Nitrogen Generators

for ICP Spectrometers

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Nitrogen on Demand, up to 12 lpm

The Parker Balston Ultra High Purity (UHP) Nitrogen Generators are engineered to transform standard compressed air in to a safe supply of 99.9999% pure nitrogen.

Typical applications include optical purge for ICP-OES (Inductive Coupled Plasma - Optical Emissions) high flow GC make up gas and carrier gas, including ECD (Electron Capture Detector), solvents evaporation, DSC (Differential Scanning Calorimeter) and virtually any analytical instrument that requires a small to medium flow of ultra high purity nitrogen.



Contact Information:

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Product Features:

- Produces a continuous supply of high purity nitrogen 99.9999% 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
- Low maintenance, minimal operation retention
- Other applications include high flow GC requirements



Nitrogen is produced by utilising 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 O_2 , CO_2 , moisture and hydrocarbons. These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure nitrogen.

For ultra sensitive applications such as ECD, units are also available with the addition of a heated catalyst module to ensure hydrocarbons are removed to < 0.1ppm.

Principal Specification

Model	76-97	76-98
Purity	See Table	See Table
Hydrocarbon Concentration	N/A	<0.1ppm
Flow Rates	See Table	See Table
Inlet Pressure	4.1 to 8.6 bar	4.1 to 8.6 bar
Inlet Connection	1/4" NPT (Female)	1/4" NPT (Female)
Outlet Connection	1/8" NPT (Female)	1/8" NPT (Female)
Ambient Temperature	10 to 35°C	10 to 35℃
Electrical Requirements	230VAC - 50Hz	230VAC - 50Hz
Power Consumption	10 Watts	1000 Watts
Dimensions (H x W x D)	1040 x 610 x 640 mm	1040 x 610 x 640 mm
Weight (Shipping)	220 Kg (227)	221 Kg (228)

Flow Rates Ipm

		99.995%		99.9999%	
Model	Inlet Air Pressure (Bar)	Maxiumum Outlet Flow (lpm)	Maximum Outlet Pressure (Bar)	Maxiumum Outlet Flow (Ipm)	Maximum Outlet Pressure (Bar)
76-97 and 76-98	8.6	12	4.1	5	5.7
	7.6	12	3.8	5	5.6
	6.9	12	3.1	5	4.3
	6.2	10	3.1	4	4.3
	5.5	8	2.8	4	3.5
	4.8	8	2.4	2	3.4
	4.1	6	2.4	2	2.9

Ordering Information

Description	Model Number	
5 to 12 lpm High Purity Nitrogen Generator	76-97	
5 to 12 lpm High Purity Nitrogen Generator with Hydrocarbon removal	76-98	
Installation Kit	IK7698	

Maintenance Items	Model Number	Change Frequency
Maintenance Kit	MK76080	12 Months
Replacement Catalyst Module for 76-98	B03-0089	36 Months

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