

Parker Balston® PEM Hydrogen Generators

By Sue Benes, GC Accessories Product Marketing Manager

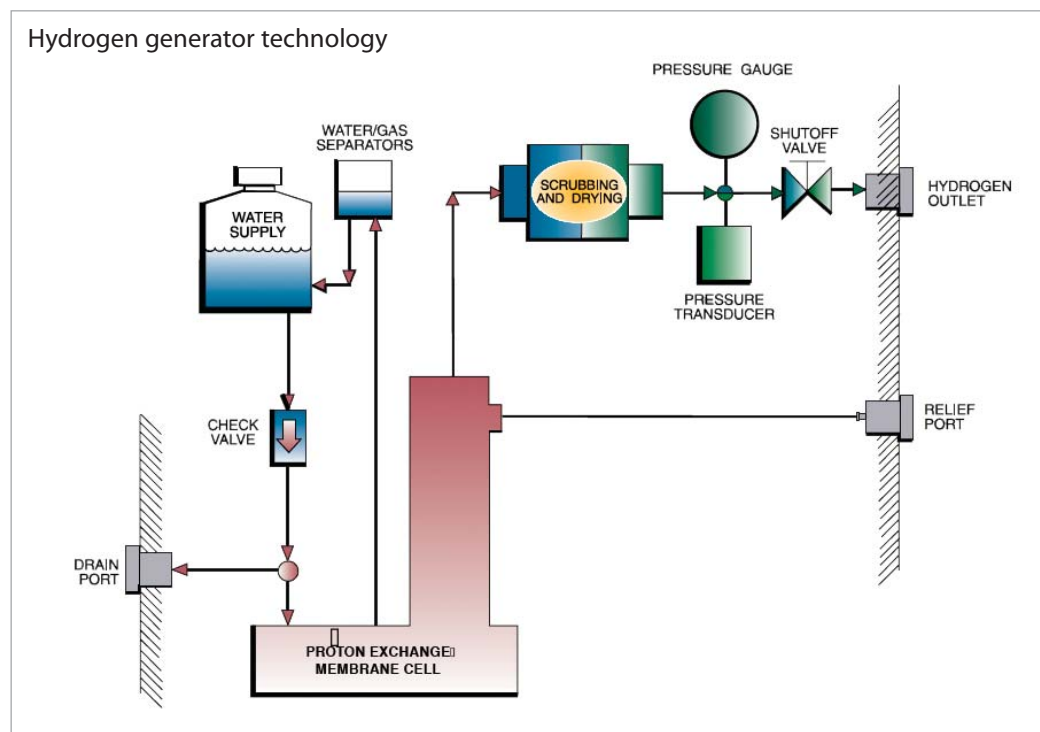


- Cost effective, convenient, and safe alternative to high-pressure gas cylinders.
- Reliably generate 99.9995% pure hydrogen for better chromatography.
- Quick and easy to maintain; require only minutes a year!

Fuel-grade high purity hydrogen generators are a safe, cost-effective alternative to high-pressure gas cylinders. Parker Balston® hydrogen generators are engineered for safety and feature a built-in sensing circuit which shuts down the generator automatically if a hydrogen leak is detected. These generators are also designed for performance and convenience. They include an exclusive water management system and control circuitry to maximize uptime, and also feature indicator lighting, which allows at-a-glance status checks and water level monitoring. Hydrogen generators offer enhanced safety and convenience, and are cost-effective. Based on cylinder gas savings alone, a hydrogen generator pays for itself in only one or two years.

Parker Balston® hydrogen generators are reliable and easy to use and maintain. Deionized water is all that is required to generate hydrogen for weeks of continuous operation. Each generator has an output capacity of up to 510cc/minute—enough to supply 99.9995% pure hydrogen for several GC-FID systems. The new Proton Exchange Membrane (PEM) cell eliminates the need for liquid electrolytes. Maintenance requires only a few moments a year—no inconvenient, extended downtime. Simply change the filters every six months, the hydration pump biannually, and the desiccant cartridge whenever it turns from beige to clear.

These units are compact, requiring only one square foot of bench space, and come with a set of universal power adaptors for U.S., European and Asian plug types. Produced and supported by an ISO 9001 registered organization, Parker Balston® hydrogen generators are the first built to meet the toughest laboratory standards in the world: CSA, UL, cUL, and CE Mark.



All Parker Balston® hydrogen generators meet NFPA requirements and OSHA 1910.103 regulations governing the storage of hydrogen.

new & improved!

Hydrogen generators now come with a set of universal power adaptors for US, European, and Asian plug types.

for more info

Looking for more information on Parker Hydrogen Generators? Download free technical literature from www.restek.com.

Fast Facts Lit. Cat.# 580053A

Principal Specifications

Model Number	H2PEM-100 (cat. #23065)	H2PEM-165 (cat. #23066)	H2PEM-260 (cat. #23067)	H2PEM-510 (cat. #23068)
Purity:	99.9995%	99.9995%	99.9995%	99.9995%
Flow Rates:	100cc/min	165cc/min	260cc/min	510cc/min
Outlet Port:	1/8" compression	1/8" compression	1/8" compression	1/8" compression
Electrical:	100-230Vac/50-60Hz	100-230Vac/50-60Hz	100-230Vac/50-60Hz	100-230Vac/50-60Hz
Delivery Pressure:	10-100 psig ± 1 psig	10-100 psig ± 1 psig	10-100 psig ± 1 psig	10-100 psig ± 1 psig
Shipping Weight:	40lb (18kg) dry	40lb (18kg) dry	40lb (18kg) dry	40lb (18kg) dry
Dimensions:	17.12"H x 13.46"W x 17.95"D (43.48cm x 34.19cm x 45.6cm)	17.12"H x 13.46"W x 17.95"D (43.48cm x 34.19cm x 45.6cm)	17.12"H x 13.46"W x 17.95"D (43.48cm x 34.19cm x 45.6cm)	17.12"H x 13.46"W x 17.95"D (43.48cm x 34.19cm x 45.6cm)

Description	Capacity	qty.	cat.#
Hydrogen Generator H2PEM-100	100cc/min.	ea.	23065
Hydrogen Generator H2PEM-165	165cc/min.	ea.	23066
Hydrogen Generator H2PEM-260	260cc/min.	ea.	23067
Hydrogen Generator H2PEM-510	510cc/min.	ea.	23068

Replacement and Maintenance Components for Hydrogen Generators (for all models listed above)

Replacement Desiccant Cartridge for H2PEM Generators		ea.	23069
6-Month Maintenance Kit for H2PEM Generators (Includes: 1 deionizer cartridge, 1 water filter, 3 environmental filters)		kit	23070
24-Month Maintenance Kit for H2PEM Generators (Includes: 1 deionizer cartridge, 1 water filter, 3 environmental filters, 1 water level sensor, 1 water pump, and 1 desiccant cartridge)		kit	23071

Super-Clean™ Gas Filter and Base Plate Kits

Description	qty.	cat.#
Carrier Gas Cleaning Kit (includes mounting base plate, 1/8" inlet/outlet fittings, and oxygen/moisture/hydrocarbon Triple Gas Filter)	kit	22019
Fuel Gas Purification Kit (includes mounting base plate, 1/8" inlet/outlet fittings, and hydrocarbon/moisture Fuel Gas Filter)	kit	22021

Replacement Gas Filters

Description	qty.	cat.#
Replacement Triple Gas Filter (removes oxygen, moisture and hydrocarbons)	ea.	22020
Replacement Fuel Gas Filter (removes moisture and hydrocarbons)	ea.	22022

Gas Filter Bundle Kit

- Kit includes two Fuel Gas Filters for FID fuel gases and one Triple Gas Filter for carrier gas.
- Ideal for use in combination with 3-position base plate—purchase separately.

Description	qty.	cat.#
Gas Filter Bundle Kit	kit	22031

Super-Clean™ Ultra-High Capacity Gas Filters

Description	qty.	cat.#
Ultra-High Capacity Hydrocarbon Filter	ea.	22030
Ultra-High Capacity Moisture Filter	ea.	22028
Ultra-High Capacity Oxygen Filter	ea.	22029

Filter Base Plates

- Standard base plate fittings are 1/8". To adapt to 1/4", order 1/8" to 1/4" tube-end unions.
- Base plates fit all Super-Clean™ gas filters listed above.

Description	qty.	Brass	
			cat.#
Single-Position Filter Base Plate	ea.		22025
2-Position Filter Base Plate	ea.		22026
3-Position Filter Base Plate	ea.		22027

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www.restek.com/outofgas



All traps measure:
10⁵/₈" x 1³/₄" (27 x 4.4 cm)
Each base plate unit
measures:
4" x 4" x 1⁷/₈"
(10.2 x 10.2 x 4.8 cm)

