

HYDROGEN GAS GENERATOR SERIE WM-H2



... and you don't need
helium anymore

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

The exclusive double gas column dryer regeneration system eliminates all down time for maintenance that is typical of other systems on the market, guaranteeing the best hydrogen purity at all times.

The WM-H2 series generators are ideal for:

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



H2 leak detector to be installed in any existing GC oven with direct control on the hydrogen generator.

This option allows to stop the hydrogen and simultaneously the feeding of an inert gas to the GC, thus preventing column damages.

Benefits and Savings

■ Improved chromatograph result

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

■ Increased laboratory efficiency

A constant, uninterrupted gas supply of guaranteed purity eliminates interruptions of analyses to change cylinders and reduces the amount of instrument re-calibrations required.

■ Improved safety

The very limited internal volume (less than 50 ml) 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

■ Simple installation

Gas generators can be installed in the laboratory, on or under a bench, eliminating the need for long gas lines from cylinders secured elsewhere.

Standard Features

- Models available : 120, 180, 260, 400, 500, 650, 800, 900, 1000, 1200 cc/min
- Purity >99.99999%
- Automatic dryer regeneration
- Pressure up to 12 bar, on request 16 bar
- Patented gas/water separator electronically controlled
- LCD touch screen : real time outlet pressure, water quality, water level, autodiagnosics with alarms
- Remote PC monitoring in standard via RS232 or RS485 to interface the unit with customer's PC software
- Water tank protected and filtered
- Autorefill included in standard
- Capabilities allowing to work in parallel mode
- Remote wireless display control in option

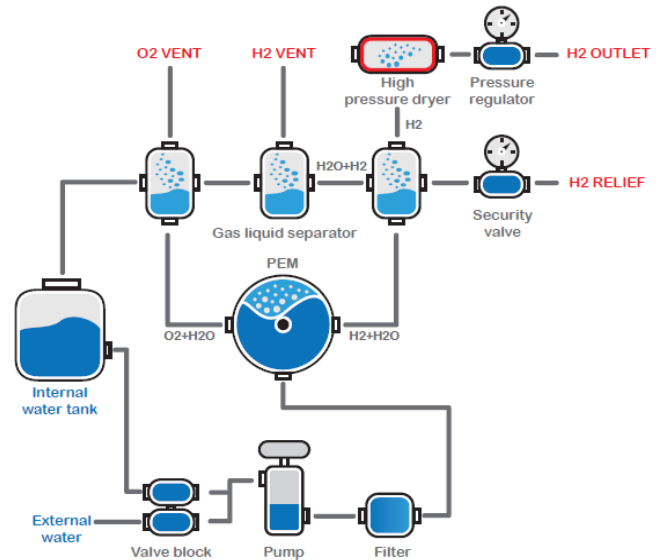
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Hydrogen is produced using distilled or deionised water from hydrolysis, through a polymer membrane.

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.

No desiccant cartridge maintenance is required: there is a double column dryer with automatic regeneration. This automatic drying system ensures the maximum grade of hydrogen purity.



Technical Specifications

Models	WM-H2-120	WM-H2-180	WM-H2-260	WM-H2-400	WM-H2-500	WM-H2-650	WM-H2-800	WM-H2-900	WM-H2-1000	WM-H2-1200
H2 flow rate cc/min	120	180	260	400	500	650	800	900	1000	1200
H2 purity	> 99.99999%									
Delivery pressure	1 - 12 barg (16 barg on request)									
Dryer	Innovative double column dryer system without maintenance ⁽¹⁾									
Internal water tank	2,3 liters with autorefill included									
Temperature range	From 5°C to 35°C									
LCD touch screen	Resolution 128x64 touch screen (operating parameters, system status, alarms)									
In series	communication port : RS-232, RS-485, USB, LAN									
Options	- Remote wireless display control - Possible to working in parallel mode									
Water quality	Deionised or distilled > 10MΩ									
Dimensions (L x H x P)	30x43x43 cm									
Outlet port	1/8 Swagelock									
Weight	15 kg			18 kg			22 kg			
Power consumption	From 200W to 800W depend of model									
Certification	CE									

