





RACK ND series

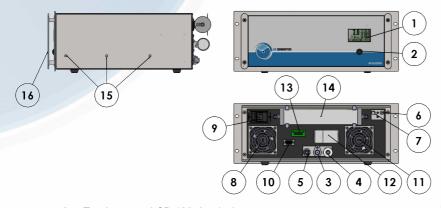
H2 GENERATOR RACK 4U

The RACK.ND series generators use an electrolytic cell with polymeric membrane (PEM) to produce pure hydrogen.

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 connector: RS232
- 11 Cooling fan air intake
- 12 Water filter
- 13 Remote-control connector (optional)
- 14 Desiccant column
- 15 Holes for sliding rails
- 16 Front handles

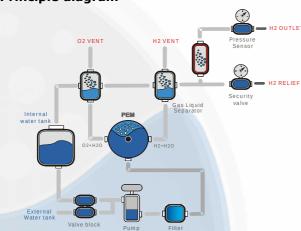
Main Applications

- 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 500 cc/min
- Outlet pressure:
 - up to 10 bars
- Hydrogen purity:
 - >99.9995%
- Drying system:
 - Refillable molecular sieve column
- Internal water tank:
 - 1.1 litres, with electronic level control "Autorefill" from external tank included as standard
- · Dimensions:
 - Standard 4U RACK (40 cm deep)
- Weight:
 - 17 to 18 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 ND series features a desiccant cartridge that needs to be replaced or refilled when saturated.

Models	RACK.ND.H2.120	RACK.ND.H2.180	RACK.ND.H2.260	RACK.ND.H2.400	RACK.ND.H2.500	
General information						
Electrolysis cell		PEM technology				
Dryer type		Rechargeable desiccant column				
Purity	>99.9995%					
Outlet pressure	7 Bar(100 psi) - Optional 10 Bar(145 psi)					
H2 flow rate cc/min (max)	120	180	260	400	500	
Communication						
RS232	Χ	X	X	X	X	
RS485/USB	Optional					
LAN	Optional					
Software function						
Parallel mode capability	Not available					
Automatic tank refill	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 water tank capacity	1.11					
External tank capacity	5 or 10 l					
Electrical data						
Connection type		IEC320-C13				
Supply voltage	100-240Vac 50/60Hz					
Installation Power (max)	280W					
Fuse Rating (5x20 mm)		4A 250VAC				
Dimensions	Standard 19" Rack 4U – deep 40cm					
Net weight(water tank empty)	17Kg				18Kg	
Connections						
Hydrogen Outlet	1/8" Compression Fitting					
Water	Quick Release Push in Fitting					

Referred to O_2 , DewPoint < -55°C