

**C<sub>2</sub>H<sub>2</sub>****CH<sub>4</sub>****VinylChloride****Methyl Ethyl Ketone****Ethyl lactate****Solvents****1,3 Butadiene****CH<sub>2</sub>Cl<sub>2</sub>**

# chromaFID

A GC/FID instrument for automatic, continuous analysis of Volatile Organic Compounds (20 ppb to ppm)



Model : C31022

## Applications of the chromaFID:

### Industrial Health & Safety (interior emissions):

- Pharmaceutical plant
- Heavy Chemicals
- Micro-electronics manufacture

### Emission monitoring:

- Incinerators
- Solvents & paints
- Petrochemical
- VOC treatment (Filtration...)

### Other applications:

- Environnement
- Industrial Processes...

*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.*

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A GC/FID instrument for automatic, continuous analysis of Volatile Organic Compounds (20 ppb to ppm)



## Description:

The ChromaFID is a gas chromatograph dedicated to the analysis of VOC's from 20 ppb to ppm levels. The analyser enables the continuous monitoring of the concentration of VOC compounds from C1 to C12.

## Principle:

- Automatic, continuous sampling through a sample loop
- Injection of the loop sample into a temperature regulated metallic capillary column. The temperature & pressure of the column is regulated by the operating software.
- The detection of the VOC compounds eluted from the column is performed by an FID detection system.

## Characteristics:

The chromaFID is equipped with an integrated PC including of the Vista-chrom program. Before delivery, the instrument is tested and validated for a minimum of 1 week by our QC department.

The instrument is robust, compact, very low maintenance and offers excellent result quality : repeatability, linearity, stability and sensibility (ppb).

## VISTACHROM® software:

The software developed by Chromatotec® allows:

- Remote monitoring
- Full traceability through archiving of results and QC
- Set up and control of threshold alarms
- Export of data MODBUS / MGS1 / 4-20mA / 0-10V

## Options:

- Internal calibration
- Automatic data transfer through : 4-20mA / Modbus / MGS1
- Hydrogen Generator
- Zero Air Generator
- Multiple stream analysis with Multiplexer
- Dilution system
- Heated lines
- Analysis of particular VOC's such as : Epichlorohydrine / MIBK / IPA...

## Product technical specifications:

### VOC analysis (20 ppb to ppm):

*Depending on the chosen application*

- BTEX
- Chlorinated solvents : dichloromethane, 1,2-dichloroethane
- Vinyl chlorides
- Aldehydes
- C1 to C6
- C6 to C12

### Detection limit:

- Benzene : 20 ppb or 64 µg/m<sup>3</sup>

### Detection range:

- 20 ppb to ppm levels

### Relative Standard Déviation:

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

### Results:

- Full result storage (data and graphics)
- Output 4-20 mA (option)
- Communication protocol MODBUS / JBUS or MGS1 (option)

### Cycle time:

- 3 up to 30 minutes depending on the application

### Gas supply:

- H2 (FID and carrier gas) : 30 ml/min (supply 2 bars ; 1/16")
- Air (FID) : 180 ml/min (supply 3 bars ; 1/8")
- Sample supply (sample pump) 1/8"

### Volume sampled:

- 50 to 500 µl (programmable)

### Power supply:

- Main: 230V / 115V or 50 Hz / 60Hz
- Battery: 24V (option)

### Electric consumption:

- Average: 150 VA ; Peak : 360 VA

### Dimensions and weight:

- Rack: 19" (5U)
- Height: 222 mm
- Width: 482 mm
- Depth: 600 mm
- Net weight of analyser: 22 kg

### To order:

chromaFID (without special application)

### Model:

C31022

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

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