

HG PRO LN

PEM Hydrogen generator

H₂

N

A

The HydroGen series **HG PRO LN** is able to generate up to 1500 cc/min of Hydrogen with purity better than 99.99999% a pressure up to 16 bar (232 psi) and a N₂ content < 1 ppm.

The HG PRO includes a new long life multilayer electrolytic cell with polymeric membrane (PEM) using distilled water. No acid or alkaline solutions are used.

The innovative gas drying system (two-column drying PSA system with automatic regeneration) ensures the maximum grade of hydrogen purity, it is completely maintenance-free and allows continuous operation, 24 hours a day.

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 using an external control box.

The touch-screen LCD interface provides simple and user-friendly management of all functions on the unit.

Main Applications

- Carrier gas for GC and GS-MS
- GC-FID / GC-NPD / GC-FPD / THA
- ICP-MS collision gas
- Refilling metal hydride tanks for use with fuel cells
- CVD application for diamond production

Main advantages

- ✓ New long life multilayer PEM cell
- ✓ High flow rate up to 1500 cc/min
- ✓ High pressure up to 16 bar (232 psi)
- ✓ N₂ content < 1 ppm
- ✓ RS 232/485 and USB standard
- ✓ LAN optional
- ✓ Auto refill standard
- ✓ High purity: 99.99999%
- ✓ Dryer with no maintenance
- ✓ Safety routine and self monitoring
- ✓ Reduced foot print
- ✓ High pressure GLS electronically controlled (patented)





Specifications

Model: HG PRO LN	350	700	900	1100	1300	1500
General data						
Electrolytic cell	Long life Multilayer PEM technology					
Drying system	PSA (Pressure Swing Adsorption)					
H2 purity	>99.99999% *1					
Outlet pressure	12 bars (174 psi) / 16 bars (232 psi) (optional)					
H2 flow-rate (Max)	350	700	900	1100	1300	1500
N2 content	< 1 ppm					
Dimensions (W x D x H)	27 x 44 x 41 cm					
Net weight (no water in tank)	21.5 Kg	23.5 Kg	26 Kg		27 Kg	
Communication						
RS-232 / USB / RS-485	Standard					
Digital I/O	Standard					
LAN	Optional					
Software functions						
Parallel mode	Ready on board					
Automatic tank refill	Standard					
Fill Hydride canister function	Standard					
Water						
Quality Required	Deionized, ASTM II, <0.1uS					
Supply pressure (min, Max)	0.1 bar (1.45 psi), 0.5 bar (7.25 psi)					
Supply flow rate (min, Max)	0.2 l/min, 1.5 l/min					
Internal tank capacity	3 L					
External tank capacity	5 or 10 L (optional)					
Electrical data						
Type of connection	IEC 320-C14					
Power supply voltage	100-240 Vac (±10%) 50/60 Hz					
Nominal power (Max)	320W	640W				750W
Fuse rating (5x20mm)	4A (250 Vac – T – L / 35A))	6.3A (250 Vac – T – L / 35A))				
Connections						
Hydrogen outlet	1/8" compression fitting					
Water	Quick release push-in fitting					
Operating/storage conditions						
Working Temperature	5-40°C (41-104°F)*2					
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, dew point <-80°C (< -112°F), Atmospheric Dew Point (ADP)

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

Ordering codes

Gas Generators

6920.15.035.1
6920.15.070.1
6920.15.090.1
6920.15.105.1
6920.15.130.1
6920.15.150.1

HG PRO 350 LN
HG PRO 700 LN
HG PRO 900 LN
HG PRO 1100 LN
HG PRO 1300 LN
HG PRO 1500 LN

Consumable

6930.00.091

Deionizer water filter



LNI Swissgas

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