GAS ANALYZER GC 866

# airmoVOC WMS

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

Chlorobenzene

STYRENE

BTEX

TRIMETHYLBENZENE

TRICHLOROETHYLENE


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

24 7 365 TURN KEY SOLUTION

## 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.***

*Updated: March 2021*

# airmoVOC WMS

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 |
|---|---|
| 1,2-Dichloroethane | 107-06-2 |
| Benzene | 71-43-2 |
| 1,2-Dichloropropane | 78-87-5 |
| Trichloroethylene | 79-01.6 |
| Toluene | 108-88-3 |
| Tetrachloroethylene | 127-18-4 |
| Chlorobenzene | 108-90-7 |
| Ethylbenzene | 100-41-4 |
| * m-Xylene | 108-38-3 |
| * p-Xylene | 106-42-3 |
| Styrene | 100-42-5 |

| All VOC below can be analysed | N° CAS |
|---|---|
| o-Xylene | 95-47-6 |
| Isopropylbenzene | 98-82-2 |
| 1,3,5-Trimethylbenzene | 108-67-8 |
| 1,2,4-Trimethylbenzene | 95-63-6 |
| 1,3-Dichlorobenzene | 541-73-1 |
| 1,4-Dichlorobenzene | 106-46-7 |
| 1,2-Dichlorobenzene | 95-50-1 |
| 1,2,4-Trichlorobenzene | 120-82-1 |
| 1,2,3-Trichlorobenzene | 87-61-6 |
| Hexachloro-1,3-butadiene | 87-68-3 |
| *SUM of M+P Xylene* | |

## 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:

- $R^2 > 0.99$ 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***

To contact us: sales@chromatotec.com

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