

# Hydrogen Generators

for GC and GC/MS carrier gas applications



The Parker H-MD-Carrier ultra high purity hydrogen gas generators offer the optimum combination of safe operation, reliability, performance and low cost of ownership.

Utilising field proven PEM cell technology, hydrogen is produced on demand from deionised water and electricity, at low pressure and with minimal stored volume. Innovative control software allows unrivalled operational safety and reliability.

The H-MD-Carrier generators ideally supply GC and GC/MS carrier gas, in addition to all known combustion detectors that are routinely used in today's laboratory workflows. Four models operate at flow rates; 160 ml/min, 250 ml/min, 500 ml/min and 1100 ml/min.

Hydrogen generators are available with Remote Networking software. Remote Networking software allows up to 27 hydrogen generators to be actively controlled from one central PC, and facilitates true cascading capabilities.



## Product Features:

- **Eliminate dangerous hydrogen cylinders from the work place**
- **Simple to install and operate**
- **Compact, reliable with minimal maintenance**
- **Produces a continuous supply of 99.9999% pure hydrogen up to 1,100ml/min and 6.9 bar**
- **3 year standard cell warranty**
- **Optional automatic water fill and remote networking capability**

## Product Selection

Model	Flow Rate	Purity*	Water Consumption (24/7, full flow)	Delivery Pressure		Optional Auto Water Fill (AWF)
	ml/min	%	L/week	bar g	psi g	
20H-MD-Carrier	160	>99.9999	1.69	0.69-6.89	10-100	YES
40H-MD-Carrier	250	>99.9999	2.41	0.69-6.89	10-100	YES
60H-MD-Carrier	500	>99.9999	4.82	0.69-6.89	10-100	YES
110H-MD-Carrier	1100	>99.9999	10.60	0.69-6.89	10-100	Standard

\*With respect to oxygen

Note: For auto water fill option add suffix AWF ie 20H-MD-AWF

## Technical Data

Ambient Temperature Range	5 - 40°C (41 - 104°F)
Water Supply Pressure*	0.1 bar g (1.45 psi g)
Water Supply Flow Rate*	1 L/min
Water Quality	Deionised. ASTM II, >1MΩ, <1µs, filtered to <100µm
Supply Voltage Range	90V - 264V 50/60Hz
Port Connections	Hydrogen Outlet Water Drain Water Fill*
	1/8" Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting

\*With optional AWF

## Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (Empty)		Weight (Full of Water)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
20H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
40H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
60H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
110H-MD-Carrier	456	17.9	342	13.5	470	18.5	23.6	51.8	28	61.7

## Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
6 Month Kit	M06.HMD.0001	6 Months
24 Month Kit	M24.HMD.0001	24 Months
60 month kit	M60.HMD.0001	60 months

## Optional Extras

Description	Part Number	Required for
Remote Networking Module	H2-REMOTE-NET-DH 604971530	Allows cascading of two generators
Remote Networking Expansion Module	H2-REMOTE-EXP-DH 6049711540	Required to cascade each additional generator

[www.parker.com/gsf](http://www.parker.com/gsf)



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