



INSTRUMENTS
ANALYTICAL SOLUTIONS

SRA R990 POWERFUL AND VERSATILE MICRO GAS CHROMATOGRAPH

An attractive design and a wide potential of use, there are the main features of the new **R990** designed by SRA Instruments. This powerful gas analyzer uses the latest gas chromatography miniaturization technologies, developed by Agilent Technologies, to perform gas mixture analyzes in less than 3 minutes. This μ GC is perfect to be used in the laboratories, in research or production departments with a particular aptitude to continuous analysis of process gases in gas distribution systems, pilot plants or small reactors.

The system, available in desktop or rack cabinet version, is compact in its hardware organization but modular in the choice of the analysis configuration. **R990** incorporates an on-board computer with Windows 10 operating system and chromatographic and process software; a bright and large LCD video with touch screen offers an easy-to-use feature necessary for those who have to manage the start of analysis, instrumental diagnostics and measurement results.


The micro gas chromatograph can be easily integrated into



a system thanks to the various communication and automation possibilities available in the basic version, such as modbus outputs, relays and analogue inputs / outputs. The analytical architecture consists of modules containing injector, column and microTCD detector, installed in parallel and suitably chosen in number (up to 4) and in the type of column to solve the separation of the components.

The new Agilent architecture allows the replacement of the individual components (injector, column and detector) of the chromatograph directly on-site.

Applications



Application fields:

- > Analysis of fuel mixtures:
- > natural gas
- > hydrogen
- > biogas and biomethane

R990 is perfect for the analysis of fuel mixtures, such as natural gas, hydrogen, biogas and biomethane, where it is used for the measurement of the composition, calorific value and impurities present in gases.

R990

Specifications

R990 Main Chassis

Number of analysis channels: 1 to 4

Number of internal pumps: 0 to 2

Sample inlet

- 1 or 2
- 1/16" stainless steel inlets (Swagelok type)
- 1 bar relative maximum

Carrier gas

- 1 or 2
- 1/8" stainless steel inlets (Swagelok type)
- 5.5 bar relative maximum

Vents

- 6 maximum
- 1/8" brass inlets maximum (Swagelok type)

Panels

- 1 front panel led for R990 status (ready, running, alarm)
- 1 front panel standby switch
- 1 back panel MAIN switch

Digital input/output

- SUBD-25 female connector
- 2 x Digital input
- 2 x Digital output
- 2 x output relays (24V 1A maximum)
- Voltages available: 1 x 5V - 1 x 12V (500mA max)
- Remote signal: 1 x start in - 1 ready in - 1 ready out - 1 start out

Weight

- Channel configuration + OBC: 18 kg
- Channel configuration + OBC: 20 kg
- Channel configuration + OBC: 22 kg
- Channel configuration + OBC: 24 kg

Size: 448.9 x 221.45 x 495.5 mm

Power supply: 300W max / 100V -240V / 50-60Hz

Without On Board Computer

1 x Ethernet

3 x USB (1 front panel and 2 back panel) usefull for

- Wifi
- Dongle licence SRA Soprane CDS Software
- Storage (Mobile or Pro Licence)

1 x SUBD-9 Male: for Vici Valve - RS232 COM1

If Pro licence: 2 x SUBD- 9 Male COM 2 et COM 3 RS232/

RS422/RS485 ModBus

With On Board Computer

Intel core i3 Processor

SSD 256GB

RAM 8GB

Windows 10 and SRA Soprane CDS Software

Ports (Connected to the on board computer)

- 1 x Ethernet
- 1 x USB 3.2 front panel or 2 x USB 2.0 back panel
- 2 SUB-D 9 male RS232 - RS422 - RS485 (VICI valve or ModBus via Soprane CDS)
- 1 SUB-D 9 male RS232 (VICI valve or ModBus via Soprane CDS)
- 1 VGAs

Option

Analog input

- Screw connectors with 4 analog input 0-10V or 0-20mA (individually configurable)

Membrane filterer Genie

(with or without sulfinert coating)

- Genie 170
- Max pressure 34.5bar
- Type 6 Membrane – 54°C maximum
- Inlet – outlet: 1/16" (Vici type)

Front panel touchscreen (OBC mandatory)

- Touchscreen 7" TFT – 24 bit – 1024 x 600 pixels
- *Display results*
- *Start analysis*

Pressure sensor

- Sample inlet pressure measurement
- Range: -1 à 1.5 bar
- Accuracy: ± 60 mbar

Sample inlet

- 3 ways valve
- Multi position valve

Digital or analog input/output

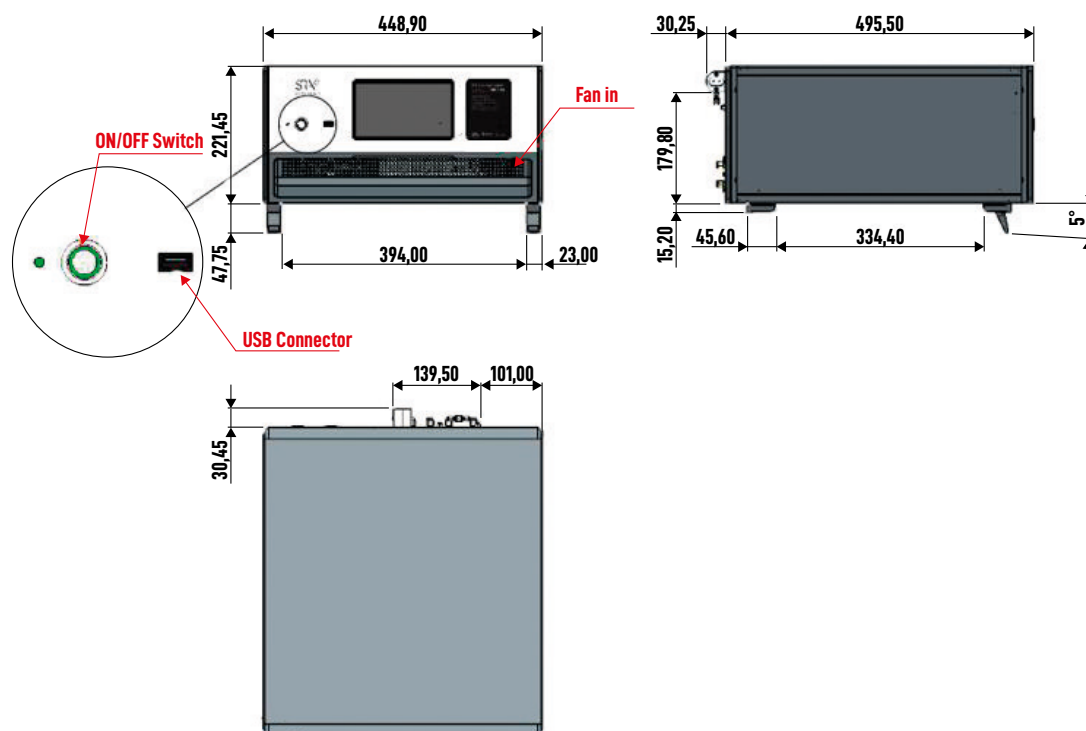
(choose between following possibility)

- 4 x 4-20mA output
- 4 x output relay (5A – 250V)
- Customized configuration on demand



R990

Interface plan



- SRA INSTRUMENTS SpA**
 Via alla Castellana, 3 | 20063 Cernusco S/N (MI) | Italy
 Tel. +39 02 9214 3258 | Fax +39 02 9247 0901
 info@srainstruments.com
- SRA INSTRUMENTS SAS**
 210 rue des Sources | 69280 Marcy l'Etoile | France
 Tel. +33 (0)4 78 44 29 47 | Fax +33 (0)4 78 44 29 62
 info@sra-instruments.com
srainstruments.com

