

# **ONLINE ANALYTICAL SOLUTIONS EXPERTS**

GAS ANALYZER GC 866

H25\*

50<sub>2\*</sub>

sulfides

Odor Index

DMS

DMDS

Mercaptans

Me-SH

Et-SH

# airmo MEDOR®

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 D 7493-22 & D7165-22

#### **Certifications:**

GOST, ATEX, IECEx, CSA, CSA international



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.

# airmo MEDOR®

# ppt and ppt (M53)

# Online analysis and monitoring of odorous sulfur compounds



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 CSA C1D2
- · Calculation modules (Average / Statistics / Odor unit OU e/m3 and
- 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)</li>
- DMDS, MM and EM < 50 ppt (0.05 ppb)
- H2S and SO2 option < 5 ppb</li>

#### 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</li>

#### Cycle Time for the following different analyses:

- · MM, EM, DMS, DMDS, DES
- · With H2S and SO2 option
- · With IPM, TBM, NPM, 2BM, IBM, NBM and
- MES option

#### Supervisor:

· Embedded computer Windows® based with LCD display

900s

2400s

1800s

<u> Model:</u>

· 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**

airmoMEDOR ppt - without computer - with peltier, dryer and CALIB

airmoMEDOR ppt - computer included - with peltier,

M53022 Tran dryer and CALIB

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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