

Benzene

IAA

BTEX

Epichlorohydrin

MIBK

# chromaPID

Automatic monitoring of benzene and/or other VOCs  
Loop injection : ppb or ppm level

Model: C91022 - 5UModel: C91022 - Exp

## Main applications:

Time-Weighted Average: 1 ppm  
Short Term Exposure Limit: 5 ppm

## Targetted compounds:

Benzene (TWA: 1 ppm)  
Iso Alcohol Amines  
BTEX, Styrene, Cyclo-hexane  
1,3 Butadiene, Iso-Propyl-Benzene (Cumene)  
Epichlorohydrin

## Main markets:

Indoor / Outdoor Air quality monitoring  
Industrial hygiene  
Fence line  
Benzene in green house  
Refinery / Petrochemical site



## Certification:

ATEX, IECEx, CSA, CSA international



Chromatotec® is specialized in VOC, Sulfur and permanent gases analysis down to ultra trace levels (% , ppm, ppb, ppt).  
Please visit our website for more details

Updated: May 2020

# chromaPID

A GC PID for automatic monitoring of benzene and/or other VOCs

Loop injection: ppb or ppm level



## Description:

The chromaPID is an autoGC-PID (Photo Ionisation Detector) for the analysis and monitoring of Benzene and or other VOCs in ambient air. Different configurations exist depending on the application and concentration range:

- chromaPID ppb for 0-1 ppm
- chromaPID ppm for 0-10 / 0-50 / 0-100 ppm

## Principle:

- Automatic sampling using a loop
- Automatic loop injection on metallic capillary column
- Isothermal gas chromatograph
- Detection of all compounds eluting from the column performed by PID detector 10.6 eV.
- Self cleaning of the lamp for high stability

## Key points:

- Continuous monitoring with automatic online sampling
- Analytical performances: Specific, linear and very sensitive to Volatile Organic Compounds
- Results validation by automatic standard injection
- Low gas consumption, can be reduced in option
- More than 10 years data storage
- No cylinders required thanks to internal calibration tube and gas generators
- Automatic control with process device
- Intelligent system with tunable and interactive alarm levels
- Powerful VISTACHROM Chromatotec® software: Remote monitoring & injection control
- Full traceability with on board archiving of results and chromatograms
- QC Set up and control of threshold alarms
- Data export by MODBUS / 4-20 mA / 0-10 V
- Time stamp results

## Options:

- Wall mounted cabinet
- MODBUS RTU or TCP/IP communication protocol
- One module for 4 x Analog output 4-20 mA or 0-10 V
- 24 V power supply for transportable analyzers
- Multiple stream selector (2 to 10).
- Nitrogen generator nitroxychrom (XXX913CS)
- CALIB with Benzene permeation tube
- Explosion proof version Exp for ATEX, IECEx, Zone 1 and 2 and also for CSA C1D2
- Internal electric heater and/or cooler for temperature regulation of the Exp cabinet with thermal insulation
- Liquid sample system with purge for Sulfurs extraction from liquid phase (XXPurge ED Ex)
- Temperature gradient GC oven for multicomponents analysis
- Touch screen for wall mounted cabinet

## Product technical specifications:

### Analyzer compound:

- Benzene

### Lower detection limit:

- Benzene : 6 ppb (ppb version) or 0.1 ppm (ppm version)
- TVOC: 1 ppb

### Detection range and linearity:

- Benzene : 0-10 (ppm or ppb), 0-100 (ppm or ppb), 0-1000 (ppm or ppb)

### Relative Standard Déviation:

- < 0,3% over 48 h (retention time)
- < 3% over 48 h (concentration)

### Cycle time:

- 3 to 15 minutes

### Supervisor:

- Embedded computer Windows® based with LCD display
- 128 GB of Hardware storage on SSD memory

### Communication:

- Ethernet, remote control

### Gas supply:

- Air or Nitrogen: 6-10 ml/min (inlet 3 bar; 1/8")
- Sample inlet (vacuum pump) 1/4"
- Internal calibration : 50 ml/min for ppm range
- Pneumatic valve : 90 ml/commutation

### Gas supply for Exp cabinet:

- If air used for dilution: 30l/min in continue

### Operation Temperature:

- Room with air conditioning: 10 to 35°C

### Power supply:

- Main: 230 V / 110 V or 50 Hz / 60 Hz
- Battery: 24 V (option)

### Electric consumption:

- Average: 150 VA ; Peak: 360 VA

### Dimensions and weight:

#### **Rack version: 19" (5U)**

- Height: 222 mm
- Width: 482 mm
- Depth: 660 mm
- Net weight: 20 kg

#### **Exp version for hazardous area**

- Height: 800 mm
- Width: 600 mm
- Depth: 300 mm
- Net weight: 40 kg

## To order:

chromaPID inbuilt computer 5U with CALIB  
chromaPID Ex px certified ATEX zone 1  
chromaPID Ex px certified IECEx zone 1  
chromaPID Ex px CSA C1D2

## Model:

C91022  
C91022-ATEX-Z1  
C91022-IECEx-Z1  
C91022-CSA-C1D2

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

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