Product Information Sheet

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 water-feed 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 99.9995% pure fuel gas for up to 12 FID's or several GC's with carrier gas. 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 99.9995% pure hydrogen gas at up to 6.9 bar**
- **Designed to run 24 hours a day**
- **Compact, reliable and minimal maintenance**
- **Eliminate dangerous hydrogen cylinders from the laboratory**
- **2 years standard cell warranty**
- **Ideal for GC combustion gas requirements**

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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 eightstage 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*	99.9995%	99.9995%	99.9995%	99.9995%
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

Catalogue: S3.2.195c_EN 03/11

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