



ELSD Nitrogen Generator

- Simplifies ELSD operation
- Produces a continuous supply of high purity nitrogen from compressed air
- Replaces inconvenient nitrogen cylinders
- Requires no electricity



6053

The ELSD Nitrogen Generator has a small, compact footprint that fits easily on the lab bench next to your ELSD or mounts on the wall nearby.

Increase productivity, reduce operating costs, and improve lab safety by eliminating nitrogen cylinders. Forget about the need to change the nitrogen cylinder or wondering whether there is enough nitrogen left to finish the run.

The ELSD Nitrogen Generator requires no electricity and has no moving parts. Nitrogen is generated using a proprietary membrane separation technology. Simply connect the generator to your lab's existing compressed air supply or suitable air compressor. The generator separates air into its component gases and only nitrogen flows through to the ELSD.

The ELSD Nitrogen Generator produces a continuous, on demand supply of pure nitrogen at flow rates up to 4L/min. Two ELSDs may be used with one generator as long as your total gas flow rate is less than 4L/min.

more info

For information on air compressors, see page 211.



6704



Water vapor and oxygen permeate through the wall of the membrane quickly. Only nitrogen flows through the fiber bores to the ELSD.

Nitrogen Generator Specifications

Nitrogen Purity:	99%
Nitrogen Flow:	4L/min
Suspended Liquids:	None
Particles:	<0.01µm
Min/Max Operating Pressure:	60/125psig
Dimension:	16.1" H x 10.7" W x 13.4" D (40.9cm H x 27.2cm W x 34.0cm D)
Weight:	42.5lb (19.3kg)
<i>Compressed Air Requirements:</i>	
Purity:	Free of water, compressor oil (0.01mg/m ³), hydrocarbons, and particulates (<0.1µm)
Temperature:	60°F (15°C)–110°F (43°C)
Compressor Outlet Pressure:	90–145psig
Compressed Air Flow:	43L/min minimum

ELSD Nitrogen Generator

Description	Part No.
<i>ELSD Nitrogen Generator</i>	600150
<i>Replacement Parts</i>	
50ft 1/4" o.d. PTFE Tubing	3136
1/4" Brass Nuts, 10/pk	14059
1/4" Brass Ferrules, 10/pk	14062
Plug Valve	12128
1/4"—1/4" MPT Brass Male Connection	11639
1/8"—1/4" MPT Brass Male Connection	11635
<i>Accessories</i>	
Single-Stage Pressure Regulator, 0–200psig	81892
<i>Maintenance</i>	
Maintenance Kit	600151
Air Compressor with Dryer Model OF302-25BD2	89239

LC/MS Nitrogen Generators

High Purity Nitrogen from Parker and Domnick Hunter

- Choose from membrane and PSA technologies
- Stand-alone units or models with built-in compressor
- Wide range of flows to meet your needs

LC/MS instrumentation uses nitrogen as purge gas in its nebulizer, and has special nitrogen purity requirements. Parker Balston® nitrogen generators use membrane technology, while Domnick Hunter uses PSA (pressure swing adsorption). Membrane units generally offer quieter operation, while PSA units require lower air flows.

Nitrogen generators used for LC/MS are either fixed or variable purity units. Variable purity units have different nitrogen purities that are dependent on the inlet pressure, outlet pressure, and flow. Many of the variable purity units have available built-in oxygen analyzers to monitor the purity of the gas being provided.



7301

Parker Balston® NitroFlow Lab



7302

Parker Balston® N2 Series



7261

Domnick Hunter® LC/MS30

Model	Parker Balston					Domnick Hunter	
	NitroFlow Lab	N2-14	N2-22	N2-35	N2-45	LCMS30-1	LCMS30-0
Flow (L/min)	30	14	22	35	45	30	30
Air In (L/min)	Built-in Compressor	73	113	171	225	Built-in Compressor	130
Inlet Pressure (PSIG)	N/A	60	60	60	60	N/A	130.5
Outlet Pressure (PSIG)	100	145	145	145	145	102	102
Nitrogen Purity	Up to 99.5%	99%	99%	99%	99%	98%	99%
Method	Membrane	Membrane	Membrane	Membrane	Membrane	PSA	PSA
Dimensions (H x W x D)	31" x 18" x 32" 76cm x 46cm x 81cm	51.5" x 18" x 16.2" 130.8cm x 45.7cm x 41.1cm		67" x 24" x 20" 140cm x 61cm x 50cm		20" x 28" x 32.5" 51cm x 70.5cm x 82.6cm	20" x 28" x 30" 51cm x 70.5cm x 76cm
Weight	285lb (130kg)	75lb (34kg)		250lb (114kg)		284lb (129kg)	298lb (135kg)
110V Part Numbers							
<i>without O₂ analyzer</i>	80552	80163	80293	8618464	80308	8618461	8618463
<i>with O₂ analyzer</i>	—	80165	80297	8618466	80311	—	—
220V Part Numbers							
<i>without O₂ analyzer</i>	80593	80169	80295	8618465	80309	8618462	8618460
<i>with O₂ analyzer</i>	—	80171	80302	8618467	80312	—	—

UHP Nitrogen Generators

Ideal for GC and for TOC

Gas Chromatography applications require ultra high purity nitrogen. With GC, nitrogen may be a carrier gas or make-up gas but regardless it needs low ppm oxygen, carbon dioxide, carbon monoxide, and hydrocarbon. These low levels of impurities are needed to protect the column and some detectors.

Total Organic Carbon (TOC) analyzers use special purified nitrogen as a purge gas. It is important that both the air and nitrogen be hydrocarbon (including Methane), CO₂ and CO free. This allows for the best signal to noise ratio with the TOC analyzer. The TOC Nitrogen Gas Generator is zero grade (<1ppm methane) and <1ppm CO₂ and CO.

The units listed below all provide ultra high-purity nitrogen based on PSA technology. The nitrogen will contain concentrations of less than 1ppm each CO, CO₂, and <2ppm hydrocarbons. Unless indicated, methane is not removed or considered in the impurities. The units do differ in oxygen concentrations

With all nitrogen generators, there is a need to have a proper air supply. This supply can be either a house supply air source or a stand-alone air compressor. With either source, you must consider that it takes, on average, approximately five liters of air to produce one liter of nitrogen.



Parker Balston® Ultra High Pure (UHP) Nitrogen Generator



Domnick Hunter® High-Purity Nitrogen Generator

gc instruments

Parker Balston® Ultra High Pure (UHP) Nitrogen Generators Specifications

Model	Flow	Air In	Inlet Pressure	Outlet Pressure	N ₂	O ₂ Analyzers	H ₂ O	Method	Weight
HPN2-1100	500–1100cc/min	42L/min	60–125psig	35–85psig	100%	<1.0ppm	<2ppm	PSA	115lb (72kg)
UHPN2-1100*	500–1100cc/min	42L/min	60–125psig	35–85psig	100%	<1.0ppm	<2ppm	PSA	115lb (72kg)
HPN2-2000	2000cc/min	42L/min	75–120psig	90psig	99.99%	<100ppm	<2ppm	PSA	115lb (72kg)

*Methane removed for TOC applications.

Domnick Hunter® High-Purity Nitrogen Generators Specifications

Model	Flow	Air In	Inlet Pressure	Outlet Pressure	N ₂	O ₂ Analyzers	H ₂ O	Method	Weight
G1-110W	750cc/min	N/A†	101psig	73psig	99.999%	<10ppm	<2ppm	PSA	70lb (44kg)
G5-010W*	1000cc/min	N/A†	101psig	73psig	99.999%	<10ppm	<2ppm	PSA	100lb (62kg)
G2-010W	1500cc/min	N/A†	101psig	73psig	99.999%	<10ppm	<2ppm	PSA	154lb (96kg)
G2-110W	3000cc/min	N/A†	101psig	73psig	99.999%	<10ppm	<2ppm	PSA	154lb (96kg)

*Methane removed for TOC applications. †Built-in compressor.

related products

Looking for a nitrogen generator to use with ELSD?

See page 12.

Nitrogen Generators

Description	110V Part No.	220V Part No.
<i>Parker Balston® Ultra High Pure (UHP) Nitrogen Generators</i>		
HPN2-1100, 500–1100cc/min	80167	80173
UHPN2-1100*, 500–1100cc/min	80153	80155
HPN2-2000, 2000cc/min	80210	80211
<i>Domnick Hunter® High-Purity Nitrogen Generators (built-in compressors)</i>		
G1-110W, 750cc/min	50223	50226
G5-010W*, 1000cc/min	500930	500935
G2-010W, 1500cc/min	50230	50233
G2-110W, 3000cc/min	50273	50275

*Methane removed.