# **Hydrogen Generators**

for GC combustion detector applications



The Parker domnick hunter H high purity hydrogen gas generators offer the optimum combination of safe operation, reliability and performance.

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 generators ideally supply fuel gas to all known GC combustion detectors used in today's laboratory workflows. Three models operate at flow rates; 160 ml/min, 250 ml/min and 500 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 99.9995% pure hydrogen at up to 6.9 bar
- 2 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	
	ml/min	%	L/week	bar g	psi g	Water Fill (AWF)	
20H	160	>99.9995	1.25	0.3-6.89	5-100	YES	
40H	250	>99.9995	2	0.3-6.89	5-100	YES	
60H	500	>99.9995	4	0.3-6.89	5-100	YES	

<sup>\*</sup>With respect to oxygen

Note: For auto water fill option add suffix AWF ie 20H-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, >1M $\Omega$ , <1 $\mu$ s, filtered to <100 $\mu$ m		
Supply Voltage Range	90 - 264V 50/60Hz		
Port Connections Hydrogen Outlet Water Drain Water Fill*	<sup>1</sup> /8" Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting		

<sup>\*</sup>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	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7
40H	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7
60H	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7

#### **Preventative Maintenance**

Preventative Maintenance Kit	Part Number	Change Frequency
Replacement desiccant cartridge	604970412	As required*
6 month kit	604970600	6 months
24 month kit	604970532	24 Months

<sup>\* 20</sup>H Continuous operation approx 6 to 7 months

## Optional Extra's

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

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<sup>\* 40</sup>H Continuous operation approx 4 to 5 months

<sup>\* 60</sup>H Continuous operation approx 2 to 3 months