Velocity Scientific Solutions





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HGA ST BASIC

PEM Hydrogen generator with ZeroAir integrated

The HydroGen series **HGA ST BASIC** is able to generate up to 600 cc/min of Hydrogen with purity better than 99.9999% and pressure up to 10 bar (145 psi). An AirGen output can deliver hydrocarbon free pure Air with a flow up to 2000 cc/min. The **HGA ST 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, **HGA ST BASIC** is completely maintenance-free and allows continuous operation, 24 hours a day.

The on-board CPU automatically checks for internal leaks and constantly controls 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

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 10 bar (145 psi)
- ✔ Hydrogen purity: 99.9999%
- ✓ THC: < 0.1 ppm</p>
- RS 485 and USB as standard
- ✓ LAN optional
- Dryer with no maintenance
- ✔ Reduced foot print
- High pressure GLS electronically controlled (patented)







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Specifications

Models: HGA ST BASIC	120	160	250	350	600
General data					
Electrolytic cell	PEM technology				
Drying system	Static dryer				
H2 purity	>99.9999% 1				
Outlet pressure	10 bars (145 psi)				
H2 flow-rate cc/min (Max)	120	160	250	350	600
Dimensions (WxDxH)	9.5 x 48 x 44 cm				
Net weight (no water in tank)	21 kg				
Communication					
RS485/USB	Standard				
LAN	Optional				
Software functions					
Parallel mode	Ready on board				
Automatic tank refill			Standard		
Water					
Quality		Deio	nized, 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-C14		
Power supply voltage	100-240 Vac (±10%) 4763 Hz				
Nominal power (Max)	350W 500W				
Fuse rating (5x 20 mm)			4A (250VAC - T)		
Connections			·		
Hydrogen outlet		1/8	" compression fit	tting	
Water (inlet, drain)			release push-in		
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 port	1/8" BSPP female				
Outlet port	1/8" BSPP female				

1 Referred to O₂ - DewPoint < -25°C (< -13°F), Atmospheric Dew Point (ADP)

Ordering codes	
Gas Generators	
6920.07.012	HGA ST BASIC 120
6920.07.016	HGA ST BASIC 160
6920.07.025	HGA ST BASIC 250
6920.07.035	HGA ST BASIC 350
6920.07.060	HGA ST BASIC 600
Consumable	
6930.00.091	Deionizer water filter
6930.00.017	Filter elements for ZA RACK series / HGA 2U series /
	HGA ST series



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