

airmoSCAN_{xPERT}: VOC

Trap GC-MS / FID system

Turnkey solution for continuous analysis of
Volatile Organic Compounds (VOC) BTEX and Dioxine Precursors

PAMS

DIOXINE
PRECURSORS

TO 15

TO 14

502.2/524

airmoVOC C6C12

Supervisor

Mass spectrometer

airmoVOC C2C6

H₂ generator

Zero air generator

Calibration system



Main applications:

Ambient air monitoring / Clean room
Impurities / contaminants quantification
Odor/odorants quantification
Transportable unit in mobile van for different site survey

Targetted compounds:

Molecules listed in Methods:
PAMS 56, TO 14, TO 15, 502.2/524
More than 120 VOCs



Chromatotec® is specialized in VOC, Sulfur and permanent gases analysis down to ultra trace levels (% , ppm, ppb, ppt).
Please visit our website for more details

Updated: March 2021

Description:

airmoSCAN_{xPERT} is a combination of two robust and miniaturised instruments, airmoVOC expert and Det QMS, which allows quantification and identification of chemicals from low ppm to low ppt levels (VOCs, organosilane, odorants compounds).

airmoSCAN_{xPERT} 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.

Configuration:

- airmoVOC Expert (with internal cooling and MFC for sampling)
- Embedded PC with electronic and LCD display with VISTACHROM
- Process Quadrupole Mass spectrometer with internal vacuum pumps
- airmoPURE, ppt VOC air purifier, 3-4 Bar regulators, catalyst system and filters, max. 1 liter/min
- Hydroxychrom USB 4U (hydrogen generator) max. 100 ml/min
- airmoCAL MFC - CALIB with 3 permeation tubes (Benzene + 2 others) supplied zero/air/calib/cylinder

Key points:

- Air monitoring by online Trap GC/FID/MS
- Identification of unknown compounds in SCAN mode with NIST library from ppt range
- Low cost of ownership thanks to low maintenance
- Remote control installed and configured 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
 - Data export by MODBUS / 4-20 mA / 0-10 V
 - Time stamp results
- Mass axis stability < 0.2 uma / year
- 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
- Purge and Trap for liquid samples
- Second airmoVOC Expert for more compounds
- 24 V DC power supply
- Specific inlet for sampling bag
- Alarm if instrument default by MODBUS or 4-20 mA

Technical specifications:

Detection limit:

- Benzene down to 1 ppt with Trap GC/FID/QMS

Range:

with Trap GC/FID/QMS:

- ppt to ppb
- 0.5 to 45 µg/m³ (mCerts tests)

Relative Standard Deviation:

- < 0.3 % over 48 h (RT)
- < 3 % over 48 h (Conc)

Cycle time:

- 30 minutes (for very low concentrations)

Analysis mode:

- GC / FID
- QMS: SCAN mode / MID mode

Results:

- Data storage (timestamp)
- 4-20mA current output (option)
- MODBUS / JBUS or MGS1 communication protocol (option)

Supervisor:

- Embedded computer Windows[®] based with LCD display
- 32 GB of Hardware storage on SSD memory

Communication:

- MODBUS protocol included in standard

Gas supply:

- H₂ (FID and carrier gas): 30 ml/min (inlet 2 bars; 1/16" double ferrule)
- Air (FID): 180 ml/min (inlet 2 bars; 1/8" double ferrule)
- Sample inlet (vacuum pump) 1/4" double ferrule
- Pneumatic valve 90ml/commutation

Power supply:

- Main (230 V / 115 V 50 Hz/60 Hz)

Electrical consumption:

- 1730 Watt maximum

Dimensions:

- 19" cabinet: 18U to 38U
- Width: 600 mm
- Depth: 800 mm
- Height: from 1070 mm to 1885 mm

To order:

airmoSCAN_{xPERT}

Model:

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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