

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

Nitrogen on demand, up to 3,200 ml/min

**The Parker Balston Zero Nitrogen Generators** are engineered to transform standard compressed air in to a safe regulated supply of 99.9995% pure nitrogen, with <0.1ppm of hydrocarbons

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.

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

The air then passes through two columns filled with proprietary carbon molecular sieve (CMS) which adsorb O<sub>2</sub>, CO<sub>2</sub>, moisture and hydrocarbons. These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure nitrogen.



## Features and Benefits

- Produces a continuous supply of ultra high purity organic free nitrogen at 99.9995% purity
- Ideal for make-up and carrier gas applications including ECD
- Eliminate dangerous nitrogen cylinders from the laboratory
- Integral oil free compressors with noise reduction technology
- Economy mode: increasing compressor life and reducing ongoing running costs
- Designed to run 24 hours a day



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## Principal Specifications

Model	UHPZN2-1100	UHPZN2-1100C	UHPZN2-3200	UHPZN2-3200C
Purity	99.9995%	99.9995%	99.9995%	99.9995%
Hydrocarbon Concentration	<0.1ppm	<0.1ppm	<0.1ppm	<0.1ppm
CO Concentration	<1ppm	<1ppm	<1ppm	<1ppm
CO <sub>2</sub> Concentration	<1ppm	<1ppm	<1ppm	<1ppm
H <sub>2</sub> O Concentration	<1ppm	<1ppm	<1ppm	<1ppm
Flow Rates	1100ml/min	1100ml/min	3200ml/min	3200ml/min
Inlet Pressure	130 to 145 psig (9 to 9.9 bar)	N/A N/A	130 to 145 psig (9 to 9.9 bar)	N/A N/A
Outlet Pressure	75 psig (5 bar)	75 psig (5 bar)	75 psig (5 bar)	75 psig (5 bar)
Integral Compressor	No	Yes	No	Yes
Inlet Connection	1/4"	N/A	1/4"	N/A
Outlet Connection	1/8"	1/8"	1/4"	1/4"
Ambient Temperature	60 to 77°F (15 to 25°C)	60 to 77°F (15 to 25°C)	60 to 77°F (15 to 25°C)	60 to 77°F (15 to 25°C)
Electrical Requirements <sup>(1)</sup>	120/230VAC, 60/50Hz	120/230VAC, 60/50Hz	120/230VAC, 60/50Hz	120/230VAC, 60/50Hz
Power Consumption	720 Watts	1250 Watts	720 Watts	1250 Watts
Dimensions (HxWxD)	34" x 14" x 26" (869mm x 345 mm x 667 mm)	34" x 14" x 26" (869mm x 345 mm x 667 mm)	34" x 14" x 26" (869mm x 345 mm x 667 mm)	34" x 14" x 26" (869mm x 345 mm x 667 mm)
Weight	190lbs (86Kg)	212lbs (96Kg)	190lbs (86Kg)	212lbs (96Kg)

### NOTES

1 Refer to voltage appendix for electrical and plug configurations for outside North America.

## Ordering Information

for assistance, call 800-343-4048, 8 to 5 Eastern Time

Description	Model Number
1,100 ml/min Zero UHP Nitrogen Generator	UHPZN2-1100
1,100 ml/min Zero UHP Nitrogen Generator with Integral Compressor	UHPZN2-1100C
3,200 ml/min Zero UHP Nitrogen Generator	UHPZN2-3200
3,200 ml/min Zero UHP Nitrogen Generator with Integral Compressor	UHPZN2-3200C
Installation Kit	IK7694

Maintenance Items	Model Number	Change Frequency
Filter Kit - All Non Compressor Models	MKUHPZN2-FK	12 months
Filter Kit - All Compressor Models	MKUHPZN2CL-FK	12 months
Compressor Kit 230V - All Models	MKN2-CK230L	4,000 hours or 12 months (which ever comes sooner)