zone 1 and 2 and also for C1D2 group B, C & D T4
- · Calculation modules (Average / Statistics / Odor unit OU e/m3 and
- Automatic data transfert through: Module for 4 outputs 4-20 mA (with 0 mA for instrument default) / 0 - 10 V / MODBUS RTU or TCPI IP or MGS1
- · Nitrogen or air generator for safe and hazardous area
- 24 V DC power supply
- · Electric selection valve to reduce air consumption
- Wall mounted box XXX934
- · Liquid injection valve for LPG analysis
- Touch screen on the front panel for Exp version (only ATEX)
- · External cylinder inlet for automatic calibration from external cylinder
- · MFC for multipoint calibration from internal CALIB and/or from cylinder
- · Zero method
- · Automatic tank filling
- · Sealproof detector

Technical specifications:

Detection Limit:

H2S MEDOR® ppm:

H2S: 0.1 ppm (0.1417 mg/m3)

H2S MEDOR® ppb:

H2S: 1 ppb (1.39 μg/m3)

Range (adjustable depending on application):

- 0/10 or 0/100 or 0/1000 (ppb or ppm)
- · % with internal loop valve

Relative Standard Deviation:

- RSD < 3 % on concentration over 48H
- RSD < 0.5% on retention time over 48H

Cycle Time:

- H2S 120 s for 0 3 ppm range
- · H2S 300 s for higher range

Supervisor:

- · Embedded computer Windows® based with LCD display
- · 128 GB of Hardware storage on SSD memory

Linearity:

• > 0.995

Communication:

- · MODBUS RTU included in standard
- · Ethernet, remote control

Gas supply:

- Carrier: Dry air or N2 (3 bar): < 4 ml/min
- · Internal calibration: 50 ml/min for ppm range
- · Sample inlet 1 bar and 160 ml/min sample flow
- · Pneumatic valve 90 ml/commutation

Power supply:

Main: 230 V / 115 V or 50/60 Hz

· Power: 24V (optional)

Electrical consumption:

· Average: 150 VA

Dimensions and weight:

• Rack: 19" (5U)

• Width: 482mm

Depth: 600 mm Net weight: 22 Kgs

Height: 222 mm

· Height: 800 mm

• Width: 600mm

• Depth: 300 mm

· Net weight: 40 Kg

Wall mounted Exp version:

Model:

M51022

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

To order:

H2S MEDOR® inbuilt computer 5U with CALIB H2S MEDOR® Ex px certified ATEX zone 2 H2S MEDOR® Ex px certified ATEX zone 1 H2S MEDOR® Exd ATEX zone 1 H2S MEDOR® Ex px certified IECEX zone 1 H2S MEDOR® Exd IECEX zone 1

H2S MEDOR® Ex px C1D2 H2S MEDOR® Exd C1D2

M51022 -ATEX-Z2 M51022 -ATEX-Z1 M51022 -ATEX-Z1-Exd M51022 -IECEX-Z1 M51022 -IECEX-Z1-Exd M51022 -C1D2 M51022 -Z1-Exd

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice To contact us: sales@chromatotec.com

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