ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

H_2S

SO_2

Total Reduced Sulfur

Odor Index

DMS

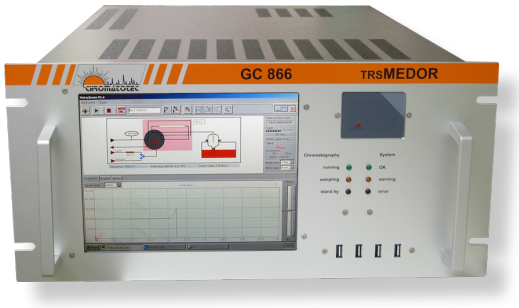
DMDS

Me-SH

Et-SH

TRSMEDOR®

ppm (M54) or **ppb** (M52)
Online analysis and monitoring of odorous sulfur compounds



Model: M52022 (rack version)

Model: M52022 (wall mounted version)

On-line applications:

Fence line
Fermentation process
Deodorization process
Fugitive emission

Targeted compounds:

Standard version: H2S / SO2 / MM / EM / DMS / DMDS / DES
Upon request: IPM / TBM / NPM / MES / 2BM / IBM / NBM / THT

Main markets:

WWTP / Refineries / Petrochemicals / Gas process sites
Ambiant / Industrial air monitoring
Odor impact management
TRS measurement

SCAN or CLICK ME

Standards:

ISO 19739:2004, DIN 51855/7
ASTM D5504-20, ASTM D7493-22 & D7165-22
US EPA Method 16 b

Certifications:

GOST, ATEX, IECEx, QPS

TURN KEY SOLUTION 24 7 365

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.

Updated: October 2025

TRSMEDOR®

ppm (M54) or **ppb** (M52)
Online analysis and monitoring of odorous sulfur compounds

Description:

The TRSMEDOR® is an autoGC-ED (MEDOR® Electrochemical wet cell Detector) for the analysis and monitoring of sulfur compounds in air: H_2S, Mercaptans, Sulfides.
Two versions exist according to levels of concentration expected:

- The TRSMEDOR® ppm
- The TRSMEDOR® ppb

Principle:

- Automatic sampling using a loop linked to sampling pump
- Automatic loop injection on metallic capillary column
- Isothermal gas chromatograph
- Detection of all compounds eluting from the column performed by MEDOR® Detector: Electrochemical wet cell Detector which is SSD Sulfur Specific Detector.
- Signal provided by reaction between the wet cell electrolyte and the sulfur compounds

Key points:

- Automatic calibration/validation of the data, with embedded permeation tube
- 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
- Intelligent system with tunable and interactive alarm levels

- Powerful VISTACHROM Chromatotec® software:
  - Remote monitoring & injection control
  - Full traceability with on board archiving of results and chromato-grams
  - QC Set up and control of threshold alarms
  - Data export by MODBUS / 4-20 mA / 0-10 V
  - Time stamp results

Options:

- Multiple stream selector (up to 16 streams with one analyzer)
- 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
- Calculation modules (Average / Statistics / Odor unit OU e/m3 and more)
- Automatic data transfer through: Module for 4 outputs 4-20mA / Modbus RTU or TCP IP / MGS1
- **Nitrogen** or air generator
- 24 V DC power supply
- Electric selection valve to reduce air consumption
- Wall mounted box XXX934
- Automatic tank filling
- Sealproof detector

Technical Specifications:

Reduced sulfur compounds analysis:

- Speciation and Total Reduced Sulfur by sum (TRS): H2S, SO2, DMS, MM, DES, DMDS, EM compounds

Detection limits* for H2S, SO2, DMS, MM, EM:

TRSMEDOR® ppm LDL ≤ 0.1 ppm

TRSMEDOR® ppb ≤ 1 ppb
*more sensitive analyzers available upon request with special application

Range (adjustable depending on application):

- 0/10 or 0/100 or 0/1000 (ppb or ppm)
- Calculation: Odor Index, Total Sulfur, Total mercaptans

Relative Standard Deviation:

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

Cycle Time for the following different analyses:

- **H2S, SO2, MM, EM, DMS, DMDS, DES** **600s**
- With special application following compounds can be added: IPM, TBM, NPM, 2BM, IBM, NBM, MES, THT and THT **1200s**

Supervisor:

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

Linearity:

- > 0.995 for all compounds

Communication:

- Ethernet, remote control

Gas supply:

- Carrier: Dry air or N2 (3 bars): ≤ 4 ml / min.
- CALIB: in continuous ~ 50 ml / min.
- CALIB during validation ~ 250ml/min for M52 configuration
- Pneumatic valve 90ml/commutation

Power supply:

- Main: 230V 60Hz or 115V / 50Hz
- In case of power loss, the instrument will restart automa-tically

Electrical consumption:

- 150 VA

Dimensions and weights:

Rack: 19" (5U)	Wall mounted box:
• Height: 222 mm	• Height: 800 mm
• Width: 482mm	• Width: 600mm
• Depth: 660 mm	• Depth: 300 mm
• Net weight: 22 Kg	• Net weight: 40 Kg

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

To order:

	Model:
TRSMEDOR® ppb inbuilt computer 5U with CALIB	M52022
TRSMEDOR® ppm inbuilt computer 5U with CALIB	M54022

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice

To contact us: sales@chromatotec.com

NORTH AMERICA
Houston - USA

EUROPE
Bordeaux- FRANCE

ASIA
Beijing - CHINA