CHROMATOTEC® GROUP

ONLINE GAS ANALYZER EXPERTS

GAS ANALYZER GC 866

Freon

Benzene

Hydrofluoro-chlorocarbons

Acetone

CO2

Toluene

Siloanes

auto GCMS 866

Analysis of up to 123 compounds from PAMS / TO15 / biogenic VOCs / Oxygenated VOCs in combination with airmoVOC and/or chroma FID

Example of mini-cabinet integration

SCAN or CLICK ME

Environnement

Urban/Non urban area pollution control
Indoor measurements
BTEX / PAMS / CE analysis
Plant / process emissions

24 7 365 TURN KEY SOLUTION

Process

Industrial Hygiene
Fence line monitoring

Other applications

Wastewater plant, Purge and trap (method 502-2 or 524), Ambiant air control (PAMS and TO14)

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.

Updated: March2023

auto GCMS 866

Analysis of up to 123 compounds from PAMS / TO15 / biogenic VOCs / Oxygenated VOCs in combination with airmoVOC and/or chroma FID

Description:

autoGCMS is a combination of two robust and miniaturised instruments, airmoVOC and/or ChromaFID and Det QMS, which allows quantification and identification of chemicals from high ppm to low ppt levels (depend on autoGC configuration) for VOCs, organosilane, odorants compounds.
autoGCMS integrate gas generators and calibration system for operation without any cylinder (in compliance with ISO 17025 for Benzene).

The analyzer is tested more than two weeks in our quality control department and then delivered and installed by our engineers. Once the instrument is set and running, the operators can easily control the air quality.

Vistachrom and Vista MS software enable users to view and store data on an industrial computer. It provides user friendly utilities to recalculate, calibrate and export data and to configure the measurement.

KEY POINTS :

- Design to couple with 1 or multiple gas chromatography systems
- Miniaturization, sensitivity, mobility and flexibility are its main features. Everything, from primary vacuum pump until detector and electronics are in a 19“ in rack 12U.Complete system in compact cabinet with less than 1m^2.
- Flexible analysis system for a broad range of applications
- Full automatic operation and easy to operate.
- Outstanding analytical performance
- Measurement of main components and trace components in gas mixtures in one step
- Measurements of chemical reactive and corrosive gas components possible
- Excellent long term stability and reproducibility of the analytical results
- High availability of data and automatic validation (at ppb or ppm level) thanks to internal permeation tube
- Low cost of ownership due to low maintenance
- Air monitoring by online Trap GC/FID/MS
- Identification of unknown compounds in SCAN mode with NIST library from ppt range
- Remote control installed and configurated into the computer for easy operation from remote location using internet connection
- Powerfull 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
  - Time stamp results
- Stand By mode during transport in mobile van with 24 V DC option for very fast analysis when arrived on site
- Restart of the system in less than 60 minutes

Options :

- On-line results are transmitted via a MODBUS / JBUS or MGS1 communication protocol
- Analog output: 4-20 mA or 0-10 V
- Multiple streams selector with up to 48 streams
- Purge and Trap for liquid samples
- Second airmoVOC or chromaFID for more compounds or future measurements
- 24 V DC power supply
- Specific inlet for sampling bag
- Alarm if instrument default by MODBUS or 4-20 mA

Technical specifications

Analyser :
- 1-300 amu
- 6x100 mm rod-system with pre filter
- Faraday cup (high concentrations - % and for service)
- SEM dynode (low concentrations - down to ppb)

Detection limit :
- Direct MS < 50 ppb for Benzene
- auto GCMS: after airmoVOC C6 C12 expert <10 ppt for Benzene and after chroma FID <10 ppb for Benzene

Detection range :
- With airmoVOC from 0.01 ppb until 10000 ppb
- With chroma FID from 10 ppb until 100 000 ppb
- 7 decades dynamic range 0,1 ppm – 100 % with direct MS

Mass Axis Stability :
- > 0.2 UMA/year

Relative Standard Deviation for auto GCMS mode:
- RSD < 3 % on concentration over 48H
- RSD < 0.3% on retention time over 48H

Measuring speed / cycle times :
- 4 ms – 60 s (in standard)
- From 2 min for fast GCMS to 60min for trap GCMS of more than 100 compounds

Supervisor:
- Full result storage (data and chromatogram)
- Embedded computer Windows® based with LCD display
- 128 GB of Hardware storage on SSD memory
- 4 USB Connecting Port
- Two RS-232 ports
- Display: 10” TFT Color LCD
- MODBUS RTU / JBUS communication protocol

Gas supply:
- H2 (FID and carrier gas): 30 ml/min (supply 2 bar ; 1/16”double ferrule
- Air (FID) : 180 ml/min (supply 3 bar ; 1/8”double ferrule
- Sample supply (sample pump) 1/4”double ferrule
- Pneumatic valve 90ml/commutation

Libraries :
- Chromatotec VOCs library based on NIST spectrum (for GC coupling)
- Full NIST library in option

Results :
- Data Storage (timestamp)

Power supply and power consumption
- Main (230V / 115V 50 Hz/60Hz)
- 1000 to 1730 Watt

Dimensions and weight :
- 19” cabinet: 18U to 38U
- Width: 600 mm
- Depth: 800 mm
- Height: from 1070 mm to 1885 mm
- Net weight: 55 Kg to 170 Kg

To order : autoGCMS 866 **Model :** A21022-MS (airmoVOC) / A23022-MS(airmoVOC Expert) / C31022-MS(chromaFID)

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

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