

HG BASIC

PEM Hydrogen generator

The HydroGen series **HG BASIC** is able to generate up to 700 cc/min of Hydrogen with purity better than 99.9999% and pressure up to 10 bar (145 psi). The HG BASIC includes a new long life multilayer electrolytic cell with polymeric membrane (PEM) using distilled water. No acid or alkaline solutions are used.

The innovative drying system ensures the maximum grade of hydrogen purity, protects the GC thanks to its innovative humidity safe guard, HG BASIC is completely maintenance-free and allows continuous operation, 24 hours a day.

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

- New long life multilayer PEM cell
- High flow rate up to 700 cc/min
- High pressure up to 10 bar (145 psi)
- RS 232/485 and USB standard
- LAN optional
- Auto refill standard
- High purity: 99.9999%
- Static dryer no maintenance
- Safety routine and self monitoring
- Reduced foot print
- Smart humidity safe guard (patented)
- High pressure GLS electronically controlled (patented)



Smart **Gas** Generators



Specifications

Models: HG BASIC	120	260	350	500	700
General data					
Electrolytic cell	PEM technology				
Drying system	Static dryer				
H2 purity	>99.9999%*				
Outlet pressure	10 bars (145 psi)				
H2 flow-rate cc/min (Max)	120	260	350	500	700
Dimensions	27x33x41(H) cm				
Net weight (no water in tank)	14.5 kg			18 kg	
Communication					
RS232	Standard				
RS485/USB	Standard				
LAN	Optional				
Software functions					
Parallel mode	Ready on board				
Automatic tank refill	Standard				
Water					
Quality Required	Deionized, ASTM II, <0.1uS				
Supply pressure (min, Max)	0.2 bar (1.4 psi), 1 bar (14 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-C13				
Power supply voltage	100-240VAC 50/60 Hz				
Installed power (Max)	280W				
Fuse rating (5x20)	4A 250VAC				
Connections					
Hydrogen outlet	1/8" compression fitting				
Water	Quick release push-in fitting				

* referred to O2, dew point <-20°C

Main applications

- GC-FID / GC-NPD / GC-FPD / THA
- ICP-MS collision gas
- Refilling metal hydride tanks for use with fuel cells

Smart Gas Generators



LNI-GGI srl con socio unico
www.lni-swissgas.eu

Registered office: Via Sassoferato 1, 20135 Milano MI
Logistics center: Via E. Mattei 9, 35038 Torreglia PD