

chroma^{TID}NH₃ and Nitro organic compounds analyser

Model: C32000 4U if piloted by another GC/Vistachrom (5U with XXX022)

chroma^{TID} applications:**Industrial Hygiene**

0,1 to 10 ppm

Environment

ambient air at ppb

Process Follow Up

0,1 to 10 ppm

Emissions

ppm

Cemetery analysis

Toxic compounds monitoring: acetonitrile = Methyl cyanure
 Monitoring of solvent emissions, acrylonitrile = Ethene cyanure
 Quality control of manufacturing process

Waste Water Plant

amines (MA/DMA/TME/EA/DEA...)

Industrial area

Specifics amines from WWP and amines from petro chemistry

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.

Updated: April 2014

Total amines

NH₃

Methyl Amine

Ethyl Amine

Acetonitrile

Amines

acrylonitrile

TMA

Principle:

chroma^{TID} is an **isothermal industrial gas chromatograph specific** for the analysis of **Nitro compounds** in air (indoor or outdoor).
QC for industrial hygiene or pure gas like N₂/CO₂/O₂.
As a fully automatic instrument, the chroma^{TID} allows **un-attended operation the commissioning 24/24**.
The injection is made via a heated valve. The separation is achieved using a macro bore (0,53 mm) or a capillary column (0,2 mm), according to the application.
An electrical valve regulates H₂ carrier gas.
The retention time drift is less than 0,3 %. The detector of the instrument is heated.

Detection system is a thermoionic (ceramic) source heated by constant current and the obtained signal is transferred to an electrometer.

The instrument is equipped of an internal microprocessor which runs all of the analytical events (temperature, pressure, injection, detection and concentration calculations).

Calib - automatic calibration by permeation tubes

- With one permeation tube included regulated in temperature and in flow
- Method: Calib and measure in a sequence
- It is possible to start an immediate Calib by clicking on a button or starting Calib in the menu
- External calibration from bottled gases is possible in automatic on site or via remote communication
- Dilution by Nitrogen cylinder or generator

VISTACHROM[®] software:

The software developed by Chromatotec[®] allows to visualize and store data on a PC. Furthermore it provides comfortable utilities to recalculate, calibrate and export data and to set-up measurement.
The airmoTREND software allows the display (**TREND**) of retention time, area, mass or concentration profiles.

Options:

- On-line results are transmitted via a MODBUS / JBUS or MGS1 communication protocol.
- Modul 4 x analog output 4-20 mA or 0-10 V
- **Automatic validation with CALIB**
- **Oven gradient temperature**
- 24 V power supply
- internal ZERO/SPAN every 24H
- **Hydrogen and Nitrogen generators**
- Multiple stream selector (2 to 9 streams with one analyzer)

Product technical specifications:

Analysis 1 to 5 compounds:

- **Nitro Compounds**
- Methyl Amine and Ethyl Amine : Total amines

Detection limit:

- **Methyl Amine: 20 ppb**

Detection range:

- **20 ppb to ppm measurements with a 250 µl loop**

Relative Standard Deviation:

- < 0.3 % over 48h for RT
- < 3 % over 48h for area (Concentration)

Results:

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

Cycle time:

- Monitoring: 5 minutes (according to the application)
- Monitoring: 10 to 15 minutes

Gas supply (depending on application):

- H₂ (TID and carrier gas): 6 ml/min (inlet 2 bars; 1/16")
- air (TID): 50 ml/min (inlet 3 bars ; 1/8")
- Sample inlet (vacuum pump) 1/4"

Volume sampled:

- Injection loop : 250 µl in standard

Power supply:

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

Electric consumption:

- 150 VA

Dimensions and weight:

- Rack: 482 mm (19")
- Height: 177 mm; Depth: 660 mm (4U)
- Height: 236 mm; Depth: 660 mm (5U)
- Net weight of analyser: 20 kg

Ion source life time:

- Depending on application, ceramic ion source life time can be up to 3 month

To order:

chroma^{TID} (integrated computer 5U)

Model:

C32022

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

To contact us: info@chromatotec.com



NORTH AMERICA

CHROMATOTEC Inc.
18333 Egret Bay Blvd, Suite 270,
Houston TX 77058 - USA
Phone: +1 (281) 335 4944
Fax: +1 (281) 335 4943

EUROPE

AIRMOTEC AG SAS
15 rue d'Artiguelongue
33240 Saint-Antoine - FRANCE
Phone: +33 (0) 557 940 626
Fax: +33 (0) 557 940 620

ASIA

CHROMATOTEC Trading (Beijing) Co., Ltd.
Room 1806, Building 1,
Wanda Plaza, No.93, Jianguo Avenue,
Chaoyang District,
Beijing 100022 - CHINA
Phone : +86 (0) 105 960 3283