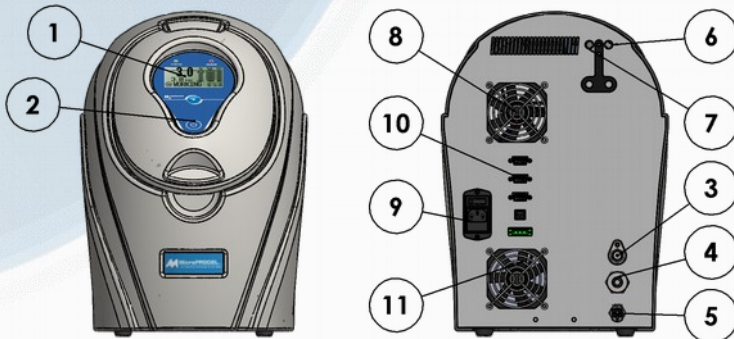




WM series

H2 GENERATOR DESK

The WM series generators use an electrolytic cell with polymeric membrane (PEM) to produce pure hydrogen. The innovative gas drying system is completely maintenance-free and allows continuous operation, 24 hours a day. The exclusive, electronically-controlled gas/liquid separator, automatic checking for internal leaks whenever starting the unit, and constant control of operating parameters guarantee maximum safety. Up to 20 units can be connected in parallel. The touch-screen LCD interface provides simple and user-friendly management of all functions on the unit.



- 1 Touch-screen LCD 128x64 pixel
- 2 START/STOP button
- 3 Hydrogen Outlet
- 4 Hydrogen purge
- 5 Water feed connector for filling the tank
- 6 Hydrogen vent
- 7 Oxygen vent
- 8 Cooling fan air outlet
- 9 Power connection and switch
- 10 I/O connectors: RS485 – RS232 – USB – Digital I/O
- 11 Cooling fan air intake

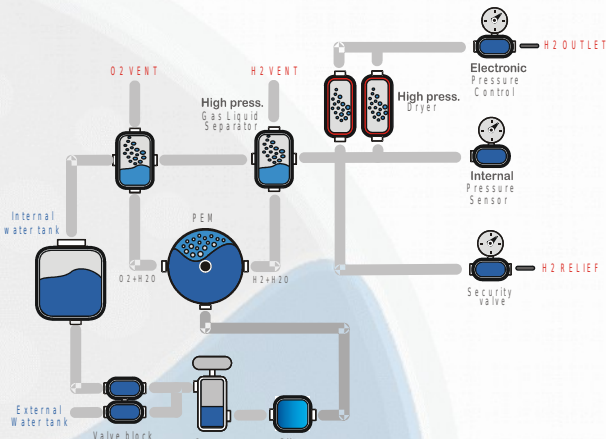
Main Applications

- Carrier gas for GC and GS-MS
- ICP-MS collision gas
- Flame ionization detector feed gas (FID)
- Refilling metal hydride tanks for use with fuel cells

Main Features

- **Available Flow-rates:**
up to 1500 cc/min
- **Outlet pressure:**
up to 16 bars
- **Hydrogen purity:**
>99.99999%
- **Drying system:**
Innovative maintenances-free system for continuous 24-hour operation
- **Internal water tank:**
2.3 litres, with electronic level control and “Autorefill” from external tank (optional)
- **Dimensions:**
30x43x42(H)
- **Weight:**
16 to 22 kg (depending on the model)
- **Certification:**
CE, ISO9001

Principle diagram



Hydrogen is produced from distilled water using a polymeric membrane (PEM). No acid or alkaline solutions are used.

The drying stage requires no maintenance.

A two-column drying system with automatic regeneration ensures the maximum grade of hydrogen purity.

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.H2.1500	
General data												
Electrolytic cell	PEM technology											
H2 purity	>99.99999% ¹											
Outlet pressure	12 bars (174 psi) / 16 bars (232 psi) optional											
H2 flow rate cc/min (max)	120	180	260	400	500	650	800	900	1000	1200	1500	
Dimensions	30x43x42(H) cm											
Net weight (water tank empty)	16 kg				19.5 kg				21.5 kg		22Kg	
Communication												
RS232	X	X	X	X	X	X	X	X	X	X	X	X
RS485	X	X	X	X	X	X	X	X	X	X	X	X
USB	X	X	X	X	X	X	X	X	X	X	X	X
LAN	Optional											
Software functions												
Parallel mode capability	X	X	X	X	X	X	X	X	X	X	X	X
Automatic tank refill	X	X	X	X	X	X	X	X	X	X	X	X
Fill canister function	X	X	X	X	X	X	X	X	X	X	X	X
Water												
Quality	Deionized, ASTM II, <0.1uS											
Supply pressure (Min)	0.2 bars (1.4 psi)											
Supply pressure (Max)	1 bar (14 psi)											
Supply flow-rate (min,max)	0.2 l/min, 1.5 l/min											
Internal tank capacity	2.3 l											
External tank capacity	5 or 10 l											
Electrical data												
Power supply connection type	IEC320-C13											
Power supply voltage	100-240Vac 50/60Hz											
Installed power (max)	280W				560W				650W			
Fuse rating 230V (110V) 5x20mm	4A 250VAC				6.3A 250VAC							
Connections												
Hydrogen outlet	1/8" compression fitting											
Water	Quick release push-in fitting											

¹ referred to O₂, Dew point <-75°C