

# **ONLINE ANALYTICAL SOLUTIONS EXPERTS**

# microVOC

Accurate, portable & user-friendly VOC analyzer



Benzene

Toluene

Ethylbenzene

Xylenes

Phenol

Acrolein

1.3 Butadiene

1.2.4 TMB





# Model: µ-VOC

# **Applications**

Public building occupational exposure verification Industrial hygiene measurement Chamber test studies Material emissions quantification Building management Concentration level continuous monitoring Field Campaing

# SCAN or CLICK ME



# **Standards**

IEC/EN 61010-1:2010 EMC: NF EN 61326-1:2013



Chromatotec® specializes in VOC, sulfur and permanent gas analysis at trace and ultra-trace levels (ppm, ppb, ppt).

Please visit our website for more details.

# microVOC

# Accurate, portable & user friendly VOC analyzer



# **Principle**

microVOC is a compact VOC analyzer which allows continuous and realtime qualification and quantification of benzene, toluene, ethylbenzene, xylenes in standards and other VOCs in options.

- · Field-portable design
- · Easy to use
- · Labour saving
- Exceptional Accuracy
- Highly sensitive
- · Real-time continuous monitoring
- · Smart, embedded software

# **Advantages**

## **User friendly**

- · Compact size and light weight
- · Deployment in less than 5 minutes
- Powered by either plug-in or battery
- · Minimal carrier gas consumption
- · Rapid calibration with gaseous BTEX mixture or only toluene
- Compatibility with canisters and FLEC® System
- · Easy to deploy and use for field campaigns
- · Loop and trap configuration are available on the same instrument.

## Rapid & accurate measurements

- Short analysis time: 10 minutes
- Detection limit lower than 1 ppb for benzene with loop and 10 ppt with trap

### Analysis programming, monitoring & data logging

- · Color touch screen with standard/expert user modes
- · Method programming capability (more than 20 compounds per method possible)
- · Results in near real-time
- · Data logging for quality control

## Issued from French academic research

- Innovation from CNRS & Strasbourg University
- · Patented microfluidic device

## **Options:**

- Sampling Teflon line (OD: 1/8"; L: 150 cm)
- Other VOCs like: Methanol, Phenol, Acrolein, 1-3 Butadiene, ETO, THT, TBM, Naphtalene and other on request
- · Under Development: Model TCD in option for H2, O2, N2, CO, CO2. CH4...
- · Printed manual
- · 3G module: For remote data visualization stored internally and control of the analyser (require ethernet cable+ PC/Laptop+ network coverage)
- · XXXCYL: External Gas Calibration Inlet
- XXXZERO: Automatic method to do zero analysis with internal
- · Special application with pre-concentration trap to increase sensitivity down to ppt levels.

Name: microVOC

microBTEX microVOC-Trap Model:

μ-VOC µ-BTEX µ-Trap

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

# **Product technical specifications**

## **Detection limit**

#### Loop

- Benzene & Toluene: ~ 1 ppb
- Ethylbenzene & m+p-Xylenes: ~ 2 ppb (with default settings) / o-Xylene: ~ 4 ppb

### Trap

- Benzene~10 ppt with pre-concentration trap.
- Toluene, Ethylbenzene, m+p-Xylenes, & O-xylene:

# Configuration & cycle time

# Loop

- BTEX: 10 min
- Benzene + 1.3 butadiene = from 10 to 15 min
- Benzene = 5 min (3 min in option)
- · Other application on demand

# **Trap**

BTEX 15 min

# Detection range

#### Loop

- 0-1000 ppb
- 0-10 ppm / 0-100 ppm / 0-1000 ppm

- 0-15 ppb
- 0-100 ppb with other PID lamp

#### Measurement

- · Detector: PID
- · Temporal resolution 0.1 seconds
- Response time : One measurement every 10 minutes (default settings)
- Analysis sample condition: Gas T°: 5 40°C; Gas RH: 20
  - 90%; Atmospheric pressure
- · Calibration : Gaseous BTEX mixture or gaseous Benzene

### Sampling

- 200µL loop or carbon trap
- Gas flow rate: between 10 to 100 mL min<sup>-1</sup>
- · Carrier gas: Nitrogen 4 bar inlet pressure and 2.5 mL
- Supply inlet connection: 1/8"

# Instrument supply

- Power supply: Input 100 240V ±10%; 1.5 A max; 47 -63 Hz - Output 15V; 6.67A 100W
- · Autonomy on battery: Up to 4h
- · Power consumption : max 75 w

#### General

- Dimensions (analyzer): 32×28×15 cm; 6.0 kg
- Dimensions (suitcase): 56 x 45 x 25 cm; 18 kg
- Operational conditions: 0 40°C / 20 80% RH
- Storage conditions: -20°C +40°C / 0 85% RH
- Display: 7" TFT display; resolution 800 x 480; integrated touchscreen
- · Autonomy: BTEX version: 21 days for Gas -4 hours for battery. Can be reduced for different applications.

# Software & communication

- · Embedded software: Expert and standard modes; Data saving on microSD card 32 GO with more than 13 months in continue data storage capacity; Analysis setting, launching and monitoring; Defects and maintenance management.
- USB : Data transfer (area, retention time, concentration)
- · Ethernet: Communication and remote control

- · Carrier case with handle and integrated pre-cut foam for
- Power supply & cable; Particle filter; Filter strainer; Carrier case with pre-cut foam; 1/8" inox caps with associated ferrules; Analysis column; 58L Nitrogen bottle with adapted manometer; Teflon tube and associated ferrules for carrier gas; Stylus.

# Other feature

· Comptability: Canister & FLEC® system