



## R490 MICROGC TECHNICAL SPECIFICATIONS

### General specifications :

2 models available :

Dimensions (mm) : W 467 (482) (19") ; H 177 (4U) ; D 436

Weight : 6.5 kg with 2 modules

and

Dimensions (mm) : W 482 (19") ; H 225 (5U) ; D 464

Weight : 9 kg with 3 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 : 99.9996 % 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, 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 : 10<sup>6</sup> 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, H<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>) ; hydrocarbons C<sub>1</sub> to C<sub>10</sub>, H<sub>2</sub>S, CO<sub>2</sub>, CO, COS, N<sub>2</sub>O, mercaptans, VOC, BTEX, etc ...

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



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