

High Purity Nitrogen Generators

The Parker Balston Ultra High Purity (UHP) Nitrogen Generators are engineered to transform standard compressed air in to a safe supply of 99.999% pure nitrogen.

Innovative design features include integral compressors with economy mode as standard. This extends compressor life and reduces ongoing running costs.

Typical applications include optical purge for ICP-OES (Inductive

Coupled Plasma - Optical Emissions) high flow GC make up gas, solvents evaporation, DSC (Differential Scanning Calorimeter) and virtually any analytical instrument that requires a small to medium flow of ultra high purity nitrogen.



Model HPN2-5200



Features and Benefits

- Produces a continuous supply of high purity nitrogen 99.999% for ICP-OES
- Ideal for Optical Purge, extends analysis into the far UV range below 170 nm
- Designed to run 24 hours a day
- Eliminate dangerous nitrogen cylinders or dewars from the laboratory
- Integral oil free compressors with noise reduction technology
- Economy mode, increasing compressor life and reducing ongoing running costs



Nitrogen is produced by utilizing a combination of 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 carbon molecular sieve (CMS) which adsorb O₂, CO₂ moisture and hydrocarbons. These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure nitrogen.

Principal Specification

Description	HPN2-5200	HPN2-5200C	HPN2-8000	HPN2-8000C	HPN2-10500	HPN2-10500C	HPN2-14000	HPN2-14000C
Purity	99.999%	99.999%	99.9%	99.9%	99.8%	99.8%	99.5%	99.5%
Hydrocarbon concentration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CO concentration	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm
CO ₂ concentration	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm
H ₂ O concentration	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm
Flow rates	5,200 ml/min	5,200 ml/min	8,000 ml/min	8,000 ml/min	10,500 ml/min	10,500 ml/min	14,000 ml/min	14,500 ml/min
Inlet pressure	130.5-143.6 psi g (8-9.9 bar)	N/A	130.5-143.6 psi g (8-9.9 bar)	N/A	130.5-143.6 psi g (8-9.9 bar)	N/A	130.5-143.6 psi g (8-9.9 bar)	N/A
Integral compressor	No	Yes	No	Yes	No	Yes	No	Yes
Outlet pressure	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)	72.5 psi g (5 bar)
Inlet connection	1/4"	N/A	1/4"	N/A	1/4"	N/A	1/4"	N/A
Outlet connection	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	N/A
Min/Max Inlet Air Temperature	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)	59°F to 77°F (15 to 25°C)
Electrical requirements	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz	120 VAC/60Hz 230VAC-50Hz
Power consumption	89 Watts	580 Watts	89 Watts	580 Watts	89 Watts	580 Watts	89 Watts	580 Watts
Dimensions (HxWxD)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)	34.2x13.6x26.3in (87x35x67cm)
Weight (shipping)	189.6 lbs (86Kg)	197.3 lbs (95Kg)	189.6 lbs (86Kg)	197.3 lbs (95Kg)	189.6 lbs (86Kg)	197.3 lbs (95Kg)	189.6 lbs (86Kg)	197.3 lbs (95Kg)

Ordering Information

Description	Model Number
5,200ml/min HP Nitrogen Generator	HPN2-5200-NA
5,200ml/min HP Nitrogen Generator with integral compressor	HPN2-5200C-NA
8,000ml/min HP Nitrogen Generator	HPN2-8000-NA
8,000ml/min HP Nitrogen Generator with integral compressor	HPN2-8000C-NA
10,500ml/min HP Nitrogen Generator	HPN2-10500-NA
10,500ml/min HP Nitrogen Generator with integral compressor	HPN2-10500C-NA
14,000ml/min HP Nitrogen Generator	HPN2-14000-NA
14,000ml/min HP Nitrogen Generator with integral compressor	HPN2-14000C-NA
Installation Kit	Consult Factory

Maintenance Items	Model Number	Change Frequency
Filter Kit - non compressor models	MKHPN2-FK	12 months
Filter Kit - compressor models	MKHPN2CL-FK	12 months
Compressor Kit 230V all models	MKN2-CK230L	8,000 hours or 24 months (whichever comes first)