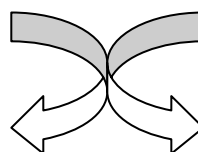


# CHROMA<sup>100</sup> DID

The continuous mode permanent gases monitor  
A highly automated system for routine field measurement of  
permanent gases on the range:

PPM



PPB

## Process

Quality control in pure gas

**Impurities in Hydrogen**

Substance tracer

Gas Input in tubing

### • Principle :

The CHROMA<sup>100</sup> DID is an automatic industrial gas analyser. The sample comes through the sampling **loop**. Then the sample is injected into an analytical column for separation. The system can use packed column. He is the carrier gas.

The first column allows to separate composite peak (H<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, CO), and the second column CH<sub>4</sub>, CO<sub>2</sub>. The temperature setting is **isothermal**. The automatic valve permits the sample's injection

Measuring principle of DID = **Discharge Ionisation Detector**.

High voltage accelerate pure helium atoms (purity > 6.0). Ionised helium atoms are continuously produced. These helium ions are better described as photons. These photons ionize the gas molecules with an ionisation potential. The ion current is continuously collected at a polarised electrode and amplified similarly to the FID application process.

The Vistachrom software enables the user 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 calculation of retention time, area, mass or concentration profiles.

### • Options :

On-line results are transmitted via :

- A MODBUS / JBUS or MGS1 communication protocol.
- Analog output 4-20 mA or 0-10 V.
- **Automatic validation**
- Multiple Stream selector (2 to 6)
- Argon analysis



Chromatotec is specialised in VOC, sulphur and permanent gases analysis  
at trace and ultra trace levels (ppm, ppb, ppt).

Feel free to visit our web site for more details:

<http://www.chromatotec.com>

Printed Matter Reference: tsp\_c81\_002e\_chroma100did\_090311\_w.doc

Ar

H<sub>2</sub>

CO

CH<sub>4</sub>

He

CO<sub>2</sub>

N<sub>2</sub>