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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</p>
- 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 (WxDxH) | | | 9.5 x 48 x 44 cm | | |
| Net weight (no water in tank) | | | 22 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 bars (0 psi), 0.5 bar (7.25 psi) | | | | |
| Internal tank capacity | | | 0.3 | | |
| Electrical data | | | | | |
| Type of connection | | | IEC 320-C14 | | |
| Power supply voltage | | 100-2 | 40 Vac (±10%) 50 | /60Hz | |
| Nominal power (Max) | | 35 | 50W | | 500W |
| Fuse rating (5x 20 mm) | | | 4A (250VAC - T) | | |
| Connections | | | , | | |
| Hydrogen outlet | 1/8" compression fitting | | | | |
| 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 ports | | | 1/8" BSPP female | 9 | |
| Outlet ports | | | 1/8" BSPP female | <u> </u> | |

^{*1} Referred to O₂ - DewPoint < -75°C (< -103°F), Atmospheric Dew point (ADP)

| 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 ZA RACK series / HGA 2U series / |
| | HGA ST series |

