

R 490 MICROGC

GAS ANALYZER IN 19-INCH RACK

Designed for industrial applications

The needs of industry are not those of the laboratory. To adapt to the environment of a control room or production unit, SRA Instruments proposes a 19-inch rack-mounted MicroGC.

The analyzer can be configured as required with the same modularity and ease of replacement as the standard MicroGC range.

In its rack-mountable version, the MicroGC can integrate several analytical modules, customized sampling systems, alarm contacts, optional analog or digital data transmission and can be remotely controlled from a master computer.

Several accessories can be added on the rear panel, such as filter elements, flowmeter or stream selector.

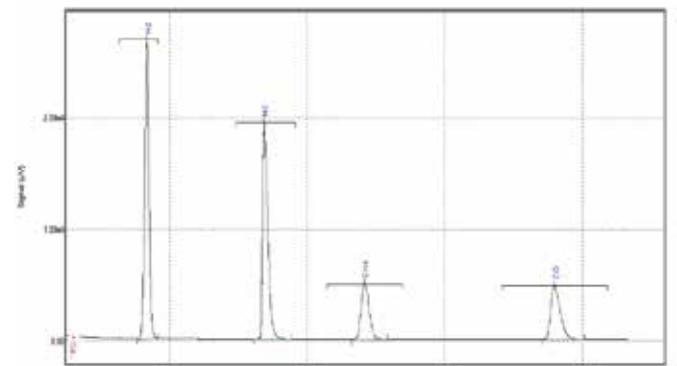
The R 490 MicroGC is controlled by Soprane II software.



R 490 MicroGC SRA Instruments



Main page of Soprane II software



Example of separation on Molsieve column

Soprane II software

This dedicated MicroGC software, developed by SRA Instruments, allows you to extend the possibilities of your instrument by programming analysis sequences, managing several flows, monitoring trends and automatically performing specific calculations.

R 490 MicroGC
Your industrial gas analyzer 

Field of application :

- Natural and refinery gas
- Syngas
- Fuel cell
- Permanent gases
- Hydrocarbons
- Catalysis, fermentation process, ...



▶ Modular



▶ Automation



▶ Upgradeable



▶ Integration in cabinet



▶ Fast



▶ Custom sampling capabilities

R 490 MICROGC

TECHNICAL SPECIFICATIONS

General specifications :

Dimensions (mm) : H 177 (4U) ; D 436 ; W 467 (482) (19")
Weight : 6.5 kg with 2 modules

Environmental conditions :

Operating temperature : 0 °C to 50 °C
Relative humidity : 0 to 95 % non-condensing
Altitude : up to 2000 m max.
Use : indoor or enclosed

Utilities :

Power supply input : 220 - 240 VAC, 50 to 60 Hz
Power consumption : 10 A max.
Carrier gas : 1 or 2 carrier gas at 5.5 bar
Carrier gas type : Helium, Argon, Nitrogen, Hydrogen
Carrier gas consumption : 10 mL/min/module
Carrier gas purity : 99.9995% minimum

Sampling :

Sample : gas or vapour samples only
Sample pressure : ATM to 14.5 psi max (1 bar).
Sampling pump : up to 2 independent sampling pumps
Stream selector (option) : up to 4 electrovalves. Optional driving of external pump.
Other conditions on demand, contact us.

Chromatographic specifications :

Injector type : Micro-machined injector with no moving parts; variable volume; optional heated injector and backflush capability
Injection volume : 1 to 10 µL, software selectable.

Column : Capillary from 200 µm to 320 µm, stationary phase depending on the application.

Column temperature : Isothermal operation, from ambient +15 °C to 180 °C.

Detector : Micro-machined thermal conductivity detector (µTCD) using Wheatstone bridge design (internal volume 200 nL).

Linear dynamic range : 10⁶ for most of the compounds
Repeatability : variable volume <0,5 RSD % at constant pressure and temperature.

Communication :

Ethernet : RJ45 on the back panel.

I/O :

Output : configurable relay outputs.
Optional analog signals : 4-20 mA inputs/outputs.
Digital inputs : 0 - 10 V, external start or sampling default (optional), etc ...

Driving software :

Acquisition and processing software : Soprane II, french, english.
Operating system : Windows 7 - 32/64bits or higher.
Modbus (Ethernet / RS) : configurable.

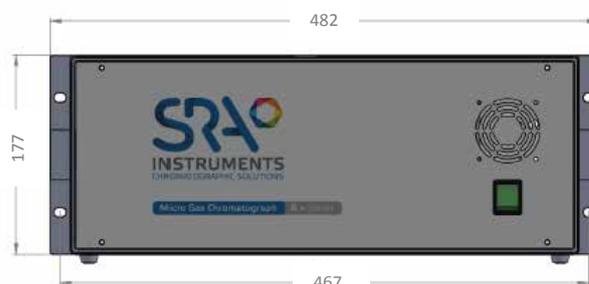
Specific calculation :

Option : NGA/RGA ISO-6976, LPG ISO 8973/7941/6578, combustion gas, customized.

Applications :

Compounds analysed : permanents gases (He, H₂, O₂, N₂) ; hydrocarbons C₁ to C₁₀, H₂S, CO₂, CO, COS, N₂O, mercaptans, VOC, BTEX, etc ...

Application fields : natural gas, refinery gas, fuel cell, catalysis, biogas, fermentation process, process gas, etc ...



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