

# airmoVOC WMS

Monitoring of VOC in water - BTEX included  
Based on EPA\* 502.2 Method



Model: A25022

## Water markets

Finished drinking water  
Raw source water  
Drinking water  
Surface water  
Wastewater (head space / ppt)  
Rain water

## Air markets in option

Ambient air control  
Urban/Non urban area pollution control  
Indoor measurements  
BTEX/PAMS/CE analysis

## Process

Finished water  
Waste water / effluent



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.

Chlorobenzene  
STYRENE  
BTEX  
TRIMETHYLBENZENE  
TRICHLOROETHYLENE

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Surveillance of VOC in water - BTEX included

Based on EPA\* 502.2 Method



## Principle:

The airmoVOC WMS uses a valve with a sample trap. It also features a metallic capillary column.

- Miniaturization, sensitivity, mobility and flexibility are its main features.
- Everything from the sample port up to the data storage is integrated in a wall mounted box.
- Uninterrupted sampling with pre-concentration on absorbent tube
- Gas chromatograph with metallic column with programmable temperature gradient oven.

Pressure control of the carrier gas by piezo-valve.

- One week tested after production for quality control.

Vistachrom software enables the user to visualize and store data on a PC.

Furthermore it provides comfortable utilities to recalculate, calibrate and export data and to set-up measurement.

The software allows the calculation of retention time, area, mass or concentration profiles.

## Purge: for on line analytic instrument

- Based on EPA 502.2 Method
- 5 ml of water sample as standard or optional 25 ml sparger
- Purge with inert gas: ultra pure N2 (Ultra High Purity) – 40 ml/min
- Sampling time: 11 minutes
- Inlet calibration is easy to perform thanks to a low sample volume required only 5ml of water
- Dead volume < 15 mL (volume between water and trap)
- Bubbles with a diameter < 3 mm at the origin of the frit
- Automatic rinse

## Example of application

All VOC below can be analysed	N° CAS	All VOC below can be analysed	N° CAS
1,2-Dichloroethane	107-06-2	o-Xylene	95-47-6
Benzene	71-43-2	Isopropylbenzene	98-82-2
1,2-Dichloropropane	78-87-5	1,3,5-Trimethylbenzene	108-67-8
Trichloroethylene	79-01-6	1,2,4-Trimethylbenzene	95-63-6
Toluene	108-88-3	1,3-Dichlorobenzene	541-73-1
Tetrachloroethylene	127-18-4	1,4-Dichlorobenzene	106-46-7
Chlorobenzene	108-90-7	1,2-Dichlorobenzene	95-50-1
Ethylbenzene	100-41-4	1,2,4-Trichlorobenzene	120-82-1
* m-Xylene	108-38-3	1,2,3-Trichlorobenzene	87-61-6
* p-Xylene	106-42-3	Hexachloro-1,3-butadiene	87-68-3
Styrene	100-42-5		

## Options:

- DET QMS for online GCMS
- airmoVOC BTEX expert 1 ppt LDL
- Automatic validation and calibration with internal CALIB
- 24 V DC power supply
- Integrated hydrogen and zero air generators for autonomous analysers
- Multiplexer: 2 to 32 streams
- 1 stream for water and 1 stream for air
- Internal or external multipoint calibration and zero with CALIB MFC, XXXCYL MFC, airmoCAL PAH
- airmoVOC C6C16 for more VOCs and S VOCs
- Analog output 4-20 mA or 0-10 V

## Product technical specifications:

### Analysis by airmoVOC:

3 main solutions :

Up to 60 compounds with :

- 60 compounds : our Purge & Trap 2 GC FID
- 50 compounds : our Purge & Trap 1 GC FID
- 50 compounds : our Purge & Trap 1 GC PID
- BTEX and chlorine compounds

### Detection limit:

- < 0.001 µg/l for BTEX

### Detection range:

- 0.05 to 20 µg/l for surface water and finished drinking water

### Relative standard deviation (RSD):

- < 0.3% over 48h (Retention Time)
- < 3% over 48h (Concentration)
- < 10% for water analysis (Concentration)

### Base Line: Zero drift:

- < ±3%

### Linearity:

- R<sup>2</sup> > 0.99 on all 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

### Cycle time:

- 30 min or 60 min

### 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
- N2 (Purge): 40 ml/min (inlet 3 bars ; 1/8" double ferrule)
- Sample inlet (vacuum pump) ; 1/4 double ferrule
- Pneumatic valve 90ml/commutation

### Operation Temperature:

- Room with air conditioning: 10 to 25°c

### Purge:

- ZERO N2 analysis
- ZERO WATER analysis (Blank)
- Standard water analysis

### Power supply:

- Main: 230V / 50 Hz or 115V / 60 Hz

### Electrical consumption:

- Mean: 150 VA, Peak 360 VA

### Installation in a wall-mounted cabinet:

- Height: 1440mm
- Width: 600mm
- Depth: 300mm
- Net weight: 80 Kg

### To order:

airmoVOC WMS

### Model:

A25022

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

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