


ND series


H2 GENERATOR DESK

The 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 Desiccant cartridge compartment

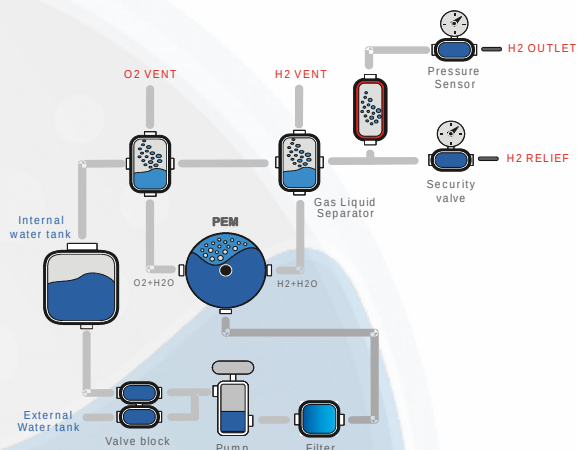
Main Applications

- 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:**
2.3 litres, with electronic level control and "Autorefill" from external tank (optional)
- **Dimensions:**
30x43x42(H)
- **Weight:**
14.5 kg
- **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	ND.H2.120	ND.H2.180	ND.H2.260	ND.H2.400	ND.H2.500
General data					
Electrolytic cell	PEM technology				
Drying system	External column dryer				
H2 purity	>99.9995% ¹				
Outlet pressure	7 bars (100 psi) / 10 bars (145 psi) (optional)				
H2 flow-rate cc/min (Max)	120	180	260	400	500
Dimensions	30x43x42(H) cm				
Net weight (no water in tank)	14.5 kg				
Communication					
RS232	X	X	X	X	X
RS485/USB	Optional		X	X	X
LAN	Optional				
Software functions					
Parallel mode	Not available				
Automatic tank refill	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				
Electrical data					
Type of connection	IEC 320-C13				
Power supply voltage	100-240 Vac 50/60 Hz				
Installed power (Max)	280W				
Fuse rating (5x 20 mm)	4A 250VAC				
Connections					
Hydrogen outlet	1/8" compression fitting				
Water	Quick release push-in fitting				

¹ Referred to O₂ Dew Point < -55°C