

ASPROC

GC H2S-TS

& +39 055 9705134 **⊠** info@asproc.net **⊕** www.asproc.net





ONLINE GAS AND LIQUID ANALYZER EXPERTS

GAS ANALYZER GC 866

DMDS

H2S/TOS TS MEDOR®

Sulfur compounds analyzer





Model: M51000-TS (rack version) Model: M51000-TS (wall mounted version)

DMS

Main applications:

Trace detection in natural gas / LPG / Gaseous fuels H2S and TS in crude oil / Diesel / Fuel oil / Condensates / Water Deodorisation control at ppb level Propellant gas Catalyzer protection and control Sales gas

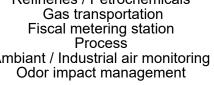


<u> Targetted compounds:</u>

H2s, TOS (Total Organic Sulfur = mercaptans and sulfides) and Total Sulfur (TS) by sum



Gas transportation Fiscal metering station Process Ambiant / Industrial air monitoring Odor impact management





ISO 19739:2004, DIN 51855/7 ASTM D 7493-14, ASTM D 5504-20



Certification:

ATEX, IECEx, CSA, CSA international









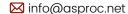




Chromatotec® is specialised in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (ppm, ppb, ppt). Please visit our website for more details.











Description

- The H2S/TOS TS MEDOR® is an autoGC-ED (MEDOR® Electrochemical wet cell Detector) for the analysis and monitoring of H2S, TOS and TS by sum of H2S + TOS in natural gas and gaseous fuels.
- Different configurations exist depending on the application and concentration range:
 - HS2/TOS TS MEDOR ppb for 0-1 ppm
 - H2S/TOS TS MEDOR ppm for 0-10 / 0-50 / 0-100 ppm

Principle

- · Automatic sampling using a loop
- Automatic loop injection on metallic capillary column
- · Isothermal gas chromatograph
- Detection of all compounds eluting from the column performed by ME-DOR® detector: Electrochemical wet cell Detector which is a Sulfur Specific Detector (SSD)
- · Signal provided by electrochemical reaction between the wet cell electrolyte and the sulfur compounds
- Fully compliant with ASTM D 7493-14: Standard Test Method for On-line Measurement of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatograph and Electrochemical Detection.
- · Compliant with ASTM D 5504-20: Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence with alternative detector.

Key points

- · Continuous monitoring with automatic online sampling
- · Analytical performances:
 - · Specific, linear and very sensitive to sulfur compounds
 - · Results validation by automatic standard injection
 - · Long term stability using detector installed in reservoir
- · 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
 - · No cylinders required thanks to internal calibration tube and gas generators
- · Automatic control with process device
- · Intelligents system with tunable and interactive alarm levels
- Powerful VISTACHROM Chromatotec® software:
 - Remote monitoring & injection control
 - · Full traceability with on board archiving of results and chromatograms

Options

- · MODBUS RTU communication protocol
- One modul for 4 x Analog output 4-20 mA or 0-10 V
- 24 V power supply for transportable analyzers
- · Multiple stream selector (2 to 10).
- airmopure (XXX031) or nitroxychrom (XXX913CS)
- CALIB with DMS permeation tube
- Explosion proof version Exp or Exd for ATEX, IECEx, Zone 1 and 2 and also for CSA C1D2
- · Internal electric heater and/or cooler for temperature regulation of the Exp/Exd cabinet with thermal insulation
- · Liquid sample system with purge for Sulfurs extraction from liquid phase (XXPurge ED Ex)

Product technical specifications

Compounds Analysed:

· H2S, TOS (total of mercaptans and sulfides) and TS by sum (H2S + TOS)

Detection Limit:

- H2S/TOS TS MEDOR® ppb: 5 ppb H $_2$ S (7 μ g/m³) H2S/TOS TS MEDOR® ppm: 0.1 ppm H $_2$ S (0.1417 mg/

Detection Range: H2S / TOS / TS

- 0/10, 0/100 or 0/1000 (ppb or ppm)
- · Low % with HC sampling valve

Relative Standard Deviation:

- RSD < 3% on concentration over 48H.
- RSD < 0.6% on retention time over 48H.

Cycle Time:

- H2S / TS result in 2 min for 0-3 ppm range
- · H2S / TS result in 5 min for higher range

Linearity:

• > 0.995 for all compounds

Storage / Transfer of Results:

- · Hardware storage
- MODBUS communication protocol (optional)
- · 4-20mA (optional)

Gas supply:

- Carrier: Dry air or N2 (3 bars): 5 ml/min.
 CALIB: in continuous 50 ml/min. (option)
 CALIB during validation ~ 250ml/min (option)
 Pneumatic valve 90ml/commutation

Power supply:

- Main (230V / 115V 50/60Hz)
- 24V battery (optional)

Electrical consumption:

• 150 VA

<u>Dimensions and weight:</u>

Rack: 4582 mm 19"

- Height: 222 mm (5U)
- Width: 482mm
- Depth: 600 mm
- Net weight: 20 Kgs

Wall mounted box:

- Height: 800 mm (1300 mm if XXPurge ED Ex is included)
- Width: 600 mm
- Depth: 300 mm
- Net weight: 40 Kg (50 Kg if XXPurge ED Ex is included)

To order:

H2S/TOS TS MEDOR® inbuilt computer - 5U (XX022) **Model:**

M51022-TS

Rack or wall mounted





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 ☐ in



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