

airmoSCAN_{XP}ERT: VOC + PAH

Trap GC-MS / FID system

Turnkey solution for continuous analysis of
Aromatic Hydrocarbon Compounds (PAH) BTEX and Dioxine Precursors

PAH

DIOXINE

TO 15

PLUORENE

502.2/524

auto GC 866

Supervisor

Mass spectrometer

Gas chromatograph

H₂ generator

Zero air generator

Calibration system



Main applications:

Ambient air monitoring / Clean room
Impurities / contaminants quantification
Odor/odorants quantification

Targetted compounds:

Molecules listed in Methods:
PAMS 56, TO 14, TO 15, 502.2/524
More than 100 VOC

*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*

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airmoSCAN_{xPERT}

Trap GC-MS / FID system
Turnkey solution for continuous analysis of
Volatile Organic Compounds



Description:

airmoSCAN_{xPERT} is a combination of two robust instruments, airmoVOC expert and Det QMS, which allows quantification and identification of chemicals from % to low ppt levels (VOC, organosilane, odorants compounds, CO₂, NH₃). The complementarity of the instruments allows the monitoring of low concentrations in 30 minutes and/or the very fast detection of concentration changes at ppm levels.

airmoSCAN_{xPERT} is delivered with gas generators and calibration system (in compliance with ISO 17025 for Benzene).

The analyzer is tested more than one week 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 QUADSTAR 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
- Mass spectrometer with 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 - CALIB with 3 permeation tubes (Benzene + 2 others) supplied zero/air/calib/cylinder

Key points:

- Air monitoring by direct injection in the Mass Spectrometer or using the gas chromatography (GC FID or GC/MS)
- Heated selection valve GC
- Modem & remote control installed and configured into the computer
- 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:

- 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

Technical specifications:

Detection limit:

- Benzene down to 1 ppt with Trap GC/FID/QMS
- Benzene 500 ppb with direct injection with QMS

Range:

with Trap GC/FID/QMS:

- ppt to ppb
 - 0.5 to 45 µg/m³ (mCerts tests)
- with direct injection with QMS:
- 500 ppb to %

Relative Standard Deviation:

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

Cycle time:

- 30 minutes (for very low concentrations)
- 6 minutes (for fast analysis)

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" swagelock)
- Air (FID): 180 ml/min (inlet 2 bars; 1/8" swagelock)
- Sample inlet (vacuum pump) ¼" swagelock

Power supply:

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

Electrical consumption:

- 1730 Watt maximum

Dimensions:

- 19" cabinet: 1850 mm with wheels & lifting rings
- Width: 600 mm
- Depth: 800 mm
- Height: 1885 mm

To order:

airmoSCAN_{xPERT}

Model:

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

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