

# GENius ONE

The new hydrogen  
generator

**FULLTECH  
INSTRUMENTS**  
*The SMART way for your lab*



**GENius**



GENius

## The new GENius ONE

is the ultimate hydrogen generator for your laboratory. Performing, safe and reliable.

Its small size allows it to be positioned in the rooms where the gas will be used. This completely eliminates the need for long gas transport lines, coming from external cylinders.

Thanks to the "On Demand" production system, hydrogen is produced only when there is an actual demand for gas at the end of the line. This makes it possible to considerably reduce consumption, especially in terms of energy.

The purity of the hydrogen supplied is more than 99.9999%. The residual moisture is constantly monitored thanks to a electronic sensor placed at the point of dispensing

### GENiusONE

is equipped with 1 or 2 molecular sieve filters (depending on the model) which guarantee a high degree of purity and the absence of residual moisture. The filters are easily replaceable thanks to the front door and the practical bayonet coupling.

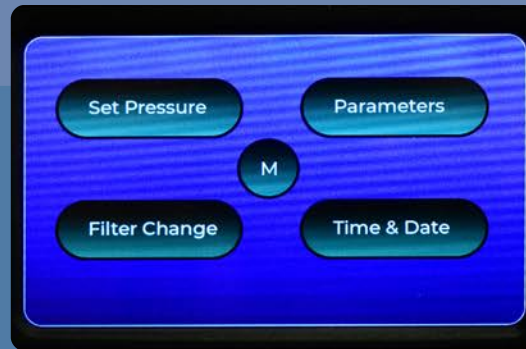


**The Predictive Check Monitor (PCM)** is a system based on LEDs that change color according to the operational status of the **GENius ONE**. Thanks to it, it

is always possible to keep the hydrogen production process under control, even from a distance, in large environments.







**It's easy.** You can configure it in a few taps. Through the large display and an intuitive interface it is

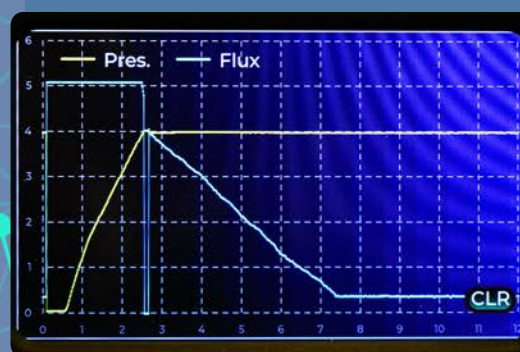
possible to set and monitor the various operating parameters.

**The cell itself is monitored,** so that the cell temperature and current, the electrolysis voltage, and the conductivity of the water never go beyond the danger limits to guarantee the long life of the main components. The data is always shown on the main display.



**Derivative Pressure Monitor (DPM) and Hydrogen Sensor Monitor (HSM)** are two combined systems of sensors and algorithms that constantly monitor flow, pressure and detect any leaks inside the machine, stopping production in the event of potentially hazardous situations.

The detected data can also be displayed in a graph.



**The cell,** the heart of the **PEM** technology system, is guaranteed for three years and is tested to withstand up to 30 bar.

## TECHNICAL SPECIFICATIONS

Electrolytic Cell	PEM (proton exchange membrane)
Dew Point	-75°C
Output	pressure from 1.0 to 6.5 Bar, 8.5 and 10 Bar optional versions
H2 drying	by means of a quick coupling molecular sieve filter
Feed	Demineralized water <10 µS / cm @ 25°C
Display	TFT color 5" Touch screen
Front LED indicators	Intuitive status signaling system through colors and movements
Energy consumption	230W
Dimensions	230 W x 460 H x 460 D (mm)
Product weight	15 Kg
Operating temperature	10°C – 40°C
Outgoing connection	1/8" Swagelock
Water tank	3L

### OPTIONAL ACCESSORIES

- Water recirculation pump on cleaning filter, timed;
- UV lamp for tank disinfection, timed;
- External H2 leak detector;
- Wireless web server;

### SAFETY

- Automatic shutdown in case of: internal / external hydrogen leakage, overpressure, lack of water, excessive temperature, cell power supply fault, excessive dew point, lack of pressure rise, poor water quality, exhausted filters.

**LA GENius family will increase soon...**

