

# Hydrogen Gas Generator

## « Serie LC-H2 »

The LC-H2 hydrogen generators use the latest polymer electrolyte membrane (PEM) Technology to produce pure hydrogen.

The LC-H2 series use a desiccant cartridge which can be refill or replaced by a new one.

The exclusive, electronically controlled gas/liquid separator, automatic checking for internal leaks whenever starting the units and constant control of operating parameters, guarantee maximum safety.

### Applications :

- GC-FID
- GC-FPD
- GC-NPD
- GC-TCD
- Hydrogenation
- ICP-MS
- Fuel cell
- THA



## BENEFITS AND SAVINGS

### > Increased laboratory efficiency

A constant, uninterrupted gas supply of guaranteed purity eliminates interruptions of analyses to change cylinders and reduces the amount of instrument re-calibrations required.

### > Improved safety

The very limited internal volume (less than 50 ml) allows safe use of the gas generators where the use of cylinders is risky or prohibited. The application of tested safety technologies stops the unit in the event of leaks or malfunctions

### > Simple installation

Gas generators can be installed in the laboratory, on or under a bench, eliminating the need for long gas lines from cylinders secured elsewhere.

## STANDARD FEATURES

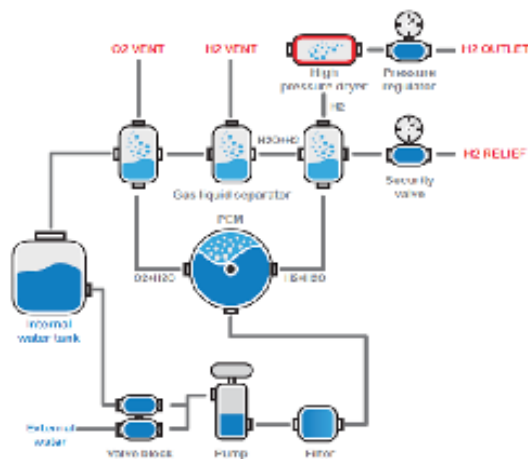
- Models available : 100, 140, 180 cc/min
- Purity H<sub>2</sub> > 99.9995%
- Pressure up to 7 bar (101 psi)
- Patented gas/water separator electronically controlled
- LCD touch screen with indication in real time : H<sub>2</sub> outlet pressure, H<sub>2</sub> flow rate, water quality, water level, cartridge saturation, system status with auto-diagnostics of breakdown with alarm
- Water tank protected and filtered
- Automatic checking for internal leaks to guarantee maximum safety
- Remote PC monitoring in standard via RS232 and RS485 in option (allow the end user to be connected with the manufacturer for remote diagnostics)

## OPERATING PRINCIPLE

Hydrogen is produced using distilled or deionised water from hydrolysis, through a polymer membrane.  
Electrolytic dissociation separates the water into its two main components : hydrogen ready for analytical use, and oxygen that is released into the air.

No acid nor alkaline solutions are used in the hydrogen generation cycle.

**LC-H2 Series** use a desiccant cartridge which needs to be refilled or replaced when saturated



Models	LC-H2-100	LC-H2-140	LC-H2-180
Generals Informations			
H2 flow rate - cc/min	100	140	180
H2 purity	> 99.9995 % (O2 < 1 ppm, dewpoint H2O < -55°C (-67°F))		
Delivery pressure	7 bar (101 psi)		
H2 Dryer	Replaceable desiccant column		
Internal water tank	2,1 liters		
Temperature range	From 5°C to 35°C (41 - 95°F) and humidity 80% to 25°C (77°F)		
LCD touch screen	Resolution 128 x 64 - touch screen with (operating parameters, system status, alarms)		
Water quality	Deionised, ASTM II, < 0.1 µS		
Dimensions (W x H x D)	25 x 30 x 32 cm (10" x 12" x 12")		
Outlet port	1/8 Swagelock		
Weight (kg/lbs)	6.5 / 14.33		
Power consumption	80 W	100 W	120 W
Power supply	90 - 240 V ac / 50 - 60 Hz		
Communication			
RS232	X		
RS485/USB	Option		

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The products are guaranteed 12 months. Beyond, your investment continues to be supported by our maintenance program "Gold Service". Our world class technical assistance offers Programmed preventive maintenance to ensure optimal performance of your Gas generator F-DGSI and a priority intervention in case of failure.

F-DGSI

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