

Hydrogen Gas Generator

« Serie WM-H2 »

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 exclusive, electronically-controlled gas/liquid separator, automatic checking for internal leaks whenever starting the units and constant control of operating parameters, guarantee maximum safety.

The touch screen LCD interface provides simple and user-friendly management of all functions on the unit.

Applications :

- GC-MS • GC-FAST • GC-Carrier gas
- GC-FID • GC-FPD • GC-NPD • GC-TCD
- Hydrogenation • ICP-MS • Fuel cell • THA

BENEFITS AND SAVINGS

> Improved chromatograph result

The use of hydrogen as a carrier gas allows :

- faster and more sensitive than the more expensive helium
- lower temperature elution, thus extending the life of the chromatograph column
- 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.

> Ergonomic and compact design, simple installation

Can be installed in the laboratory, on or under the 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 (174 psi), on request 16 bar (232 psi)
- Cold Palladium Catalyst reduces O2 <0.01 ppm and moisture < 1 ppm
- Patented gas/water separator electronically controlled
- LCD touch screen with indication in real time : H2 outlet pressure, H2 flow rate, water quality, water level, system status with auto-diagnostics of breakdown with alarms
- Remote PC monitoring in standard via RS232 or USB to interface the unit with customer's PC software (allow the end user to be connected with the manufacturer for remote diagnostics)
- Water tank protected and filtered
- Automatic checking for internal leaks to guarantee maximum safety
- Automatic internal water tank refill included in standard
- Capabilities allowing to work in parallel mode

OPERATING PRINCIPLE

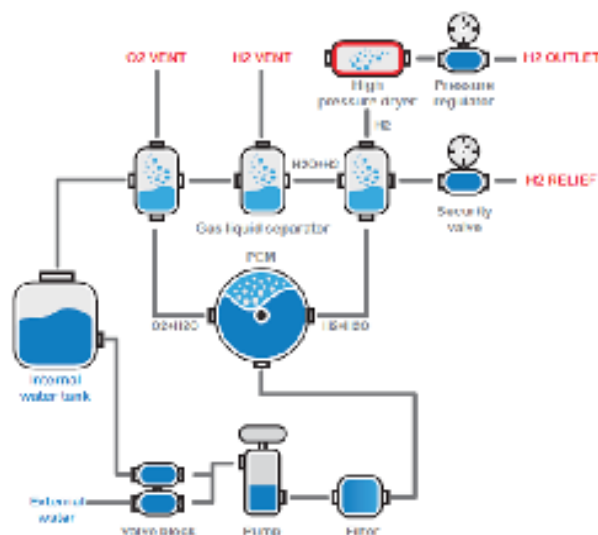
Hydrogen is produced using distilled or deionised water < 0.1 µS from hydrolysis, through a polymer membrane.

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 dessicant cartridge maintenance is required: there is a double column dryer with automatic regeneration.

This automatic drying system ensures the maximum grade of hydrogen purity.

An exclusif system allows to work in parralel mode and to connect until 10 units, to have flowrate until 12 L/min.



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	WM-H2-1350
Generals Informations											
H2 flow rate - cc/min	120	180	260	400	500	650	800	900	1000	1200	1350
H2 purity	> 99.99999 % (O2 < 0.1 ppm, dewpoint H2O < -75°C (-103°F))										
Cold Palladium Catalyst (Option)	Reduces O2 < 0.01 ppm and moisture < 1 ppm										
Delivery pressure	1 - 12 bar (14 - 174 psi), 16 bar (232 psi) on request										
H2 dryer	Innovative double column dryer system without maintenance										
Internal water tank	2.3 liters with autorefill included										
Temperature range	From 5 - 35°C (41 - 95°F) and humidity 80% to 25°C (77°F)										
LCD touch screen	Resolution 128 x 64 - touch screen with (operating parameters, system status, alarms)										
Water quality	Deionised, ASTM II, < 0.1 µS										
Dimensions (W x H x D)	30 x 43 x 43 cm (12" x 17" x 17")										
Outlet port	1/8 Swagelock										
Weight (kg/lbs)	16 / 35.2				19.5 / 43				21.5 / 47.4		23 / 50.7
Power consumption	280 W				450 W				560 W		660 W
Power supply	90 - 240 V ac / 50 - 60 Hz										
Communication											
RS232/RS485/USB	X										
Special feature											
Parallel mode	X										
Automatic water tank refill	X										

GoldService
Satisfaction Guaranteed

The products are guaranteed 12 months. Beyond, your investment continues to be supported by our maintenance program "Gold Service". Our world class technical assistance offers Programmed preventive maintenance to ensure optimal performance of your Gas generator F-DGSi and a priority intervention in case of failure.

F-DGSi

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Certified Product



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