ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

H_2S*

SO_{2}*

sulfides

Odor Index

DMS

DMDS

Mercaptans

Me-SH

Et-SH

airmoMEDOR®

ppt and **ppt** (M53)
Online analysis and monitoring of odorous sulfur compounds

Model: M53022 (rack version)

Environment:

Monitoring of urban and non-urban pollution
Monitoring of industrial nuisance
Deodorization process
Fugitive emission

Targeted compounds:

Standard version: MM / EM / DMS / DMDS / DES
Upon request: IPM / TBM / NPM / MES / 2BM / IBM / NBM
With loop option: H2S / SO2 in ppb

Main markets:

WWTP / Refineries / Petrochemicals / Gas process sites
Ambiant / Industrial air monitoring
Odor impact management
Impurity in pure gas (CO2 / CH4 / H2)

SCAN or CLICK ME

Standards:

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

Certifications:

GOST, ATEX, IECEx, QPS

24 7 365 TURN KEY SOLUTION

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.

** With Loop option*

Updated: October 2025

airmoMEDOR®

ppt and ppt (M53)

Online analysis and monitoring of odorous sulfur compounds

Description:

The airmoMEDOR® is an automatic gas chromatograph (autoGC) for the analysis and monitoring of trace amounts of Methyl-Mercaptan, Ethyl-Mercaptan, Di-Methyl-Sulfide, Di-Methyl-Di-Sulfide and Di-Ethyl-Sulfide by electrochemical wet cell detection (MEDOR® technology).

Principle:

- Automatic sampling and concentration using an absorbant trap.
- Desorption from the trap and injection into a metallic capilliary column.
- Isothermal gas chromatograph.
- The detection of all compounds eluting from the column is performed by an Electrochemical wet cell Detector which is Sulfur Specific Detector (SSD). This detector is using MEDOR technology.
- 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 at ppb or ppt level on a daily basis in standard
- 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 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 48 streams with one analyzer)
- Modeling software with weather station for live odor/chemical impact (XXXDISP)
- Explosion proof version Exp 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:

Sulfur compounds analysis: 5 compounds

- In standard: MM, EM, DMS, DMDS and DES
- With loop option: H2S and SO2 in ppb range
- In option: IPM, TBM, NPM, MES, 2BM, IBM and NBM

Other compounds on request

Detection limits:

- DES and DMS < 150 ppt (0.15 ppb)
- DMDS, MM and EM < 50 ppt (0.05 ppb)
- H2S and SO2 option < 5 ppb

Standard Detection Range:

- 0 to 100 ppb
- Other range on demand
- 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:

- **MM, EM, DMS, DMDS, DES** **900s**
- **With H2S and SO2 option** **2400s**
- **With IPM, TBM, NPM, 2BM, IBM, NBM and MES option** **1800s**

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
- Pneumatic valve 90ml/commutation

Power supply:

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

Electrical consumption:

- 150 VA

Dimensions and weights:

Rack: 19" (5U)

- Height: 222 mm
- Width: 482mm
- Depth: 660 mm
- Net weight: 22 Kg

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

To order:	Model:
airmoMEDOR ppt - without computer - with peltier, dryer and CALIB	M53000 Trap
airmoMEDOR ppt - computer included - with peltier, dryer and CALIB	M53022 Trap

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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