

Hydrogen Generators

for ICP-MS instruments



The Parker domnick hunter 40H-ICP hydrogen gas generator, developed in collaboration with major instrument vendors, meets the initial purge and reaction gas requirements of the Collision Reaction Interface, providing simple routine removal of troublesome spectroscopic interferences.

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 40H-ICP hydrogen generator employs a fully approved low-pressure buffer arrangement, to cater for elevated hydrogen flows required during the purge cycle of ICP-MS Instrumentation.

A range of tailored service contracts, extended warranties and global manufacturing capabilities provide comprehensive aftermarket support.



Contact Information:

Parker Hannifin Ltd
Industrial Division
Dukesway, Team Valley Trading Estate
Gateshead, Tyne and Wear
England NE11 0PZ

Tel: +44 (0)191 402 9000
Fax: +44 (0)191 482 6296
Email: gasgen@parker.com
www.domnickhunter.com

Features:

- **Online performance monitoring**
- **Large capacity water tank with optional Auto Water Fill**
- **Ease of installation and operation**
- **Optional remote monitoring and control**
- **Compact and robust design**
- **Quiet operation**
- **Global manufacturing support**
- **2-year PEM cell warranty as standard**

Benefits:

- **Faster analysis, superior resolution and lowered limits of detection**
Oxygen, moisture and organic impurity free
- **Ultra safe operation**
Minimal stored gas, unique seven-stage safety system
- **High purity guaranteed, 24/7**
Field proven technology ensures high purity hydrogen on demand
- **Class leading PEM cell; reliable and robust**
Cell construction and water management systems ensure longevity
- **Seamless integration**
Optional remote PC monitoring and control
- **Safe and sustainable**
Eliminates the need to use and handle high pressure cylinders
- **Low life cycle costs, excellent return on investment**
Payback typically less than 24 months
- **Peace of mind**
Service contracts and extended warranty programmes available

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	
40H-ICP	250	>99.999	2	0.3-6.89	5-100	YES

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	120 / 230V ± 10% (60 / 50Hz)
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
40H-ICP	577	22.7	342	13.5	602	23.7	27.5	60.6	31.5	69.5

Also available, a range of nitrogen and air (organic impurity free) generators for Life Science, Chemical Analysis and Spectroscopy applications

For information on extended warranty and preventative maintenance contract availability, please contact your local sales office or visit www.domnickhunter.com