

Sion 4210 GC
Version Z.10.11
Power on successful

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STARO

Gas Chromatograph

- Sion 4210 GC -



Gas Chromatograph Instrument

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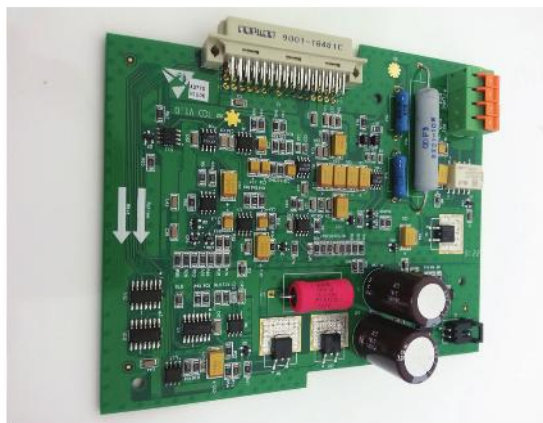
- The GC instrument has higher level features and performance than other devices sold in the market
- The instrument can contain up to two inlet ports and three detectors simultaneously with a simple, effective interface for full, comfortable operation
- The instrument can also hold up to four sampling units for gases including heating as well as an MSD detector interface connection
- The range of detectors that may be assembled is great and everything is according to the customer's requirements
- The instrument can serve as an excellent solution for laboratories in many different areas including pharmaceuticals, chemistry, petrochemicals, food, research, development, etcetera
- Sion has joined with leading companies abroad for the development and production of the instrument
- Sion is also developing the software interface to control the instrument and data processing software



Instrument Electronic Flow Control

- Sion 4210 GC -

- Up to 31 EPC channels for control of flow and pressure to inlet ports, detectors, and various auxiliary gases.
- Pressure control precision to 0.01 PSI.
- Atmospheric pressure compensation sensor to set off the instrument's location and installation changes.
- Up to three pressure or flow changes that may be controlled as a function of time in every run.
- All inlet port gases and the detectors are completely controlled electronically.
- One may choose, at any given moment, the auxiliary gases and the carrier gases (He, N₂, H₂, and Ar).
- At every inlet port one may choose control of the pressure or flow of the gases.
- With the instrument, one may receive the gas flow in a column or pressure from the moment column data are introduced to the instrument and control them.



Automatic Injection Unit

- Sion 5210 GC -

Equipped with a touch screen for full control in injection methods and injection order.

Easy and comfortable to operate.

Simple installation with every existing GC instrument.

Aesthetic , innovative design with excellent performance
High quality automation

With high stability and maximum precision

Technical Data:

- Supports a broad range of syringes - 1, 5, 10, 25, 50, 100, 250, 500 µl
- Tray with up to 16 samples.
- Two different solvents to rinse the syringe.
- Injection volume 0.1 - 250 µl (Syringe dependable).
- It is possible to keep up to 16 differnt injection methods in the sampler.
- Possible to inject up to 99 repeats from each sample.
- Up to 20 rinses per inject from each solvent in each injection.
- Viscosity delay for each sample is 0 ~ 120 sec.
- Delay befor and after injection for each sample is 0 ~ 300 sec.



Supported Detectors and Technical Data

■ (FID)
Flame
Ionization
Detector

■ (TCD)
Thermal
Conductivity
Detector

■ (ECD)
Electron
Capture
Detector

■ (FPD)
Flame
Photometric
Detectors

■ (MSD)
Mass
Selective
Detector

ECD

- Electronic Flow control.
- Equipped with anode purge to Prevent Contamination.
- Up to 400 °C operating Temperature.
- Makeup gas types: Argon/5% methane, Nitrogen.
- Radioactive source: 15 m Curie 63Ni.
- MDL: <0.04 Pico g/sec lindane.
- Dynamic range: >10⁴ with lindane.

FPD

- Electronic pressure / flow control.
- Up to 250 °C operating Temperature.
- MDL: <20 Pico g S/sec, <0.9 Pico g P/sec with Dodecane thiol / Tri butyl phosphate Mixture.
- Selectivity: 10⁵ grS / grC, 10⁶ grP / grC.
- Dynamic range: >10³ S, 10⁴ P with Dodecane thiol / Tri butyl phosphate Mixture.



FID

- Electronic pressure Flow control.
- Available for packed or capillary Columns.
- Up to 450 °C operating Temperature.
- FID Flame-out detection.
- MDL: <5 Pico graham carbon/sec as Propane using N2 carrier.
- Linear dynamic range: <±10%, 10⁷ with N2 carrier.
- Possible Data acquisition rate: up to 200 Hz.

➤

TCD

- Electronic pressure Flow control.
- 400 °C maximum operating Temperature.
- MDL: <400 Pico graham propane/mL He Carrier.
- Linear dynamic range: 10⁵ (± 5%).



Types of Inlet Ports Supported by the Instrument

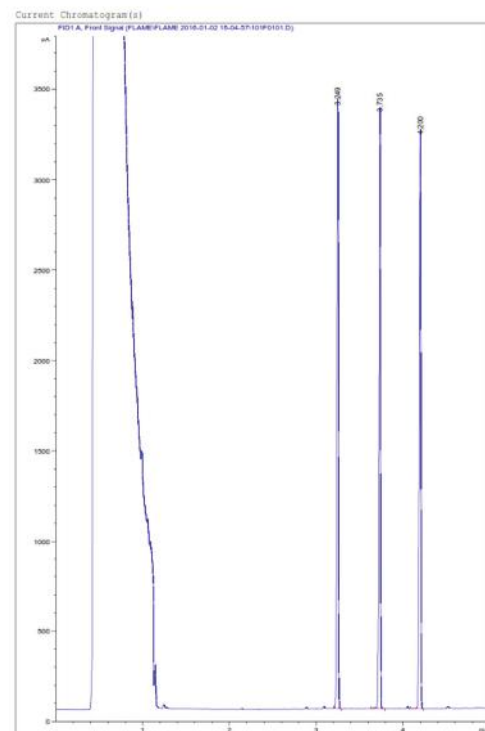
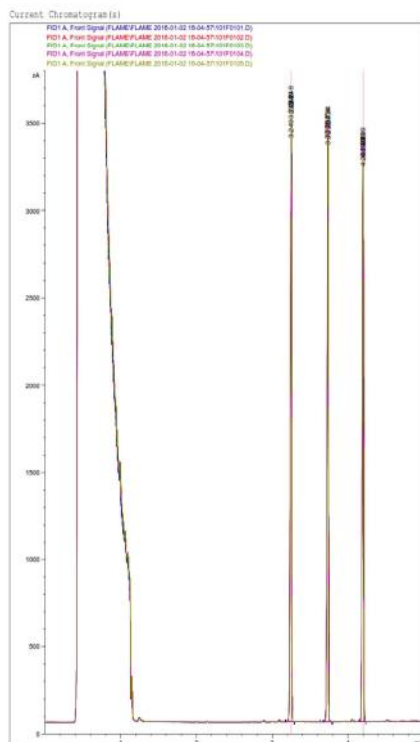
Packed injection
port – (Packed)

Split/splitless capillary inlet – (S/SL)

Cool Injection System – (CIS)



Service drawer for storage of regular care equipment



Technical Data for Inlet Ports

CIS

- Electronic pressure/flow control.
- Up to 600 °C operating temperature.
- Two temperature program ramps.
- Temperature ramp rates
0.1–720 °C/min.
- Pressure setting range: 0–100 psi.
- Total flow setting range: 0–200 mL/min N₂;
0–1,000 mL/Min H₂ or He.
- Cryogenic cooling fluid: LN₂ (Down to -160 °C) or
LCO₂(Down to -65 °C).

S/SL

- Electronic pressure/ flow control.
- Up to 400 °C operating temperature.
- Pressure setting range: 0–100 psi.
- Total flow setting range: 0–200
mL/min N₂; 0–999 mL/min H₂ or He.

Packed

- Electronic pressure / Flow control.
- Up to 400 °C operating temperature.
- Pressure setting range: 0–100 psi.
- Total flow setting range:
0–100 mL/min.
- Adapters included for 1/4-in, 1/8-in.
packed columns And 0.530-mm
capillary columns.

Communication

- Lan Interface





MAKE IT POSSIBLE

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