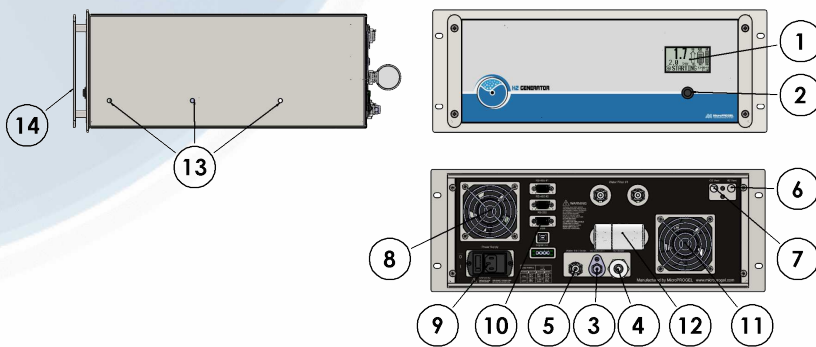


RACK WM series



H2 GENERATOR RACK 4U

The RACK.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
- 12 Water filter
- 13 Holes for sliding rails
- 14 Front handles

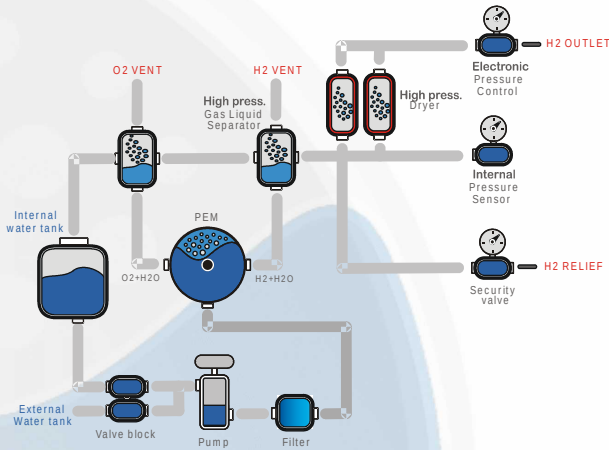
Main Applications

- 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 12 bars
- **Hydrogen purity:**
>99.99999%
- **Drying system:**
Innovative maintenances-free system for continuous 24-hour operation
- **Internal water tank:**
1.1 litres, with electronic level control and “Autorefill” from external tank, included as standard
- **Dimensions:**
Standard 4U RACK (40 cm deep)
- **Weight:**
15 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	RACK.WM.H2.120	RACK.WM.H2.180	RACK.WM.H2.260	RACK.WM.H2.400	RACK.WM.H2.500	RACK.WM.H2.650	RACK.WM.H2.800	RACK.WM.H2.900	RACK.WM.H2.1000	RACK.WM.H2.1200	RACK.WM.H2.2000	
General data												
Electrolytic cell	PEM technology											
H2 purity	>99.99999% ¹											
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	2000	
Communication												
RS232	X	X	X	X	X	X	X	X	X	X	X	
RS485	X	X	X	X	X	X	X	X	X	X	X	
USB	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	
Fill canister function	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	1.1 l											
External tank capacity	5 or 10 l											
Electrical data												
Power supply connection type	IEC320-C13											
Power supply voltage	100-240Vac 50/60Hz (200-240Vac 50/60Hz for RACK.WM.H2.2000)											
Installed power (max)	280W			450W				560W		960W		
Fuse rating 5x20mm	4A 250VAC			6.3A 250VAC								
Dimensions	Standard 19" RACK 4U – 40cm deep											
Net weight (water tank empty)	20 kg			22 kg				25 kg		26Kg		
Connections												
Hydrogen outlet	1/8" compression fitting											
Water	Quick release push-in fitting											

1 Referred to O₂, DewPoint < -75°C