

Chroma S - COS

A specific sulphur compounds analyser



Model: C51000-COS

H₂S / COS / SO₂ / MM / EM / DMS / DMDS / DES / CS₂
All mercaptan species
All sulphide species

Chroma S-COS applications:

Process Quality:

Odorant analysis & monitoring
DeSulfurisation / Deodorisation processes
Catalyser protection
Sulphur in Natural Gas
Sulphur in Pure CO₂

Air monitoring:

Emission analysis & monitoring
Indoor & Outdoor analysis
Transportable field based analysis

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.

Chroma S-COS

A specific sulphur compounds analyser



Description:

Chroma S-COS is a fully automatic isothermal gas Chromatograph for the analysis & monitoring of sulphur compounds.

Principle:

The gas sample comes through the sampling loop. Range is linked to the size loop and electronic amplification. Then the sample is injected into the column for separation. A controlled temperature oven allows selection the ideal temperature according to the application. The temperature setting is isothermal at 35°C.

Features:

Detection is achieved by a photometric detector double flame.
No quenching with the double flame
We have linearization by compounds
The identification of the compounds is based on their Retention Time = RT = elution from the column
Automatic data validation with internal calibration using a DMS permeation tube.

VISTACHROM® software:

Sequence with methods for: sample(s) / zero air / CALIB
The VISTACHROM software enables the user to visualize and store data on a computer. Computer = XXX015 or 022 is needed
It provide comfortable utilities to recalculate, calibrate and export data and to set-up measurement. Software allows the calculation of retention time, area, mass or concentration profiles/TREND.

Options:

- A MODBUS / communication protocol
- One module 4x analog output 4-20 mA or 0-10 V
- Hydrogen and Zero Air Generator
- Multiple stream selector (2 to 10)
- Nitrogen generator XXX912
- Dilution system
- Heated line
- Valve to control cylinder

Product technical specifications:

Total Sulphur compounds analysis:

- H₂S, mercaptans, sulfides, COS, SO₂, CS₂
- CS₂ is not analysed by the Medor range
- Speciation and/or TOTAL Sulfur analysis

Detection limits (*performance guaranteed with Chromatotec generators)

with loop = 250 µl and amplification 2

- 14 ppb for H₂S/SO₂/ MM/EM/DMS/DES/COS
- 8 ppb for DMDS & CS₂

Detection range:

ppm or ppb : amplification 1&2

- 0,01 to 10 mg/m³ or 0 to 600 mg/m³
- % / ppm / ppb level depends on compounds
for ex H₂S = 0,01 to 10 mg/m³ = 7 ppb to 7 ppm

Relative Standard Deviation:

- RSD < 5% on concentration over 24 hrs
- RSD < 1% on Retention Time over 24 hrs

Results:

- Hardware storage in XX022 or XXX015
- MODBUS communication protocol (optional)
- 4-20mA one module for 4 outputs (optional)

Data Management:

- Full storage of chromatograms & results
- All analyses date & time stamped individually

Cycle Times:

- 10 mins in standard

Gas Supply: input 1/8" Swagelok

- Sample inlet: for 80 ml / min and 1 atmosphere (20°C)
- Cylinder Calibration inlet at 80 ml/min
- H₂ at 2 bars for 70 ml/min
- Air for detector at 3 bars for 80 ml/min
- Air for carrier gas at 3 bars for 5 ml/min
- For calib, air at 50 ml/min in continue and during calibration one cycle by day at 300 ml/min
- Pneumatic valve 90 mL/min commutation

Power Supply:

- Main: 230V / 50Hz or 115 / 60Hz

Electrical consumption:

- Average: 100 VA
- Peak: 200 VA

Dimensions and weight:

- Rack: 19" - (5U)
- Height: 220mm
- Width: 482mm
- Depth: 600 mm
- Net weight: 17 kg

To order:

Chroma S-COS 4U
Needs a 5U supervisor (ref. XXX015)
Chroma S-COS 5U

Model:

C51000-COS
C51022-COS

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

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