

# 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	150D	300	300D
<b>General data</b>				
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 bars (174 psi)			
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			
<b>Communication</b>				
USB	Standard			
RS485	Optional			
<b>Software functions</b>				
Parallel mode	Optional			
<b>Water</b>				
Quality Required	Deionized, ASTM II, <0.1uS			
Internal tank capacity	1 L			
Autorefill	Optional			
<b>Electrical data</b>				
Type of connection	IEC 320-C13 (desktop adapter)			
Power supply voltage	100-240 (±10%) Vac 50/60 Hz			
Power (Max)	160W			
<b>Connections</b>				
Hydrogen outlet	1/8" compression fitting			
Water	Quick release push-in fitting			
<b>Operating/storage conditions</b>				
Working Temperature	5-40°C (41-104°F) *3			
Storage Temperature	1-50°C (34-122°F)			
Humidity (max, non condensing)	70%			
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 with temperature > 35°C 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

Autorefill for HG MINI  
RS 485 for HG MINI

#### Consumable

6930.00.093  
6930.00.055

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



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