# Gas Purification/Management

Gas Generators and Air Compressors: Hydrogen Generators



Description	Cat. No.	Qty
Model H2PEM-100, 110/230 volt, output flow: 0-100 cc/min	27773-U	1 ea
Model H2PEM-165, 110/230 volt, output flow: 0-165 cc/min	27620-U	1 ea
Model H2PEM-260, 110/230 volt, output flow: 0-260 cc/min	22751	1 ea
Model H2PEM-510, 110/230 volt, output flow: 0-510 cc/min	22801	1 ea

## Parker® ChromGas® Hydrogen Generator

This ChromGas hydrogen generator employs a SPE Electrolyzer cell which uses a solid polymer electrolyte to produce hydrogen on demand. An economical alternative to high pressure gas cylinders, this unit should pay for itself in a year or two.

## Features/Benefits

- Eliminates need for dangerous and expensive hydrogen gas cylinders
- Compact; only requires one square foot of bench space
- · Can be used anywhere that an electrical supply is available
- · Just add deionized water for weeks of continuous operation
- Only 100 mL of hydrogen is stored in the system at any time, and at low pressure
- A built-in sensing circuit shuts the generator down if a hydrogen leak is detected
- If contaminated water or low level water is detected, the system activates a warning light and shuts off the generator which avoids damage to the electrolytic cell
- SPE Electrolyzer technology eliminates the need for caustic liquids

#### Maintenance

- · Add deionized water as needed
- Change the deionizer bag every six months (or if "Change Water" indicator comes on)
- · Change the desiccant cartridge when it changes color to pink

## Specifications

- Water Reservoir Capacity: 4 L
- Outlet Purity: 99.99997%
- Outlet Pressure: 0-100 psig
- Outlet Fitting: 1/8 in. compression
- Power Needs: 110-230 V (50-60 Hz)
- Shipping Weight: 40 lb (18.1 Kg) dry
- Dimensions (H x W x D): 14.75 in. x 13 in. x 14 in. (37 cm x 33 cm x 36 cm)

#### Marks

- CE approved
- · UL listed
- CSA listed
- IEC 1010 certified
- · Satisfies OSHA and NFPA requirements

Description	Cat. No.	Qty
Model 9800, 110/230 volt, output	22835	1 ea
flow: 0-1200 cc/min		

### Parker® ChromGas® Hydrogen Generator Replacement Parts

Use for routine maintenance of Parker ChromGas hydrogen generators.

- Change the deionizer bag every six months (or if "Change Water" indicator comes on)
- · Change the desiccant cartridge when it changes color to pink

Description	Cat. No.	Qty	
Deionizer Bags	22963	2 ea	
Desiccant Cartridge	22837	1 ea	

## Zero Air Generators

The oxygen source for FIDs is commonly obtained by using pressurized air. In particular, zero air is recommended for FID use. This grade of air is free of methane, a compound that may cause interference with an FID (a clean flame is required for an accurate response to the analytes eluting from the column).

## Parker® ChromGas® Zero Air Generator

This ChromGas zero air generator incorporates three stages:

- · A 0.5 mm coalescing inlet filter removes particles, oil, and water
- · A heated catalyst removes hydrocarbons
- A 0.01 mm cellulose fiber outlet filter removes residual particulate material from the product air stream

A hazard-free and economical alternative to high pressure gas cylinders, this unit should pay for itself in a year or two.

## Features/Benefits

- · Eliminates need for expensive gas cylinders
- · Compact; requires less than one square foot of bench space
- Can be used anywhere that an electrical supply is available
- · Only requires an upstream compressed air source

#### Maintenance

- · Clean the inlet and outlet filters every six months
- · Change the inlet and outlet filters every two years

### Specifications

- · Inlet Pressure: 2-125 psig
- Outlet Purity: <0.1 ppm hydrocarbons (as methane)
- Outlet Pressure: 125 psig
- Outlet Fitting: 1/8 in. compression
- Power Needs: 110 V (60 Hz), or 230 V (50 Hz)
- Shipping Weight (Model 1000 and 1001): 11 lb (5 Kg)
- Shipping Weight (Model 3500 and 3501): 20 lb (9.1 Kg)
- Dimensions (Model 1000 and 1001; H x W x D): 9.75 in. x 5.75 in. x 12 in. (25 cm x 14.7 cm x 30.8 cm)
- Dimensions (Model 3500 and 3501; H x W x D): 12 in. x 6.75 in. x 15 in. (29.2 cm x 17.8 cm x 39.4 cm)

