

# Chroma CO

On-line Auto CG FID with cataliser after columns to analyse CO / CH<sub>4</sub> and CO<sub>2</sub> in air or gas



Integrated computer version (5U high) : C11022

Industrial hygiene / Process / Environment / Emissions

### Ambient air:

CO / CH<sub>4</sub> and CO<sub>2</sub> in ambient air  
Toxic compounds monitoring: **HCHO** and **Acetaldehyde (AA)** in option

In air (CO = around 300 ppb) (CO<sub>2</sub> = 380 ppm and CH<sub>4</sub> =1800 ppb)

### Process / Pure gas:

Methane / CO / CO<sub>2</sub> in pure gas  
Monitoring of CO in pure N<sub>2</sub>O  
Process manufacturing quality control

CH<sub>4</sub>

CO

CO<sub>2</sub>

HCHO\*

AA\*

\* in option

Chromatotec® is specialized 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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# Chroma CO



A gas analyser using flame detection with a catalytic methaniser after columns to analyse CO / CH<sub>4</sub> and CO<sub>2</sub> in air or gas

## Principle:

A 19' inch rack mountable chassis, 5U high. It has the ability to be used as a fully integrated system for automatic sample analysis as well as a transportable unit for use on various sites. Our application flexibility allows the chromaCO start up to meet the customer's specifications.

The CHROMA CO is an **isothermal industrial gas chromatograph** (isothermal column) dedicated to the analysis of CO/CO<sub>2</sub>/CH<sub>4</sub>/ in air or industrial hygiene or pure gas like N<sub>2</sub>. As a fully automatic instrument, it allows **unattended operation for commissioning 24/24**. The injection is made via a heated valve. **CO CH<sub>4</sub> CO<sub>2</sub> are separated by the column and CO and CO<sub>2</sub> are hydrogenated in CH<sub>4</sub> before the FID.**

- A valve regulates pure carrier gas.
- The instrument has a flame ionization detector FID.
- The detection limit is in ppb in standard.
- It is equipped with an internal microprocessor which runs all the analytical events (temperature, pressure injection, and detection and concentration calculations).

The Vistachrom software enables the user to visualize and store data on a computer. Furthermore it provides comfortable utilities to recalculate, calibrate and export data and to set-up measurement. The airmo TREND software allows the calculation of retention time, area, mass or concentration profiles. **CALCULATION AVERAGE can be made for better precision**

## Options:

On-line results are transmitted via :

- NMTHC ( + THC by calcul = NMTHC + CH<sub>4</sub> )
- HCHO application
- A Modbus / Jbus or BH protocol.
- Analog output 4-20 mA or 0-10 V.
- **Automatic validation**
- **Generator of purified air (air with THC in ppt).**
- **Oven gradient temperature**
- 24 V power supply.
- Multiple stream selector (2 to 6)
- Pressurised housing like Exp for installation in area 1..
- Available in version integrated computer – 5U (including ref. XXX022 Electronic and LCD display).
- **Gas generator H<sub>2</sub>/air/N<sub>2</sub>**

## Product technical specifications:

### CO/CH<sub>4</sub>/HCHO and CO<sub>2</sub> analysis:

- For information in air : CO = 300 ppb : CO<sub>2</sub> = 380 ppm and CH<sub>4</sub> = 1800 ppb

### Detection limit for CO CH<sub>4</sub> CO<sub>2</sub>:

#### ambient air:

- 50 ppb with H<sub>2</sub> (5.5)

#### pure gas:

- 50 ppb with N<sub>2</sub> (5.5)
- 5 ppb with N<sub>2</sub> purifier

### Detection range:

#### ambient air:

- 0 - 10 ppm (CO/CH<sub>4</sub>) & 0 - 1000 ppm (CO<sub>2</sub>)

#### pure gas:

- 0 - 10/20/50ppm

### Relative Standard Deviation at middle range :

- < 0.3 % over 48h (RT)
- < 2 % over 48 h (Conc.)

### Results:

- Data storage
- 4-20mA current output (option)
- Module for 4 output 4-20 mA current output (option)
- Modbus / Jbus or MGS1 communication protocol (option)

### Cycle time:

- 5 minutes for CH<sub>4</sub>/CO<sub>2</sub>
- 10 minutes for CH<sub>4</sub> CO CO<sub>2</sub>

### Gas supply:

- **N<sub>2</sub> as carrier gas for better sensitivity**
- H<sub>2</sub> (FID and carrier gas): 30 ml/min (inlet 2 bars 1/16" swagelock)
- Air (FID): 180 ml/min (inlet 3 bars; 1/8" swagelock)
- Sample inlet (vacuum pump) 1/4" swagelock

### Sample loop:

- Injection loop 0.5 or 1 or 2 ml ,depending of the range.

### Power supply:

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

### Electrical consumption:

- 250 VA

### Dimensions and weight:

- Rack 482 mm (19"), Height 177mm=4U, Depth 600mm 5U for C11022
- Weight: 20kg

### To order:

chroma CO (4U)  
Needs a Supervisor (5U)

### Model:

C11000  
XXX022

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

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