

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.

Main Applications

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

Main advantages

- ✓ 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)





Specifications

Model: HG BASIC		120	180	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 (Max)	120	180	260	350	500	700
	Dimensions	27 x 44 x 41(H) cm					
	Net weight (no water in tank)	14.5 kg				18 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					
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	100-240 Vac 50/60 Hz					
	Installed power (Max)	320W				640W	
	Fuse rating (5x20)	4A - 250VAC				6.3A 250VAC	
Connections							
	Hydrogen outlet	1/8" compression fitting					
	Water	Quick release push-in fitting					
Operating/storage conditions							
	Working Temperature	5-40°C (41-104°F)**					
	Storage Temperature	1-50°C (34-122°F)					
	Humidity (max, non condensing)	70%					
	Noise	< 25dB(A)					
	IP rating	IP20					
	Pollution degree rating	2 (with no aromatic compounds)					
	Altitude	< 2000m					

* referred to O2, dew point <-20°C

** with temperature > 35°C the H2 purity could be less

Ordering codes

Gas Generators

6920.10.012

6920.10.018

6920.10.026

6920.10.035

6920.10.050

6920.10.070

Consumable

6930.00.050

HG BASIC 120

HG BASIC 180

HG BASIC 260

HG BASIC 350

HG BASIC 500

HG BASIC 700

De-ionisation Cartridge



LNI Swissgas

www.lni-swissgas.eu

Registered office: Via Sassoferato 1, 20135 Milano MI

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