

# Hydrogen Generators

for Gas Chromatography

PEM (Proton Exchange Membrane)



## Hydrogen on Demand, up to 510 ml/min

Ultra high purity hydrogen generators from Parker Balston are designed as hazard-free alternatives to high-pressure hydrogen cylinders. Deionised water and an electrical supply is all that is required to generate hydrogen for weeks of continuous operation.

Optional automatic feed-water is available for remote installations or where minimal operator attention is required. With an output capacity of up to 510 ml/min, one generator can supply >99.999% pure fuel gas for up to 12 FIDs. The compact design allows the generators to be installed directly in the laboratory eliminating the requirement for long hydrogen lines.



## Contact Information:

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## Product Features:

- Produces a continuous supply of >99.999% pure hydrogen gas at up to 6.9 bar
- Eliminate dangerous hydrogen cylinders from the laboratory
- Designed to run 24 hours a day
- 2 year PEM cell warranty as standard
- Compact, reliable and minimal maintenance
- Ideal for Gas Chromatography applications



ENGINEERING YOUR SUCCESS.

### Certified Safety

Parker Balston hydrogen generators utilise an exclusive Proton Exchange Membrane to produce hydrogen on demand. A built in sensing circuit shuts the generator down if a hydrogen leak is detected and an eight-stage explosion protection system ensures the highest level of operator safety.

A sophisticated control system connected to a liquid crystal display, continuously monitors the vital operating parameters

to ensure a safe and consistent performance.

That's why Parker Balston hydrogen generators meet the strict safety guidelines to be certified for CE, CSA and UL approval.

### Proven Technology

Parker Balston's exclusive Proton Exchange Membrane is proven in thousands of GC installations worldwide. Maintenance requires only a few moments per year - no inconvenient extended downtime.

Simply change the deioniser cartridge every 6 months and the desiccant cartridge as required.

If contaminated water or low water levels are detected, the system activates a warning light and shuts off the generator. A small pump and environmental filters also ensure that the electrolytic cell is supplied continuously with high quality water - avoiding damage to the electrolytic membrane. Parker Balston's hydrogen generators are the most reliable hydrogen generators on the market today.

### Principal Specification

Model	H2PEM-100	H2PEM-165	H2PEM-260	H2PEM-510
Purity*	>99.999%	>99.999%	>99.999%	>99.999%
Flow Rates	100 ml/min	165 ml/min	260 ml/min	510 ml/min
Outlet Connection	1/8" compression	1/8" compression	1/8" compression	1/8" compression
Delivery Pressure (Adjustable)	0.7 to 6.9 bar (+/- 0.07bar)	0.7 to 6.9 bar (+/- 0.07bar)	0.7 to 6.9 bar (+/- 0.07bar)	0.7 to 6.9 bar (+/- 0.07bar)
Remote Monitoring	Yes	Yes	Yes	Yes
Auto Water Fill	Optional	Optional	Optional	Optional
Water Quality Required	> 5 Mohm	> 5 Mohm	> 5 Mohm	> 5 Mohm
Ambient Temperature	10 to 35°C	10 to 35°C	10 to 35°C	10 to 35°C
Electrical Requirements	100-230v - 50/60Hz	100-230v - 50/60Hz	100-230v - 50/60Hz	100-230v - 50/60Hz
Power Consumption	90 Watts	160 Watts	250 Watts	500 Watts
Dimensions (H x W x D)	435 x 342 x 457 mm	435 x 342 x 457 mm	435 x 342 x 457 mm	435 x 342 x 457 mm
Weight (Shipping)	24 Kg (28)	24 Kg (28)	24 Kg (28)	24 Kg (28)

\*with respect to Oxygen

### Ordering Information

Description	Model Number
100 ml/min Hydrogen Generator	H2PEM-100
165ml/min Hydrogen Generator	H2PEM-165
260 ml/min Hydrogen Generator	H2PEM-260
510 ml/min Hydrogen Generator	H2PEM-510
Auto Water Fill Option	Add suffix AWF i.e. H2PEM-100-AWF
Installation Kit	IK7532

Maintenance items	Model Number	Change Frequency
Desiccant Cartridge	MKH2PEM-D	As Required
6 Month Maintenance Kit	MKH2PEM-6M	6 Months
24 Month Maintenance Kit	MKH2PEM-24M	24 Months



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