



INSTRUMENTS
ANALYTICAL SOLUTIONS

HG ST PRO

PEM Hydrogen generator
with ZeroAir integrated



HydroGEN

The HydroGen series **HG ST PRO** is able to generate up to 300 cc/min Hydrogen with purity better than 99.99999% and pressure up to 16 bar (232 PSI). An optional AirGen output can deliver hydrocarbon free pure Air with a flow up to 2000 cc/min. The **HG ST PRO** includes an electrolytic cell with polymeric membrane (PEM) using distilled water. The two-column PSA drying system with automatic regeneration ensures the maximum grade of hydrogen purity, and is completely maintenance-free.

The **HG ST PRO** is the ideal Hydrogen and Air Generator for all GC-FID detectors. The on-board CPU constantly control the operating parameters to guarantee full safety. 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
- Gas sensing

Main Advantages

- Quick installation
- Easy use
- Hydrogen flow rate up to 300 cc/min
- ZeroAir flow rate up to 2000 cc/min
- Pressure up to 16 bar (232 psi)
- Hydrogen purity: 99.99999%
- THC: < 0.1 ppm
- RS 485 and USB as standard
- LAN optional
- Dryer with no maintenance
- Reduced foot print
- High pressure GLS electronically controlled (patented)

Specifications

HG ST PRO
 PEM Hydrogen generator
 with ZeroAir integrated

HG ST PRO	100	160	250	300
General data				
Electrolytic cell	PEM technology			
Drying system	PSA (Pressure Swing Adsorption)			
H ₂ purity	>99.99999%*			
Outlet pressure	12 bars (174 psi) / 16 bars (232 psi) (optional)			
H ₂ flow-rate cc/min (Max)	100	160	250	300
Dimensions (W x H x D)	9.5 x 44 x 48 cm			
Net weight (no water in tank)	18.5 Kg			
Communication				
RS485/USB	Standard			
LAN	Optional			
Software functions				
Parallel mode	Ready on board			
Automatic tank refill	Standard			
Water				
Quality	Deionized, ASTM II, <0.1uS			
Supply pressure (Min, Max)	0.1 bar (1.4 psi), 0.5 bar (7.25 psi)			
Internal tank capacity	0.3 l			
Electrical data				
Type of connection	IEC 320-C13			
Power supply voltage	100-240 VAC 50/60 Hz			
Installed power (Max)	350 W			
Fuse rating (5x20 mm)	4A - 250 VAC			
Connections				
Hydrogen outlet	1/8" compression fitting			
Water (inlet, drain)	Quick release push-in fitting			
ZeroAir section (optional)				
Inlet pressure (Max)	8 bars (116 psi)			
THC (inlet air)	100 ppm			
Outlet flow rate (Max)	2000 cc/min			
Outlet pressure (Max)	Inlet pressure - 0.5 bars (8 psi) at maximum flow			
THC (ZeroAir Outlet)	<0.1ppm			
Inlet, Outlet ports	1/8" BSPP female			

* Referred to O₂, dew point <-75°C

Gas Generators	
6920.06.010	HG ST PRO 100
6920.06.016	HG ST PRO 160
6920.06.025	HG ST PRO 250
6920.06.030	HG ST PRO 300
Accessories (optionals)	
6930.00.120	ZA 2U (catalyst)
Consumable	
6930.00.050	De-ionisation cartridge

Ordering codes