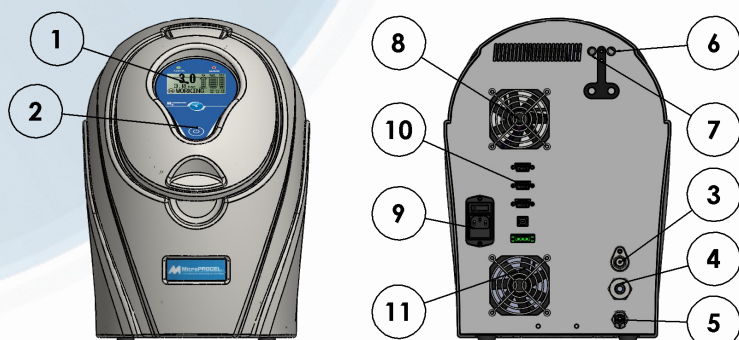



**WM series**


## 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

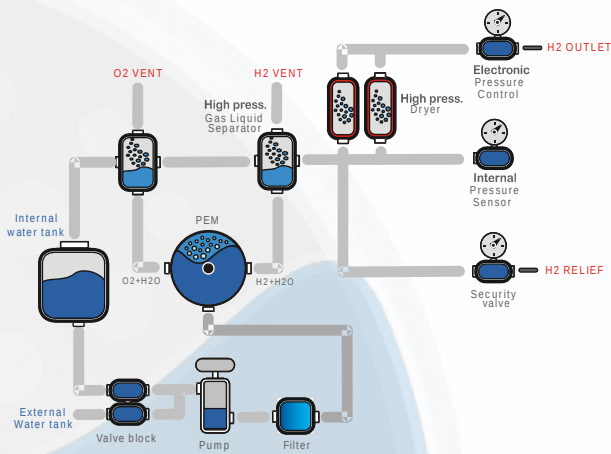
### Main Applications

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

<sup>1</sup> referred to O<sub>2</sub>, Dew point <-75°C