

HG MINI

PEM Hydrogen generator

The **HG MINI** is able to generate up to 300 cc/min of Hydrogen with purity better than 99.999% and pressure up to 12 bar (174 psi). The HG MINI includes a cell with polymeric membrane (PEM) using distilled water. No acid or alkaline solutions are involved.

The innovative static drying system ensures the maximum grade of hydrogen purity, protects the GC thanks to its unique humidity safe guard.

The on-board CPU automatically checks for internal leaks and constantly control the operating parameters to guarantee full safety. Up to 20 units can be connected in parallel mode using an external control box. The LED matrix interface provides a simple and immediate display of the status of the unit.

Main Applications

- GC-FID
- GC-NPD
- GC-FPD
- GC-PFPD
- THA
- Gas sensing

Main advantages

- ✓ PEM cell technology with integrated tank (patented)
- ✓ Flow rate up to 300 cc/min
- ✓ Pressure up to 12 bar (174psi)
- ✓ USB port standard
- ✓ Purity: 99.999%
- ✓ Static dryer + desiccant column
- ✓ Safety routine and self monitoring
- ✓ Reduced foot print
- ✓ Smart humidity safe guard (patented)
- ✓ High pressure GLS electronically controlled (patented)



Specifications



Model: HG MINI	150	150 D	300	300 D
General data				
Electrolytic cell	PEM technology			
Drying system	Static Dryer	Static dryer + Desiccant column	Static Dryer	Static dryer + Desiccant column
H2 purity	>99.999% ^{*1}			
Dew-Point ^{*2}	<-30°C (-22°F)	<-60°C (-76°F)	<-30°C (-22°F)	<-60°C (-76°F)
Outlet pressure	12 bar (174 psi) ^{*3}			
H2 flow-rate (Max)	150 cc/min		300 cc/min	
Dimensions (W x D x H)	16 x 31.5 x 27.5 cm			
Net weight (no water in tank)	10 kg			
Communication				
USB	Standard			
RS485	Optional			
Software functions				
Parallel mode	Optional			
Water				
Quality Required	Deionized, ASTM II, <0.1uS			
Internal tank capacity	1 L			
Autorefill	Optional			
Electrical data				
Type of connection	IEC 320-C13 (desktop adapter)			
Power supply voltage	100-240 (±10%) Vac 50/60 Hz			
Nominal power (Max)	100 W		160 W	
Connections				
Hydrogen outlet	1/8" compression fitting			
Water	Quick release push-in fitting			
Operating/storage conditions				
Working Temperature	5-40°C (41-104°F) ^{*4}			
Storage Temperature	1-50°C (34-122°F)			
Humidity (max, non condensing)	70% [5-40°C (41-104°F)]			
Noise	< 35dB(A)			
IP rating	IP20			
Pollution degree rating	2 (with no aromatic compounds)			
Altitude	< 2000m			

*1 Referred to O2;

*2 ADP (Atmospheric Dew Point);

*3 12 bar (174 psi) with option 6930.00.069 / 10 bar (145 psi) standard;

*4 with temperature > 35°C (95°F) the H2 purity could be less;

Ordering codes

Gas Generators

6920.20.015
6920.20.015.1
6920.20.030
6920.20.030.1

HG MINI 150
HG MINI 150 D
HG MINI 300
HG MINI 300 D

Options

6930.00.053
6930.00.054
6930.00.069

Autorefill for HG MINI
RS 485 for HG MINI
Pressure up to 12 bar (174 psi)

Consumable

6930.00.093
6930.00.055

N. 3 Refill for desiccant column
Deionizer water filter for HG MINI



LNI Swissgas

www.lni-swissgas.eu

LNI Swissgas Srl

Registered office: Via Sassoferato 1, 20135 Milano MI

Logistics centre: Via E. Mattei 9, 35038 Torreglia PD