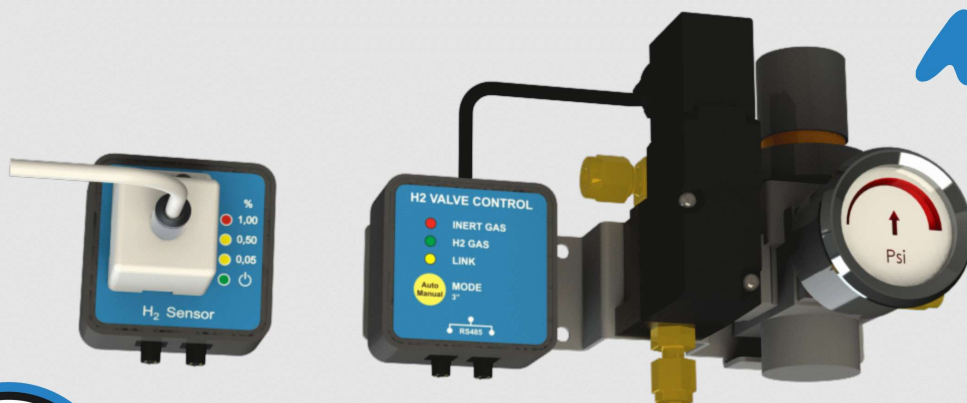


**MicroPROGEL**

> next electronic technology for your ideas

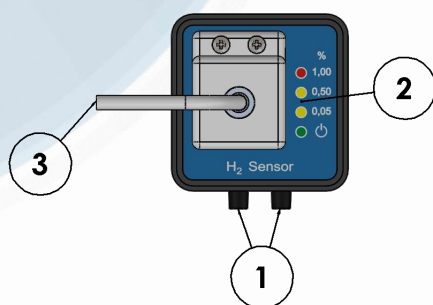
**OPT.H2.SENS.K3**
OPT.H2.SENS.K4

H2 SENSOR

OPT.H2.SENS.2 is a security system that constantly detects the amount of Hydrogen present in the GC's oven and blocks the Hydrogen generation if it detects an amount greater than the safety threshold.

The OPT.H2.SENS.RCV controller reads the percentage of Hydrogen measured by the sensor OPT.H2.SENS.2 and, if the value exceeds the threshold alarm, the Controller deactivates the solenoid valve in the OPT.H2.SENS.VB.V2 block.

The alarm can be signaled to a PC and to a remote device.



- 1 Serial port RS-485 / Power supply
- 2 Status LEDs
- 3 Hydrogen sensor

OPT.H2.SENS.2 is engineered to work in standalone mode connected by RS-485 network to a Hydrogen Generator. The sensor can be connected directly with the MicroPROGEL Hydrogen Generators.

When the hydrogen concentration detected exceeds a threshold of safety, the Hydrogen Generator automatically stops the production and audible and visual alarms will be reported.

Main application

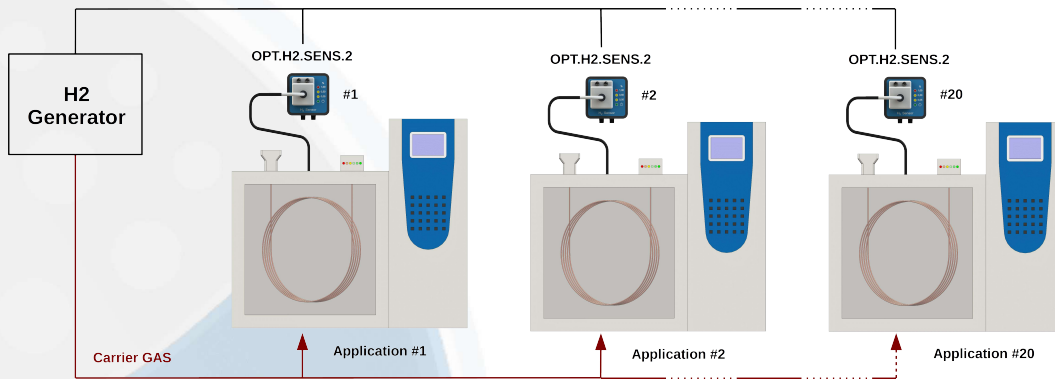
- GC's oven
- All environments where Hydrogen is used

Main advantages

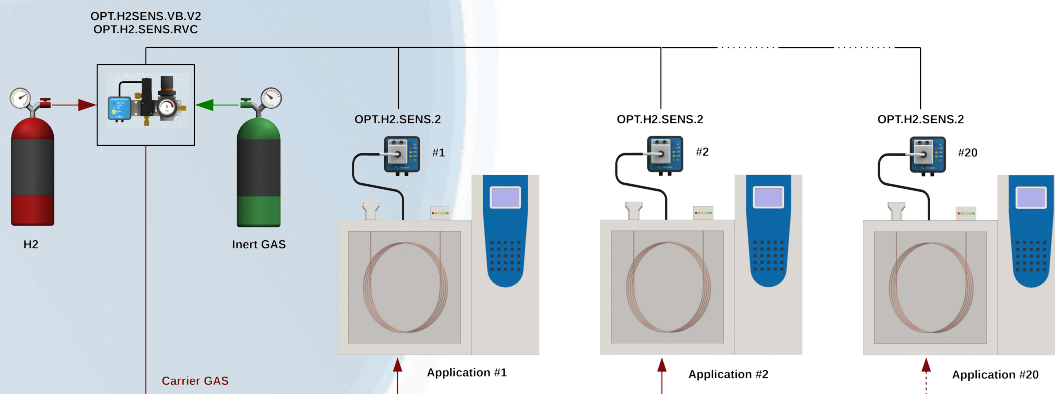
- Continuous monitoring of the GC's oven
- Acoustic and optical alarms
- Potential explosion risks eliminated
- Compatible with all GCs
- Simple installation
- Simple calibration
- Low operating costs

Principle diagram

OPT.H2.SENS.K3



OPT.H2.SENS.K4



Technical specifications OPT.H2.SENS.RVC

Power Supply Voltage	12 VDC +/- 5%
Power Supply Current	0.8 A use with OPT.H2.SENS.VB.V2
Valve output	Open collector 12VDC/500mA
Ambient temperature	5-35°C (41-95°F)
Ambient Humidity (max, non condensing)	80% at 25°C (77°F)
IP rating	IP20

Technical specifications OPT.H2.SENS.2

Hydrogen Sensitivity Range	0.01% to 1.00% by hydrogen volume (25% LEL, Lower Explosion Limit)
Accuracy	± (5.0% of F.S. + 1000ppm)
Typical Response Time	less than 20 sec
Power Supply Voltage	From 9VDC to 28VDC
Communication port	RS-485
Protocol	MODBUS-RTU
Calibration Interval	1 year (suggested 180 days)
Hydrogen Sensor Technology	Dioxide semiconductor
Product Life Expectancy	10 years
Body temperature range	-10 °C to 40 °C

Technical specifications OPT.H2.SENS.VB.V2

Hydrogen Inlet pressure	1 to 9 bar
Inert Inlet pressure	1 to 10 bar
Pressure regulator	1 to 9 bar