

# Chroma S

Online monitoring & analysis of  
Sulfur compounds by GC/FPD  
Sulfur Specific Detector (from ppb to ppm)



Model: C51022 (5U)

Targetted compounds:

Standard Version: SO<sub>2</sub> / CS<sub>2</sub> / H<sub>2</sub>S / Mercaptans (Methyl-SH / Ethyl-SH...) sulphides (DMS / DMDS / DES...)

Upon request: Isopropyl-SH / Terbutyl -SH

COS optional: ChromaS-cos configuration

Main markets:

Stack Emission Monitoring  
CEM - Continuous Emission monitoring  
Ambient Air Monitoring  
Waste Water Treatment Plant  
Gas odourisation & deodourisation  
Impurities in Pure Gas (CO<sub>2</sub>, CH<sub>4</sub>...)  
TRS measurement

Standards:

ISO 19739:2004

*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: July 2017

H<sub>2</sub>S

SO<sub>2</sub>

CS<sub>2</sub>

Mercaptans

TOTAL Reduced  
Sulfur (TRS)

COS

# Chroma S

Online monitoring & analysis of Sulphur compounds by GC/FPD



## Description:

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

## Principle:

- Continuous sampling
- Sample is injected into column oven for separation
- Controlled oven selects optimum temperature based on application
- Detection achieved by a sulphur specific **dual flame photometric detector**

## Features:

The double flame ensures no quenching occurs

- Automatic linearization of compounds
- Identification of compounds is based on their retention time (Elution from the column)
- Automatic data validation as standard with the internal permeation tube

## VISTACHROM® software:

The software developed by Chromatotec® allows:

- Remote monitoring
- Full traceability through archiving of results and QC
- Set up and control of threshold alarms
- Export of data MODBUS / MGS1 / 4-20mA / 0-10V

## Options:

- Automatic data transfer through:
  - Modbus or MSG1 communication protocol
  - Analog 4-20mA or 0-10V output
- Hydrogen Generator
- Zero Air Generator
- Multiple stream analysis with Multiplexer
- Dilution system
- Heated lines
- **N2 Generator**
- Calibration with internal permeation tube

## Product technical specifications:

### Compounds analysed:

Specific sulphur compounds analysis  
H2S, Me-SH, Et-SH, Isopropyl-SH, Npropyl-SH, 2-butyl-SH, Terbutyl-SH, DMS, DES, DMDS, COS, CS2 ...

### Detection limits with loop 500 µL

- 4 ppb double Sulphur Compounds like DMDS, CS2 ...
- 7 ppb single Sulphur Compounds (H2S DMS ...)

### Detection range (selectable ppm / ppb)

- 4 ppb to 5 ppm (Low Range)
- 100 ppb to 100 ppm (High Range)

### Relative Standard Deviation:

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

### Data Management:

- Full storage of chromatograms & results
- All analysed dates & times stamped individually

### Cycle Times:

- Cycle times are dependant on the application  
Example: \* H2S plus COS - 200 secs  
\* Total Sulphur - 600 secs

### Gas Supply:

- Carrier Gas - Air or N2 3 bar (5mL/min) 1/8"
- Sample Inlet - 1 Bar or ambient pressure (airmopump)
- Detector - H2 at 2 Bar (70 ml/min) 1/8"  
- Air at 3 bar (80 ml/min) 1/8"

### Power Supply:

- Main: (230V / 50Hz) or (115V / 60Hz)
- Battery: 24V (as option)
- Consumption: 250W (+50W for computer)

### Dimensions and Weight:

- Rack: 482 mm (19")
- Height: 222 mmm (5U)
- Depth: 600mm
- Weight: 22 kg (With integrated computer)

### To order:

Chroma S  
Chroma S - COS (calib included)  
integrated computer: XXX022  
internal calibration: XXX931

### Model:

C51000  
C51000-COS  
XXX022  
XXX931

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

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