

# High Purity Hydrogen Generators

For GC Carrier Gas and GCMS Applications

Applications: GC-FID / NPD / FPD / TCD / GC-Carrier Gas / GCMS / ICPMS / Collision Cell / THA



AiroGen<sup>®</sup> High Purity Hydrogen Generators from IATT use the latest Proton Exchange Membrane (PEM) technology to produce pure hydrogen from distilled or deionised water by hydrolysis.

IATT offer 2 types of AiroGen<sup>®</sup> High Purity Hydrogen Generators in this range:

**Type 1** - uses a single column desiccant cartridge dryer unit with programmable automatic regeneration via an integrated calendar.

**Type 2** - uses an exclusive double gas column dryer regeneration system that eliminates maintenance downtime that is typical of other systems, giving you the guarantee of high purity hydrogen at all times.

## Features

### High level of operator safety

- Unique 9 stage, fail safe, explosion protection system.
- Automatic internal/external H<sub>2</sub> leak detection.
- Patented electronically controlled gas/water separator.
- H<sub>2</sub> Sensor option for carrier gas use.

### Excellent user interface

- LCD touch screen showing H<sub>2</sub> pressure, H<sub>2</sub> flow rate, water quality, water level in real time and system status with auto-diagnostic in case of alarms.

### High quality PEM technology

- Continuous monitoring of vital parameters.
- Unique PEM cell construction and water quality management ensure reliability and longevity of the cell.
- 2 years cell warranty.

### Unique features

- 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 in 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.

Purity

Type 1:

H<sub>2</sub>: >99.9999%

Type 2:

H<sub>2</sub>: >99.99999%

Get all the benefits of High Purity Hydrogen as a carrier gas... safely!

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### Technical

#### Type 1

Flow Rates: 120, 180, 260, 400, 500, 650 ml/min  
Purity %: 99.9999%, O<sub>2</sub> < 0.1ppm, Dewpoint < -70°C

#### Type 2

Flow Rates: 120, 180, 260, 400, 500, 650, 800, 900, 1000, 1200 ml/min  
Purity %: 99.9999%, O<sub>2</sub> < 0.1 ppm, Dewpoint < -70°C

#### Outlet Pressure:

1 - 12 barg – 16 bar option available on request.



Models	Flowrate ml/min	Purity %	H2 Dryer	Pressure	Water reservoir capacity with auto refilled included	Communication	Voltage VAC	Electrical Consumption	Dimensions W x H x D cm	Weight Kg
PAR-H2 120	120	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	280 W	30 x43 x 43	15
WM-H2 120		99.99999	Auto-drying technology							
PAR-H2 180	180	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	280 W	30 x43 x 43	15
WM-H2 180		99.99999	Auto-drying technology							
PAR-H2 260	260	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	280 W	30 x43 x 43	15
WM-H2 260		99.99999	Auto-drying technology							
PAR-H2 400	400	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	280 W	30 x43 x 43	15
WM-H2 400		99.99999	Auto-drying technology							
PAR-H2 500	500	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	450 W	30 x43 x 43	25
WM-H2 500		99.99999	Auto-drying technology							
PAR-H2 650	650	99.9999	Programmable auto regeneration cartridge	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	450 W	30 x43 x 43	25
WM-H2 650		99.99999	Auto-drying technology							
WM-H2 800	800	99.99999	Auto-drying technology	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	450 W	30 x43 x 43	25
WM-H2 900	900	99.99999	Auto-drying technology	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	560 W	30 x43 x 43	25
WM-H2 1000	1000	99.99999	Auto-drying technology	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	560 W	30 x43 x 43	25
WM-H2 1200	1200	99.99999	Auto-drying technology	12 bar	2.3 L	RS232, RS485, USB port in serie	90 - 240	560 W	30 x43 x 43	25