μ-VOC



# **ONLINE ANALYTICAL SOLUTIONS EXPERTS**



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# 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
- · Results in near real-time
- · Data logging for quality control

### Issued from French academic research

- Innovation from CNRS & Strasbourg University
- · Patented microfluidic device
- · Supported by EU and innovation programs

#### **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 electro valve
- · Special application with pre-concentration trap to increase sensitivity down to ppt levels.

Name:	Model:
microVOC	µ-VOC
microBTEX	µ-BTEX
microVOC-Trap	μ-Trap

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice To contact us: sales@chromatotec.com



# Product technical specifications

## **Detection limit**

#### Loop

- Benzene & Toluene: ~ 1 ppb Trap
- Benzene~10 ppt with pre-concentration trap.
- Ethylbenzene & m+p-Xylenes: ~ 2 ppb (with default settings) / o-Xylene: ~ 4 ppb

# 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
- Trap
- 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 min<sup>-1</sup>
- · 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

#### **Genera**

- 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

#### Mobility and accessories

- · Carrier case with handle and integrated pre-cut foam for accessories
- 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

