

HGA ST PRO

PEM Hydrogen generator
with ZeroAir integrated

The HydroGen series **HGA ST PRO** is able to generate up to 600 cc/min of Hydrogen with purity better than 99.99999% and pressure up to 16 bar (232 psi). An AirGen output can deliver hydrocarbon free pure Air with a flow up to 2000 cc/min.

The **HGA 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 **HGA ST PRO** is the ideal Hydrogen and Air Generator for all GC-FID detectors. The on-board CPU constantly controls 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 GC-MS
- GC-FID / GC-NPD / GC-FPD
- THA

Main Advantages

- ✓ Quick installation
- ✓ Easy use
- ✓ Hydrogen flow rate up to 600 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

Models: HGA ST PRO	100	160	250	350	600
General data					
Electrolytic cell	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 cc/min (Max)	100	160	250	350	600
Dimensions (WxHxD)	9.5 x 44 x 48 cm				
Net weight (no water in tank)	21.5 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)	-0.2 bars (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)	350W			500W	
Fuse rating (5x 20 mm)	4A 250VAC				
Connections					
Hydrogen outlet	1/8" compression fitting				
Water (inlet, drain)	Quick release push-in fitting				
ZeroAir section					
Inlet pressure (Max)	8 bars (116 psi)				
Max THC (Inlet Air)	100ppm				
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 ports	1/8" BSPP female				
Outlet ports	1/8" BSPP female				

¹ Referred to O₂ - DewPoint < -75°C

Ordering codes

Gas Generators

6920.08.010	HGA ST PRO 100
6920.08.016	HGA ST PRO 160
6920.08.025	HGA ST PRO 250
6920.08.035	HGA ST PRO 350
6920.08.060	HGA ST PRO 600

Consumable

6930.00.091	Deionizer water filter
6930.00.017	Filter elements for KZA FID / ZA RACK series / HGA 2U series / HGA ST series



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