

Hydrogen Gas Generator



Technical Specification

	PGH-300	PGH-500	PGH-1000
Max Hydrogen Flowrate	300 ml/min	500 ml/min	1000 ml/min
Delivery Pressure	0-60 psig (0-0.4 Mpa)		
% purity	99.999%		
Power	198-242V (AC); 50Hz, 1 Phase		
Min/max Temperature	5-40°C		
Suitable Environment	non-corrosive and dust-free		
Dimensions	420 x 210 x 350mm (LxWxH)		
Weight	20 kg (approx)		
Fluid Tank Capacity	3 Ltr.		
Gas Outlet Port	1/8" OD		

* Higher capacity model also available like 2 LPM & 3 LPM

Salient Features

- Low working pressure & continuous UHP grade flow (99.999%)
- Generate hydrogen with PEM technology
- Generator has in built pressure switch which shuts off the generator in case of Over pressure built up.
- Sleep mode in case no use of H₂ gas.
- Hydrogen leak detection facility inside the generator. (Optional)
- Any leak detected will shut the system and hydrogen production is halted. (Optional)
- Low Water Level Alarm (Optional)

Applications

- GC-FID

- Hydrogen is produced in the PGH Series Hydrogen Generators by the most advanced electrolytic membrane technology.
- The application of voltage across the electrolyte results in hydrolysis, breaking down the water molecule into hydrogen and oxygen gas, which are separated by the gas permeable membrane.
- Once separated, the hydrogen gas goes through a series of purification and moisture removal systems to achieve the desired level of purity while the oxygen gas is being discharged into the atmosphere.
- Electrolytic membrane technology has its advantages over alternative hydrogen generating techniques as it is clean, requires less maintenance and there is no need to store chemicals to maintain operation.
- Only pure double distilled water (initially some KOH), is required to provide trouble free long term operation.
- Membrane separation is also less time consuming as only water is needed for routine maintenance.
- Another model with no acid and alkaline solution (KOH & NaOH) is also available.
- Separate model of Hydrogen Generator (without KOH) with pressure upto 7 bar also available.

Flow Diagram of Hydrogen Generator

