

TRSMEDOR®

ppm (M51) or ppb (M52)

Online analysis and monitoring of odorous sulfur compounds



Model: M52022

On-line applications:

Fence line
Fermentation process
Deodorisation process
Fugitive emission

Targetted compounds:

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

Main markets:

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

Standards:

ISO 19739:2004, DIN 51855/7
ASTM D 7493-08

Certification:

GOST

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.

H₂S

SO₂

Total
Reduced
Sulfur

Odor
Index

DMS

DMDS

Me-SH

Et-SH

Description:

The TRSMEDOR® is an industrial gas chromatograph for the analysis and monitoring of sulfur compounds in air: H₂S, Mercaptans, Sulfides.

Two versions exist according to levels of concentration expected:

- The TRSMEDOR® ppm
- The TRSMEDOR® ppb

Principle:

- Automatic sampling using a loop
- Loop injection by automatic valve on the column
- Isothermal gas chromatograph
- Detection of all compounds eluting from the column performed by Chromatotec's wet cell sulfur specific detector
- Signal provided by electrochemical 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 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, 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 chromatograms
 - 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 analyser)
- Modeling software with weather station for live odor/chemical impact
- Explosion proof Exp box
 - ATEX Zone 2: Ex II 3G Ex pz IIC T4
 - CSA international Class 1 Div 2, group B,C & D
- Calculation modules (Average / Statistics / Odor index and more)
- Automatic data transfert through: Module for 4 outputs 4-20mA / Modbus / MGS1
- Nitrogen or air generator
- 24 V DC power supply
- Electric selection valve to reduce air consumption

Technical Specifications:

Reduced sulfur compounds analysis:

- Speciation and/or Total Reduced Sulfur: sum (TRS)

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 TRS, mgS/m³ ...

Relative Standard Deviation:

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

Cycle Time for the following different analyses:

- | | |
|---|-------|
| • H ₂ S/TS | 120s |
| • H ₂ S, SO ₂ , MM, EM, DMS, DMDS, DES, IPM | 600s |
| • H ₂ S, SO ₂ , MM, EM, DMS, DMDS, DES, IPM
TBM, NPM, 2BM, IBM, NBM, MES and THT | 1200s |

Supervisor:

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

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

Electrical consumption:

- 150 VA

Dimensions and weights:

- Rack: 19" (5U)
- Height: 222 mm
- Width: 482mm
- Depth: 660 mm
- Net weight: 22 Kg

To order:

TRSMEDOR® ppb inbuilt computer 5U with CALIB
TRSMEDOR® ppm inbuilt computer 5U with CALIB

Model:

M52022
M51022

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

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