

D5

IPA

PGMEA

BTEX

TMSOH

D3

airmoTWA

TWA=Time Weight Average

Turnkey solution for continuous analysis of volatile chemical compounds in clean air room

Multiplexer and
calibration system

Det QMS

airmoVOC expert

H2 generator

Pumps

**Certified**

EN 14662-3

EN 15267-1

EN 15267-2

2013



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: March 2021

Description :

airmoTWA is a combination of two robust instruments, airmoVOC expert and Det QMS, which allows quantification and identification of chemicals from % to low ppt levels (VOCs, organosilane, solvents). The complementarity of the instruments allows the monitoring of low concentrations ppt or low ppb level in 30 minutes, fast detection in 6 minutes at ppb or low ppm, and/or the very fast detection in few seconds at ppm level with direct MS mode. airmoTWA is delivered with gas generators, calibration system (in compliance with ISO 17025 for Benzene) and multiplexer to be fully autonomous and automatic.

The analyzer is tested for 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 in the room.

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)
- Electronic and LCD display built into the analyser with VISTACHROM
- Quadrupole Mass spectrometer with oil free vacuum pumps
- MODEM & REMOTE CONTROL installed and configured into the computer
- Installation in a 19" cabinet = 160 + wheels + lifting rings
- Heated Multiplexer from 6 to 15 streams (more in option) in rack 19" (pump not included) airmoREL included in 1 analyser
- Multiplexer automatic control
- Sampling pump for all streams, needed with multiplexer
- airmoPURE for zero air, ppt VOC air purifier, 3-4 Bars regulators, catalyst system and filters, max. 1 liter/min
- Hydroxymchrom USB 4U (hydrogen generator) max. 100 cc/min
- airmoCAL MFC- CALIB with 3 permeation tubes (Benzene + 2 others) supplied zero/air/calib/cylinder/linearity check
- Heated Valve to select GC or direct ambient air measurement at the MS inlet

Key points:

- Air monitoring by online Trap GC/FID/MS
- Identification of unknown compounds in SCAN mode with NIST library on Vista MS software

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

Product technical specifications:

We analyze compounds from gas, water or solid samples

Gas analysis with TRAP GC/FID/QMS:

Analysis of VOC and other types of gas (D3, D4, D5, organosilane...)

Detection limit:

- Benzene ≤ 10 ppt

Detection range:

- ppt to ppb
- 0.5 to 45 $\mu\text{g}/\text{m}^3$ (mCerts tests on Benzene and VOC)

Relative Standard Deviation:

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

Cycle time:

- 30 minutes (for very low concentrations ppt or low ppb)
- 6 minutes (for fast analysis) ppb to low ppm

Analysis mode:

- GC = FID
- MS: SCAN / MID / MCD

Gas analysis with QMS:

Analysis of VOC and other types of gas (NH₃, CO₂...)

Detection limit:

- Benzene 500 ppb

Detection range:

- 500 ppb to %

Analysis mode:

- SCAN
- MID / MCD

Results:

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

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

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:
airmoTWA

Model:
A54022

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

To contact us: sales@chromatotec.com

NORTH AMERICA
Houston - USA

EUROPE
Bordeaux - FRANCE

ASIA
Beijing - CHINA