Carrier gas

The mobile phase of gas chromatography requires a carrier gas. Parker understands that purity of a carrier gas is essential, as contaminants can cause column damage and inaccuracies in detection results.

We provide gas generation for frequently used carrier gases, such as hydrogen and nitrogen, providing you with a dry, high-purity, oxygen-free and chemically inert gas, that is both consistently available and cost-efficient.

H-MD

Using proven PEM cell technology, Parker domnick hunter H-MD range generators produce a continuous supply of high-purity hydrogen, for use as carrier gas, on-demand from de-ionized water and electricity. This model works at low pressure and with minimal stored volume, offering you added safety.

- Continuous supply of 99.99995% purity hydrogen
- Precision engineered - simple installation and operation
- Compact design - save space in your laboratory
- Minimal maintenance - maximum uptime and low running costs
- Optimum safety and reliability - innovative intelligent control software and alarms
- Easy to manage - control a number of generators from one central PC

Note: Also suitable for use as fuel gas

UHP-N2

Featuring proven, advanced technology and engineered to the highest standard, Parker UHP-N2 generates a continuous stream of ultra high-purity nitrogen. Ideal for carrier gas applications, it is fully approved for use by major instrumentation manufacturers, giving you complete peace of mind.

- Continuous supply of ultra high-purity nitrogen at 99.9999% purity
- Engineered to ensure maximum reliability and minimal operator attention
- Compact design – requires minimal space in your laboratory
- Advanced noise reduction technology - a quieter working environment
- Economy mode - significantly reduced running costs and increased compressor life
- Single plug & play unit – saves you valuable time
- With or without an integral compressor

Note: Also suitable for use as make-up gas

Product Selection

Model	Flow Rate	Purity*	Water Consumption (24/7, full flow)	Delivery Pressure	
	ml/min	%	L/week	bar g	psi g
20H-MD	160	>99.9999	1.69	0.69-6.89	10-100
40H-MD	250	>99.9999	2.41	0.69-6.89	10-100
60H-MD	500	>99.9999	4.82	0.69-6.89	10-100
110H-MD	1100	>99.9999	9.64	0.69-6.89	10-100

*With respect to oxygen

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	100V - 230V 50/60Hz	
Port Connections	**Hydrogen Outlet**	1/8" Compression Fitting
	Water Drain	Quick Release Push in Fitting
	Water Fill*	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	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
40H-MD	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
60H-MD	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
110H-MD	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
Remote Monitoring Module	H2-REMOTE-MON-DH-604971532	Allows the remote monitoring of one generator
Installation Kit	IK7532	Suitable for all hydrogen generators
Automatic Water Fill Kit	604979008	Suitable for all hydrogen generators