ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

H2

He

CO

CH4

O2

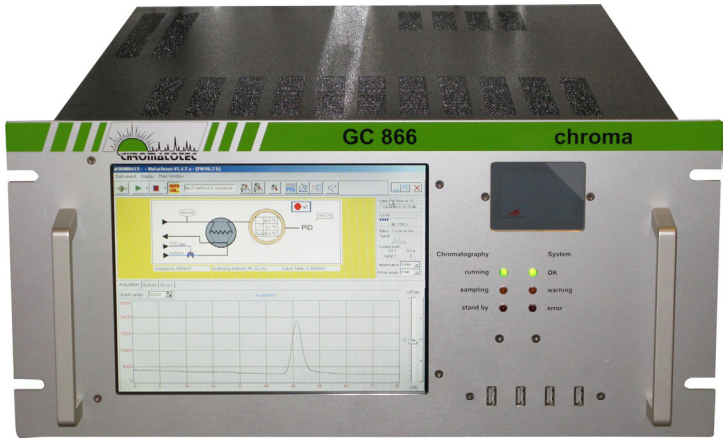
Neon

CO2

N2

chromARGON

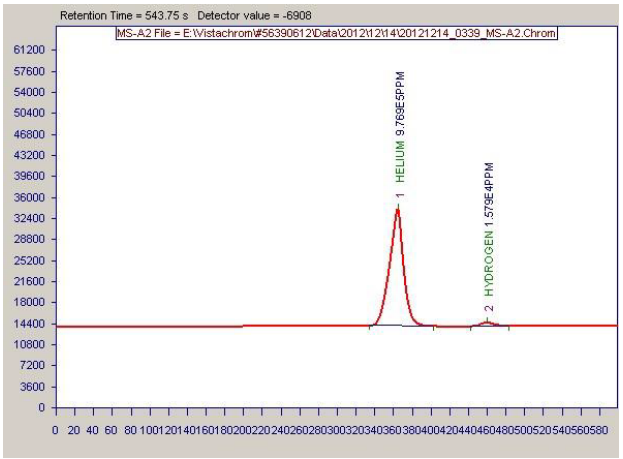
Universal Detector
Continuous permanent gases monitoring
Automated system for measurements in the range: ppm or %



Model: C41022

Applications of the chromArgon:

Pure gas quality control : UHP (Ultra High Purity)
Laboratory process
Fermentation control (no O2 and argon co-elution)
O2 / CO2 / CO control
Measurement of H2 impurities in He (1% in 99%)
Measurement of Neon / Hydrogen / Helium
CO / CO2 / CH4 / HCHO with methanizer and FID in option



SCAN or CLICK ME

TURN KEY SOLUTION 24 7 365

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: March 2024

chromARGON

Universal Detector

Continuous permanent gases monitoring

Automated system for measurements in the range: ppm or %

Principle:

The chromARGON is an automatic, industrial or laboratory gas analyzer. The temperature setting is isothermal. The sample comes through the sampling **loop**. Then the sample is injected into an analytical column (with an automatic valve) for separation. Different column can be used (e.g. packed column). After separation, the amount of each compound is measured using an universal detector, the catharometer.
An oven is installed in order to allow the **regeneration** (to avoid contamination) of the column at **250°C.**
A pressure safety is inserted just after the detector in order to protect its wires.

The catharometer detector:

The Thermal Conductivity Detector (TCD) can detect all kind of compounds. The Wheatstone bridge is made of 4 Tungsten-Rhenium wires. It works with **constant current** or **constant voltage**. With the detector, a thermal conductivity difference between the reference cell (carrier gas) and the measure cell (outlet of the column) is measured. This value is transferred to an electrometer and the generated signal is proportional to the compounds concentration in the sample. The signal is then transferred to the CPU board and the microprocessor processes the data (integration, mass or concentration calcul, peaks identification…).
The different parameters (data, chromatogram, integration report…) are **transferred via a RS-232** port and they are visualised and reprocessed with our VISTACHROM software.

VISTACHROM® software:

The software developed by Chromatotec® allows:

- **Remote control**
- Full traceability with on board archiving of results
- **Program to stop the detector filament** (to protect them) inside a sequence (e.g. column cleaning)
- Programation and control of threshold alarms
- **Ponctual (laboratory) or continuous measurement**
- Data export by MODBUS / JBUS / MGS1 / 4-20mA / 0-10V

Options:

- Gas cleaner
- Modul 4 x analog output 4-20 mA or 0-10 V.
- Alarms module
- **Automatic results validation**
- 24 V power supply
- **Explosion proof Exp box – Ex Specification Class1 Div2, groupC&D**
- Hydrogen and Nitrogen generator
- Multiple stream selector (2 to 10 streams with one analyzer)
- Carrier gas purificator
- **Sampling pump in 24V DC or airmoPUMP (XXX901 or XXX915)**
- Pressure and temperature measure
- **Mass Flow Controller** (MFC, in order to improve dilution precision and so calibration quality)

Product technical specifications:

Permanent and/or organic gas analysis:

- Neon, H2, He, O2, N2, CH4, CO, CO2, CHX…

Detection limit:

- Neon, H2 and He ≤ 2 ppm

Detection range:

- ppm to %. Depending on the options (loop and amplification)

Relative Standard Deviation: Repeatability

- RSD < 5% over 48h (concentration).
- RSD < 0.6% over 48h (retention time).

Results:

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

Cycle time:

- 10 minutes for H2 / He and for O2 / N2

Gas supply:

- Ar as carrier gas (inlet: 3.5 bar ; 1/16'' swagelock)
- Calibration inlet : 1 bar ; 1/16'' swagelock
- Sample inlet : 1 bar ; 1/16'' swagelock
- Pneumatic valve 90 mL/ commutation

Volume sampled:

- 0.1 to 2 mL depending on application and detection range

Power supply:

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

Electric consumption:

- Average : 100 VA; Peak : 200 VA

Dimensions and weight:

- Rack: 19'' (4U)
- Height: 177 mm
- Width: 482 mm
- Depth: 660 mm
- Net weight of analyser: 20 kg

If option C41022, rack 5U

To order:	Model:
ChromARGON (integrated computer 5U)	C41022
airmoPUMP	XXX901
airmoPUMP for 6 ways (need a multiplexor)	XXX915
ChromaCO (CO, CH4, CO2) for LDL in ppb	**C11000**

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

To contact us: sales@chromatotec.com

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