

# Hydrogen Generators

## PG-H2 Series



**TEXOL**  
Products

Laboratory Gas Generators

# Hydrogen Generators PG-H2 Series

The PH-H2 hydrogen generators use the latest polymer electrolyte membrane (PEM) technology to produce hydrogen.

The PG-H2 Series are well suited to:

- Ionization flame detector (FID)
- Carrier gas for GC & GC-MS
- Collisions on ICP-MS
- Small fuel-cell cylinder refills

## Benefits

### Improved chromatograph results

Hydrogen as a carrier gas is faster and more sensitive than the more expensive helium.

Run time savings of 25% to 35% without a decline in resolution.

### Safety

The very limited internal volume (less than 50ml) allows safe use of the gas generators where the use of cylinders is risky or prohibited.

The application of tested safety technologies stops the unit in the event of leaks or malfunctions.

### Savings

Hydrogen gas generators avoid the need for expensive installation of gas pipelines from the cylinder storerooms to the labs, as well as the need to repeatedly change the bottles.

### Longer analytical column life

The use of hydrogen as a carrier gas allows lower temperature elution, thus extending the life of the chromatograph column.

### Lab productivity

Continuous operation 24 hours a day allows maximum lab productivity cutting dead time for gas bottle changeover and maintenance of the drying system.

## Specifications

- Models available: 100, 160, 250, 300, 500,600 cc/min.
- Purity: 99.9999%.
- Outlet pressure: adjustable by electronic controller up to 7 bar.
- Full microprocessor control.
- LCD display interface: real time outlet pressure, water quality, auto-diagnostics with alarms.
- H2 leak detectors, water level and quality sensors.
- Extremely low noise operation: no pumps are used.
- Easy and quick use: no caustic solution used and simple dryer regeneration.
- Certification: CE & CSA, ATEX.

# Technical Specifications for PG-H2 Generators

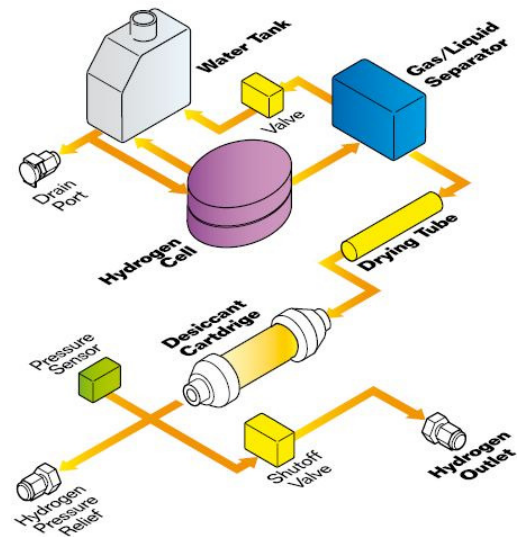
Hydrogen is produced using distilled or de-ionized water from hydrolysis through a polymer membrane.

Electrolytic dissociation separates the water into its two main components: hydrogen ready for analytical use, and oxygen that is released into the air.

No acid nor alkaline solutions are used in the hydrogen generation cycle.

The drying filter is easy to remove for regeneration; a signal is shown on the display when filter regeneration is required.

The exclusive cascading option allows up to 10 units to be connected in tandem, producing flow rates of up to 6 litres per minute!



Models	PG-H <sub>2</sub> -100	PG-H <sub>2</sub> -160	PG-H <sub>2</sub> -250	PG-H <sub>2</sub> -300	PG-H <sub>2</sub> -500	PG-H <sub>2</sub> -600
<b>Flow cc/min.</b>	100	160	250	300	500	600
<b>Membrane</b>	polymer electrolyte membrane (PEM)					
<b>Purity</b>	99.9999%					
<b>Outlet pressure</b>	1-105 psig / 0.1-7 barg					
<b>Internal volume</b>	< 50 ml at max pressure					
<b>Display</b>	operating parameters, system status, alarms					
<b>LED indicators</b>	power on/off, system ready, errors					
<b>Options</b>	RS232C or RS485, Autorefill, external contacts, PC control					
<b>Cascading</b>	NO	NO	YES	YES	YES	YES
<b>Water quality</b>	deionized or demineralized					
<b>Power</b>	110 - 220V 50 - 60Hz					
<b>Dimensions (cm)</b>	230W x 430H x 353D					
<b>Connections</b>	1/8 swagelock					
<b>Weight (kg)</b>	17	17	17	17	18	18
<b>Certification</b>	CE - CSA - ATEX					

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