









# **Chromatography** Product Brochure





ENGINEERING YOUR SUCCESS.

# **Hydrogen Generators for Fuel Gas**

## H2PEM Hydrogen Generator

### Parker's fuel gas hydrogen generators utilize a proton exchange membrane, which eliminates the use of liquid electrolytes with hydrogen generators.

Deionized water is all that is required to generate a continuous supply of hydrogen for weeks. An automatic water fill option for continuous operation is available for all fuel gas hydrogen generators. Simply connect your in-house supply of deionized water to the generator for virtually hands-free operation and realize an output capacity of up to 510 cc/min with 99.9995% pure hydrogen for up to several FIDs.

- Ideal for fuel gas for up to 14 FIDs
- Exclusive water management system and control circuitry
- Unique display lighting for easy status and water level checks
- Remote control and monitoring available with optional USB controller
- Compact design requires small footprint

- No liquid caustic solution required
- Includes 2-year cell warranty
- Minimal maintenance or monitoring required
- ROI in less than one year
- Exceeds NFPA 504 and OSHA 1910.103
   regulations
- Meets CSA, UL, and IEC1010

### **Principal Specifications**

Model	H2PEM-100	H2PEM-165	H2PEM-260	H2PEM-510		
Flow Rates	100 mL/min	165 mL/min	260 mL/min	510 mL/min		
Purity		99.9995%				
Outlet Port	1/8" compression					
Electrical Requirements	100/230 VAC, 60/50 Hz					
Delivery Pressure	5-100 psig ± 0.5 psig					
Shipping Weight	70 lb (32 kg) dry					
Dimensions	17" h x 13.4" w x 18" d (43 cm x 34.2 cm x 45 cm)					

<b>U</b>	
Description	Model
Desiccant Cartridge (1 each)	MKH2PEM-D
6 Month Service Kit	MKH2PEM-6M
24 Month Service Kit	MKH2PEM-24M
Preventative Maintenance Plan	H2PEM-PM and H2PEM-PMPLUS
Installation Service	H2PEM-100-INST, H2PEM-165-INST, H2PEM-260-INST, H2PEM-510-INST
USB Remote Control Accessory	604970894



# Hydrogen Generators for Fuel and Carrier Gas

# H-MD & H2PEMPD Series

The Parker hydrogen generator is an excellent source of ultra pure, dry hydrogen for a wide range of laboratory uses. The H-MD and H2PEMPD series generators are used extensively with gas chromatographs, as fuel gas for flame ionization detectors (FID), reaction gas for Hall detectors, and carrier gas to ensure absolute repeatability of retention times. In high sensitivity trace hydrocarbon analyzers and air pollution monitors, the hydrogen produced ensures the lowest possible background noise.

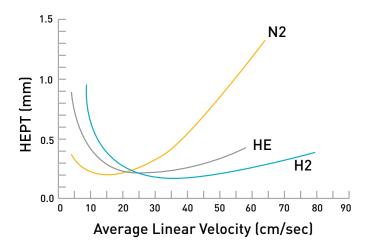
## H-MD Series

The **H-MD series** ultra high purity hydrogen gas generators offer the optimum combination of safe operation, reliability, performance and low cost of ownership. Using proven PEM cell technology, hydrogen is produced on-demand from deionized water and electricity, at low pressure and with minimal stored volume. The H-MD generators ideally supply GC and GC/MS carrier gas, Four models operate at flow rates; 160 ml/min, 250 ml/min, 500 ml/min and 1100 ml/min.

- Automatic water fill option available
- Produces a continuous supply of 99.99999+% pure hydrogen gas without downstream purifiers
- Compact only one square foot of bench space required
- · Designed to run continuously 24 hours per day



The Van Deemter Curves (right) show a comparison of nitrogen, helium and hydrogen carrier gases. A Parker hydrogen generator will also allow the user to exploit the benefits of using hydrogen carrier gas instead of helium. Increased flow velocity can shorten analysis time by 50%.



## H2PEMPD Series

The Parker **H2PEMPD series** of hydrogen generators use a proton exchange membrane (PEM) with microprocessor controls to produce hydrogen on-demand. It's maintenance-free palladium purifier module removes oxygen down to <0.01 ppm, moisture down to <1.0 ppm, while only 100 mL of hydrogen gas is stored in the system at any time. For larger gas supply requirements, up to 32 hydrogen generators can be banked together using Parker's cascading, load balancing technology. Data logging of gas generator performance is incorporated for use in regulated environments where system validation may be required.

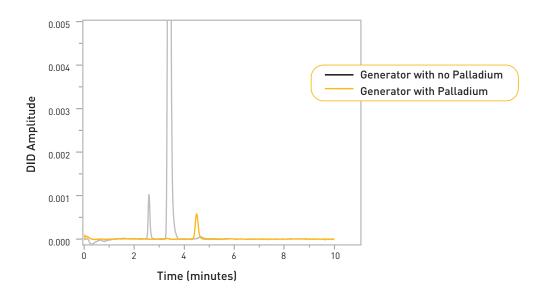
- Flow capacity up to 1,300 cc/min
- Delivery pressure of up to 175 psig
- Continuous supply of 99.99999+% pure hydrogen gas
- Compact design requires small footprint
- Automatic water feed for 24/7 operation
- Palladium membrane prevents baseline drift unlike auto-drying technologies
- Remote monitoring via PC
- Minimal maintenance or monitoring required

- Quick return on investment
- Includes 3-year cell warranty
- Exceeds OSHA 1910.103 and NFPA 50A

### Simple Experimental:

The two merged baselines in the below chromatogram were created using a Gow-Mac Gas Chromatograph Series 590 equipped with a (DID) discharge ionization detector with hydrogen separator. In creating both baselines (black and gold) the gas sample is hydrogen from a hydrogen generator. Both generators are the same - as hydrogen gas is produced from water via electrolytic disassociation, but differ slightly as one generator incorporates a desiccant drying tube as a final purifier while the second generator has a palladium membrane as the final purifier.

The large black peak represents a combined 12 ppm concentration of oxygen and nitrogen, suitable for hydrogen fuel gas while the corresponding point in the gold baseline represents a combined 12 ppb concentration of oxygen and nitrogen, suitable for either fuel or carrier gas.



## H-MD & H2PEMPD Series

#### **Principal Specifications**

Model	20H-MD	40H-MD	60H-MD	110H-MD
Flow Rate	160 mL/min	250 mL/min	500 mL/min	1100 mL/min
Purity*		>9!	9.99995%	
Water Consumption (24/7, full flow) [L/week]	1.69	2.41	4.82	10.60
Delivery Pressure	5-100 psig +/- 0.5 psig			
Optional Auto Water Fill (AWF)	Yes	Yes	Yes	Standard
Oxygen Content	<0.1 ppm			
Water Content	<1 ppm			
Electrical Requirements	Universal Power Supply: 100/230 VAC, 60/50 Hz			Hz
Shipping Weight	70 lb (30 kg) dry			
Dimensions	17" h x 13.4" w x 18" d (43 cm x 34.2 cm x 45 cm)			cm)

\* With respect to oxygen

Model	H2PEMD-510	H2PEMD-650	H2PEMD-850	H2PEMD-1100	H2PEMD-1300	
Max. Hydrogen Flow Rate	510 mL/min	650 mL/min	850 mL/min	1100 mL/min	1300 mL/min	
Hydrogen Purity			99.99999+%			
Oxygen Content		< 0.01 ppm				
Water Content	< 0.01 ppm					
Max. Outlet Pressure	100 or 175 psig (6.8 or 11.9 Bar)					
Electrical Requirements	100/230 VAC, 60/50 Hz					
Outlet Connection	1/4" Compression					
Dimensions	17.1" h x 13.5" w x 21" d (43.5 cm x 34 cm x 53 cm)					

• H2PEMPD Hydrogen Generators are available with maximum pressure of either 100 of 175 PSIG.

See Ordering Information for pressure selection

### **Ordering Information**

Description	Model
Hydrogen Gas Generator	20H-MD, 40H-MD, 60H-MD, 110H-MD
Installation Kit	IK7532
Preventive Maintenance Plan	H-MD-PM, H-MD-PMPLUS

Description	H2PEMPD-510	H2PEMPD-650	H2PEMPD-850	H2PEMPD-1100	H2PEMPD-1300
Max. Outlet Pressure to 100 PSIG (6.8 bar)	H2PEMPD- 510-100	H2PEMPD- 650-100	H2PEMPD- 850-100	H2PEMPD- 1100-100	H2PEMPD- 1300-100
Max. Outlet Pressure to 175 PSIG (11.9 bar)	H2PEMPD- 510-175	H2PEMPD- 650-175	H2PEMPD- 850-175	H2PEMPD- 1100-175	H2PEMPD- 1300-175
Annual Preventive Maintenance	H2PEMPD-PM	H2PEMPD-PM	H2PEMPD-PM	H2PEMPD-PM	H2PEMPD-PM
Semi Annual Preventive Maintenance	H2PEMPD-PMPLUS	H2PEMPD-PMPLUS	H2PEMPD-PMPLUS	H2PEMPD-PMPLUS	H2PEMPD-PMPLUS

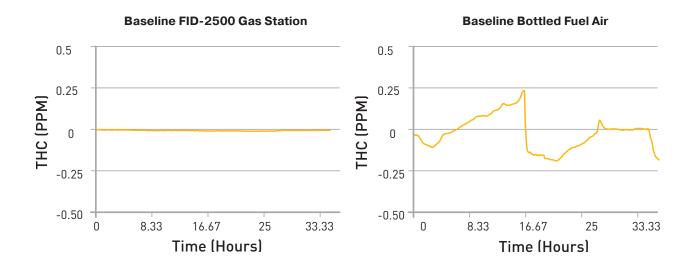
for assistance, call 800-343-4048

# **FID Gas Stations**

Designed to provide fuel gas and support air to 5-6 flame ionization detectors, flame photometric detectors, or total hydrocarbon analyzers, Parker **FID Gas Stations** provide both hydrogen gas and zero grade air to FID detectors on gas chromatographs. Hydrogen gas is produced from deionized water using a proton exchange membrane cell. The gas stations' generator compartment utilizes the principle of electrolytic dissociation of water and hydrogen proton conduction through the membrane, and supplies up to 250 cc/min of 99.9995% pure hydrogen with pressures to 60 psig. The zero air compartment produces up to 2500 cc/min of zero grade air by purifying on-site compressed air to a total hydrocarbon concentration of < 0.1 ppm (measured as methane).

- Ideal for up to 5-6 FIDs
- Increases analysis accuracy
- Reduces the cleaning requirement for the detector
- Recommended by many GC and column manufacturers
- · ROI in less than one year
- · Automatic water fill
- Silent operation
- · Minimal operator attention required
- Exceeds NFPA 504 and OSHA 1910.103
- Meets CSA, UL, and IEC1010

The chromatograms (below) compare baselines produced by a Parker FID gas station and bottled fuel air. The baseline produced by the Parker generator is very flat, with no fluctuations or peaks, in comparison with the chromatogram of the bottled air fuel supply, which has many peaks ranging from .25 ppm to -.25 ppm.





## **Principal Specifications**

Model	FID-1000NA	FID-2500NA	
Hydrogen Purity	99.99	95%	
Zero Air Purity	< 0.1 ppm (total hydro	ocarbon as methane)	
Maximum Hydrogen Flow Rate	90 mL/min	250 mL/min	
Maximum Zero Air Flow Rate	1000 mL/min	2500 mL/min	
Electrical Requirements	120/230 VAC, 60	)/50 Hz, 4 Amps	
Hydrogen Outlet Pressure	60 psig		
Zero Air Outlet Pressure	40-125 psig		
Certifications	IEC 1010-1; CSA 1010; UL 3101; CE Mark		
Dimensions	10.5" w x 17" d x 16.5" h (27 cm x 43 cm x 42 cm)		
Inlet Port	1/4" NPTF compressed air supply		
Outlet Ports	1/8" compression		
Shipping Weight	53 lbs /	′ 24 kg	

**OLUMES** 

Description	Model
FID Gas Station	FID-1000NA, FID-2500NA
Installation Service	FID-1000-INST, FID-2500-INST
Annual Maintenance Kit	MKFID1000
Preventive Maintenance Plan	FID-1000-PM, FID-2500-PM
Extended Support (24 Month Warranty)	FID-1000-DN2, FID-2500-DN2

# **Zero Air Generators**

## **HPZA** Series

Parker **Zero Air Generators** are manufactured with state-of-the art, reliable components and are engineered for easy installation, operation, and long term performance. Their compact design requires a small footprint while eliminating the safety concerns and uncertainty related to costs and availability of cylinder gas delivery. Generate a continuous supply of zero grade air on-demand with a Parker zero air generator.

- Produce UHP zero air from house compressed air (<0.05 ppm THC)</li>
- Easy installation and operation
- Increase analysis accuracy
- Qualitative SMART-Display provides status at a glance
- Minimal operator attention
- Recommended by many GC
   and column manufacturers
- ROI in less than one year
- Whisper quiet operation
- Models available to service up to 66 FIDs
- · Reduces detector cleaning



Number of FIDS	Model Number	
Up to 2	75-83NA	
Up to 8	HPZA-3500	
Up to 16	HPZA-7000	
Up to 40	HPZA-18000	
Up to 66	HPZA-30000	
D 1 150 ( 1 : )		

Based on a 450 ccm fuel air rate.

Model	75-83NA	HPZA-3500	HPZA-7000	HPZA-18000	HPZA-30000
Max. Zero Air Flow Rate	1 L/min	3.5 L/min	7 L/min	18 L/min	30 L/min
Outlet Hydrocarbon Concentration (as methane)	< 0.1 ppm	< 0.05 ppm	< 0.05 ppm	< 0.05 ppm	< 0.01 ppm
Min./Max. Inlet Air Pressure		40	psig/125 psig		
Max. Inlet Hydrocarbon Concentration (as methane)			100 ppm		
Pressure Drop at Maximum Flow Rate	4 psig				
Max. Inlet Air Temperature	78°F (25°C)				
Inlet/Outlet Ports	1/4" NPT (female)				
Electrical Requirements	120/230 VAC, 60/50 Hz				
Dimensions	10" w x 3" d x 12" h (25 cm x 8 cm x 30 cm) 11" w x 13" d x 16" h (27 cm x 34 cm x 42 cm)			cm)	
Shipping Weight	7 lbs. (3 kg) 41 lbs. (19 kg)				

### **Ordering Information**

Description	Model
Zero Air Generator	75-83NA, HPZA-3500, HPZA-7000, HPZA-18000, HPZA-30000
Maintenance Kit for Model 75-83NA	MK7583
Maintenance Kit for All Other Models	MK7840
Installation Kit for All Models	IK76803
Preventive Maintenance Plan	75-83-PM, HPZA-3500-PM, HPZA-7000-PM, HPZA-18000-PM, HPZA-30000-PM
Extended Support (24 Month Warranty)	75-83-DN2, HPZA-3500-DN2, HPZA-7000-DN2, HPZA-18000-DN2, HPZA 30000-DN2

## Principal Specifications

# Flame-Proof Zero Air Generator

## Model 75-82S

The Parker **Model 75-82S Zero Air Generator** produces up to 1,000 cc/min. of high-purity zero. Using state-of-the-art catalytic technology, the generator continuously converts compressed air into zero-grade air, at safe regulated pressures, and can be used as fuel air to process GC-FIDs, and zero grade gas /zero reference for analytical instruments. Its housing is a standard Crouse-Hinds® flame-proof enclosure designed to operate in a class 1, division 1, groups B, C, or D environment and its internals are all stainless steel.



Zero grade air is produced by means of catalytic oxidation. Compressed air is channeled into a heated catalyst bed where the hydrocarbons are converted to carbon dioxide and water vapor, producing zero-grade air with less than 0.1 ppm hydrocarbon content (measured as methane). Using a zero air generator for fuel air for GC analysis allows for a lower, more stable baseline signal to be obtained. Lower baseline noise allows for a higher signal-to-noise ratio, giving rise to higher sensitivity or larger peak areas, resulting in increased accuracy and reduced cleaning requirement of the detector.

- Safe, even in explosive environments
- Minimal operator attention required
- Produces a continuous supply of ultra high purity zero grade air
- · Compact design requires small footprint
- Designed to mount on Unistrut<sup>®</sup> framing or directly on the wall

### **Principal Specifications**

Description	Model
Zero Air Generator	75-82S
Flame-Proof Certification (CSA NRTL/C)	Class 1, Division 1, Groups B, C, and D
Maximum Flow Rate	1000 mL/min
Total Hydrocarbon Concentration	< 0.1 ppm (measured as methane)
Min./Max. Inlet Pressure	40 psig/125 psig
Max. Inlet Hydrocarbon Content	100 ppm
Max. Inlet Air Dewpoint	10°F (5°C) above ambient
Pressure Drop at Maximum Flow Rate	< 8 psid
Ambient Temperature	40°F to 100°F (4°C to 38°C)
<b>Electrical Requirements</b>	120/230 VAC, 60/50 Hz
Shipping Weight	28 lbs. (13 kg)
Dimensions	11" w x 7" h x 6" d (28 cm x 18 cm x 15 cm)

Description	Model
Zero Air Generator	75-82S
Replacement Catalyst Module	75398
Final Filter Cartridge	75820
<b>Optional Prefilter Assemblies</b>	2002N-1B1-DX, 2002N-1B1-BX
Installation Kit	IK76803
Preventive Maintenance Plan	75-82S-PM
Extended Support (24 Month Warranty)	75-82S-DN2

# Nitrogen Generator with Research Grade Purity

# Model UHPN2-1100

The **UHPN2 Nitrogen Generator** is designed to convert standard compressed air into nitrogen with purities up to 99.9999%, far exceeding the specification of UHP cylinder gas. It produces up to 1.1 lpm of UHP nitrogen gas utilizing a combination of state-of-the art purification and premier filtration technologies that includes high-efficiency coalescing pre-filters and a 0.01 micron (absolute) membrane filter.

Oxygen, carbon dioxide and water vapor are removed via pressure swing adsorption technology and a catalyst module oxidizes hydrocarbons from the inlet air supply. The UHPN2 is ideal for carrier gas applications including gas chromatography, make-up gas and low flow sample concentrators. Its compact design requires a minimal footprint and frees up valuable laboratory floor space.



- Produces UHP nitrogen
   on-demand
- Designed for continuous operation
- Eliminates dangerous gas cylinders
- Requires minimal operator attention
- Virtually maintenance-free

Description	Model
Ultra High Purity Nitrogen Generator	UHPN2-1100
Optional Prefilter Scrubber Assembly	76080
Maintenance Kit	MK7694
Installation Kit	IK7694
Preventive Maintenance Plan	UHPN2-1100-PM
Extended Support (24 Month Warranty)	UHPN2-1100-DN2



## **Principal Specifications**

Description	UHPN2-1100
Maximum Nitrogen Flow Rate	See flow table
Nitrogen Purity	99.9999%
Maximum Nitrogen Output Pressure	See flow table
CO Concentration	<1 ppm
CO <sub>2</sub> Concentration	<1 ppm
O <sub>2</sub> Concentration	<1 ppm
H <sub>2</sub> O Concentration	<1 ppm
Argon Concentration	0.9%
Minimum/Maximum Inlet Pressure	60 psig/125 psig
Recommended Inlet Temperature	78°F (25°C)
Ambient Operating Temperature	60°F to 100°F (16°C to 38°C)
Maximum Air Consumption	42 L/min (1.5 scfm)
Inlet Connection	1/4" NPT (female)
Outlet Connection	1/8" NPT (female)
Electrical Requirements	120/230 VAC, 60/50 Hz
Power Consumption	700 Watts
Dimensions	12" w x 16" d x 35" h (31 cm x 41 cm x 89 cm)
Shipping Weight	137 lbs. (62 kg)

### Flow Table

Inlet Air Pressure (psig)	Maximum Outlet Flow (mL/min.)	Max. Outlet Pressure (psig)
125	1100	85
110	1000	75
100	900	65
90	800	60
80	700	50
70	600	45
60	500	35

Purity specification for Nitrogen does not include Argon concentration.



# Zero Nitrogen and Nitrogen Generators for GC Carrier Gas and Makeup Gas Applications

## Nitrogen on demand, up to 5,000 mL/min

# UHPZN2 & UHPN2 Series

Parker Zero Nitrogen and Nitrogen Generators convert a standard compressed air supply to nitrogen gas with purities up to 99.9995% and <0.1ppm of hydrocarbons using industry-leading filtration and pressure swing adsorption (PSA) technology.

Standard compressed air is filtered by high-efficiency coalescing filters to remove all contaminants down to 0.01 micron. The air then passes through two columns filled with proprietary carbon molecular sieve which adsorbs oxygen, carbon dioxide, moisture and hydrocarbons, which are desorbed to atmosphere during the pressure swing cycle thereby producing a supply of ultra-pure nitrogen. [For ultra-sensitive applications such as ECD, units also include the addition of a heated catalyst module to ensure hydrocarbons are removed to < 0.1ppm.]

Typical applications include GC make up gas and carrier gas, including ECD (Electron Capture Detector), DSC (Differential Scanning Calorimeter), and virtually any analytical instrument that requires a small flow of ultra-high purity zero nitrogen.

- Integral oil-free compressors with noise reduction technology
- Economy mode: increases compressor life and ongoing operational costs
   Designed for continuous
- Minimal operator attention and maintenance required
- Designed for continuous operation with minimal operator attention



# **UHPZN2** Series

### **Principal Specifications**

Description	UHPZN2-1000-W	UHPZN2-1000C-W	UHPZN2-3000-W	UHPZN2-3000C-W
Purity	99.9995%	99.9995%	99.9999%	99.9999%
Hydrocarbon Concentration		<0.1	ppm	
CO Concentration		<1	ppm	
CO <sub>2</sub> Concentration		<1	ppm	
H <sub>2</sub> O Concentration		<1	ppm	
Flow Rates	1 L/min	1 L/min	3 L/min	3 L/min
Inlet Pressure (non-compressor systems only)	130.5 - 143.6 psig (9 - 9.9 bar)			
Outlet Pressure	72 psig (5 bar)			
Integral Compressor	No	Yes	No	Yes
Inlet Connection	1/4"	N/A	1/4"	N/A
Outlet Connection	1/8"			
Ambient Temperature	60°F to 77°F (15°C to 25°C)			
Electrical Requirements	104-127 VAC - 60 Hz (207-253 VAC - 50/60 Hz available upon request)			
Power Consumption	105 Watts	473 Watts	105 Watts	473 Watts
Dimensions	34.2" h x 13.6" w x 26.3" d (869 mm x 345 mm x 668 mm)			
Shipping Weight	190 lbs (86 Kg)	212 lbs (96 Kg)	190 lbs (86 Kg)	212 lbs (96 Kg)

Description	Model UHPZN2
1,000 mL/min Zero UHP Nitrogen Generator with Integral Compressor	UHPZN2-1000-W non compressor, UHPZN2-1000C-W
3,000 mL/min Zero UHP Nitrogen Generator with Integral Compressor	UHPZN2-3000-W non compresssor, UHPZN2-3000C-W
Installation Kit	IK7694

Maintenance Items	Model Number	Change Frequency
Filter Kit - All Non Compressor Models	606272561	12 months
Filter Kit - All Compressor Models	606272563	12 months
Compressor Kit 120V	606272583	Every 8000Hrs or 24 months (whichever comes first)

# **UHPN2** Series

### **Principal Specifications**

Description	UHPN2-750-W	UHPN2-750C-W	HPN2-5000-W	HPN2-5000C-W
Purity	99.9995%	99.9995%	99.999%	99.999%
Hydrocarbon Concentration			N/A	
CO Concentration		<1	l ppm	
CO <sub>2</sub> Concentration		<1	l ppm	
H <sub>2</sub> O Concentration		<1	l ppm	
Flow Rates	750 mL/min	750 mL/min	5000 mL/min	5000 mL/min
Inlet Pressure (non-compressor systems only)	115-145 psig (8-9.9 bar)	N/A	115-145 psig (8-9.9 bar)	N/A
Outlet Pressure	75 psig (5 bar)			
Integral Compressor	No	Yes	No	Yes
Inlet Connection	1/4"	N/A	1/4"	N/A
Outlet Connection	1/8"			
Ambient Temperature	60°F to 77°F (15°C to 25°C)			
Electrical Requirements	104-127 VAC - 60 Hz (207-253 VAC - 50/60 Hz available upon request)			
Power Consumption	89 Watts	596 Watts	89 Watts	596 Watts
Dimensions	34" h x 14" w x 16" d (869 mm x 345 mm x 417 mm)			
Shipping Weight	97 lbs	110 lbs	190 lbs	210 lbs

Description	Model UHPN2
750ml/min UHP Nitrogen Generator	UHPN2-750C (750 mL/min)
750ml/min UHP Nitrogen Generator with Integral Compressor	UHPN2-750C (750 mL/min with integral compressor)
5000mI/min HP Nitrogen Generator	HPN2-5000 (5000 mL/min)
5000ml/min HP Nitrogen Generator with Integral Compressor	HPN2-5000C (5000 mL/min with Integral compressor)
Installation Kit	IK7694

Maintenance Items	Model Number	Change Frequency
Filter Kit - UHPN2-750	606272551	12 months
Filter Kit - HPN2-5000	606272557	12 months
Filter Kit - UHPN2-750C	606272553	12 months
Filter Kit - HPN2-5000C	606272559	12 months
Compressor Kit 120V - UHPN2-750C-W	606272579	8,000 hours or 24 months (which ever comes first)
Compressor Kit 120V - HPN2-5000C-W	606272583	8,000 hours or 24 months (which ever comes first)

# NitroVap Gas Generators

## NitroVap-1LV & -2LV

#### Parker NitroVap Nitrogen Generators provide clean, ultra-dry dewpoint evaporator grade nitrogen at high output flows from any standard laboratory compressed air source.

Nitrogen is produced by utilizing a combination of filtration and membrane separation technologies. A high-efficiency prefiltration system pretreats the compressed air to remove all contaminants down to 0.01 micron.

Hollow fiber membranes subsequently separate the clean air into a concentrated nitrogen output stream and an oxygen enriched permeate stream, which is vented from the system.

Unique membrane separation technology allows immediate nitrogen delivery to the sample concentrator. "Lock-it-and-leave-it" operation of the sample concentrator is maintained without downtime or running out of gas mid-blow-down.

- · Ideal for any combination of sample evaporators up to 100 nozzle positions
- · Accelerates evaporation by decreasing the partial vapor pressure above the solvent liquid
- Recommended by many sample concentrator and sample evaporator manufacturers
- · Payback period of typically less than one year
- · Sleep economy mode eliminates compressed air consumption when the sample concentrator not in use
- · Minimal operator attention required
- · Compact design requires minimal footprint

### **Ordering Information**

-		 blowdow evaporators
Description	Model	<ul> <li>TurboVap from Biot</li> </ul>
NitroVap Nitrogen Generators	NitroVap-1LV, NitroVap-2LV	N-Evap from Organ
Maintenance Kit (Includes 1 each filter cartridge, and 1 each membrane cartridge)	MKNITROVAP	<ul><li>RapidVap from Lab</li><li>Reacti-Vap from Fis</li></ul>
Preventive Maintenance Plan	NITROVAP-1LV-PM NITROVAP-2LV-PM	<ul> <li>Duo-Vap from Jone Chromatography</li> </ul>
Extended Support with 24 Month Warranty	NITROVAP-DN2	<ul> <li>DryVap from Horizo</li> <li>Evaporex from April</li> </ul>

### Use with these and other rs

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- nomation
- bConco
- isher Pierce
- es
- on Technology
- vaporex from Apricot

### **Principal Specifications**

NitroVap-1LV & -2LV		
Nitrogen Dewpoint	Down to -20°F (-29°C) atmospheric	
Maximum Nitrogen Flow Rate	NitroVap-1LV up to 80 slpm @ 100 psig input, up to 140 slpm @ 125 psig input	
	NitroVap-2LV up to 160 slpm @ 100 psig input, up to 287 slpm @ 125 psig input	
Electrical Requirements	None	
Nitrogen Outlet Pressure	0-15 psig user controlled	
Dimensions	10.63" w x 14.1" d x 16.5" h (26.92 cm x 35.81 cm x 41.91 cm)	
Inlet Port/Outlet Port	1/4" NPT (female)	
Shipping Weight	53 lbs/24 kg	



## Parker Filtration Group

Aerospace Filtration Division Greensboro, North Carolina 336 668 4444

Bioscience & Water Filtration Division Bioscience Filtration Oxnard, California 877 784 2234

Water Purification Carson, California 310 608 5600

Engine Mobile Aftermarket Division Kearney, Nebraska 308 234 1951

Engine Mobile Original Equipment Division Modesto, California 209 521 7860

HVAC Filtration Division Jeffersonville, Indiana 866 247 4827

#### Hydraulic & Fuel Filtration Division Metamora, Ohio 419 644 4311

Industrial Gas Filtration & Generation Division Lancaster, NY 800 343 4048

Industrial Process Filtration Division Mineral Wells, Texas 940 325 2575

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