

Rack Mounted Hydrogen Generator

For GC Fuel Gas and Carrier Gas Applications

Applications: GC-FID / NPD / FPD/ TCD / THA and Carrier Gas



This range of AiroGen[®] Rack Mounted Hydrogen Generators from IATT use the latest Proton Exchange Membrane (PEM) technology to produce pure hydrogen from distilled or deionised water by hydrolysis. They are ideal for GC Fuel Gas and Carrier Gas Applications.

The Benefits of Using Hydrogen as Fuel Gas

- Eliminates inconvenient and dangerous hydrogen cylinders from the laboratory. Increases the accuracy of analyses and reduces the cleaning requirement of the detector.

The Benefits of Using Hydrogen as Carrier Gas

- The use of hydrogen as a carrier gas allows lower temperature elution, thus extending the life of the chromatograph column. Hydrogen as a carrier gas is faster and more sensitive than the more expensive helium. Run time savings of 25% to 35% without a decline in resolution. Rack mounting saves space on the workbench.

Features

- Patented electronically controlled gas/water separator.
- LCD touch screen showing in real time H₂ pressure, H₂ flow rate, desiccant cartridge saturation %, water quality, water level, and status of the system with auto-diagnostic in case of alarms.
- Canister filling mode enable filling of a large canister to a pressure of 16 bar to enable portable GC field applications.
- Auto refill water tank is standard for most of the range.
- Remote PC monitoring in standard via RS232 or RS485 to interface the unit with PC software.
- Capable of working in parallel mode.
- Internal water tank level of 1.2L electronically controlled (when needed it is filled from an external tank automatically by a single tube).

High purity analysis grade gases for improved performance

Purity

Type 1:
H₂: >99.9995%

Type 2:
H₂: >99.99999%

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Technical

Type 1 H2 - Flow Rates: 120,180, 260 cc/min
Purity %: >99.9995%, Dewpoint -55°C, O2 < 1 ppm. Outlet Pressure: 1 - 10 barg

Type 2 H2 - Flow Rates: Purity %: >99.99999%, Dewpoint -70°C, O2 < 0.1 ppm.

Outlet Pressure: 1 - 12 barg - 16 bar option available on request.

Models	H2 flow rate cc/min	H2 Purity	H2 Dryer	H2 Delivery pressure	Water reservoir capacity	External Water tank optional	Communication	Voltage VAC	Electrical Consumption	Dimensions W x H x D cm	Weight Kg
RACK-ND-H2 Series	120,180, 260	> 99.9995% H2O Dewpoint < -55°C, / O2 < 1 ppm	Dessicant cartridge	10 bar	1.2 L	5,10 L	RS232 in series RS485 in option	90 - 240	From 200W to 800W depend of the model	Standard 19" Rack 4U-deep 40 cm	From 15 to 25 depends of the RACK-WM-H2 Series model
RACK-WM-H2 Series	120,180, 260, 400, 500, 650, 800, 900, 1000	> 99.99999% H2O Dewpoint < -70°C, / O2 < 0,1 ppm	Exclusive double gas column dryer regeneration	12 bar (16 bar on request)	1.2 L	5,10 L	RS-232, RS-485, USB, LAN in series	90 - 240		Standard 19" Rack 4U-deep 40 cm	