

Nitrogen Generators

for ELSD



Nitrogen on Demand, up to 8 lpm

The Parker Balston ELSD (Evaporative Light Scattering Detector) nitrogen generator can produce up to 8 lpm of nitrogen at pressures up to 8 bar. The generator is engineered to transform standard compressed into a safe, regulated supply of nitrogen with minimal operator attention.

Pressure flow rates and purities are specifically designed to match the stringent requirements of all the ELSD instruments. The ELSD Nitrogen Generators has been tried and tested by all the major ELSD manufactures.



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Product Features:

- Produces a continuous supply of high purity nitrogen as a nebulising gas for ELSD
- No noise, no moving parts, no electrical requirements
- Utilises Parker's propriety membrane technology
- Eliminate dangerous nitrogen cylinders from the laboratory
- Phthalate-Free, no organic vapours
- Compact design, minimal maintenance

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Nitrogen is produced by utilising a combination of filtration and membrane separation technologies. A supply of compressed air is filtered by high efficiency coalescing filters to remove all contaminants down to 0.01 micron.

Patented propriety hollow fibre membranes then separate the air into a concentrated nitrogen stream. Membrane technology offers some unique performance benefits for ELSD users including phthalate free nitrogen, silent

operation, no moving parts and no electrical requirements. There are 10,000's of systems using Parker Balston membrane technology installed worldwide.

Principal Specification

Model	N2-04
Purity	99%
Flow Rates	Up to 8 lpm
Inlet/Outlet Connection	1/4" NPT
Inlet Pressure	4.1 to 10 bar
Ambient Temperature	10 to 35°C
Electrical Requirements	Not Required
Power Consumption	N/A
Dimensions (H x W x D)	410 x 270 x 340 mm
Weight (Shipping)	17 Kg (19)

Ordering Information

Description	Model Number
Nitrogen Generator for up to 2 ELSD	N2-04
Installation Kit	IK7572

Maintenance Items	Model Number	Change Frequency
Maintenance Kit	MK7840	12 Months

NitroVap Generator

for Turbo Vaps



Nitrogen on Demand, up to 350 lpm

The Parker Balston NitroVap nitrogen generator can produce up to 350 lpm of pure nitrogen at pressures up to 8 bar. The generator is engineered to transform standard compressed air into a safe supply of nitrogen with minimal operator attention.

With a 'sleep' economy mode, high volumes of nitrogen are available as required making this an ideal generator for Turbo Vaps, sample concentrators and solvent evaporator applications.



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Product Features:

- Pay back periods typically less than one year
- Requires minimal installation and operator attention
- Designed to run 24 hours a day
- Sleep economy mode
- Flow rates up to 350 lpm
- Compact design

Nitrogen is produced by utilising a combination of filtration and membrane separation technologies. A supply of compressed air is filtered by high efficiency coalescing filters to remove all contaminants down to 0.01 micron.

Patented propriety hollow fibre membranes then separate the air into a concentrated pure nitrogen stream. Membrane technology offers some unique performance benefits including phthalate free nitrogen, silent operation, no

moving parts and no electrical requirements. There are 10,000's of systems using Parker Balston membrane technology installed worldwide.

Principal Specification

Model	NitroVap-1LV	NitroVap-2LV
Purity	Up to 95%	Up to 95%
Flow Rates	200 lpm	350 lpm
Inlet Pressure	4.1 bar to 10 bar (7 bar recommended)	4.1 bar to 10 bar (7 bar recommended)
Inlet Connection	1/4" NPT (Female)	1/4" NPT (Female)
Outlet Connection	1/4" NPT (Female)	1/4" NPT (Female)
Ambient Temperature	10 to 35°C	10 to 35°C
Electrical Requirements	Not Required	Not Required
Power Consumption	N/A	N/A
Dimensions (H x W x D)	410 x 270 x 340 mm	410 x 270 x 340 mm
Weight (Shipping)	22 Kg (24)	22 Kg (24)

Ordering Information

Description	Model Number
200 lpm NitroVap Nitrogen Generators	NitroVap-1LV
350 lpm NitroVap Nitrogen Generators	NitroVap-2LV
Installation Kit	IK76803

Maintenance Items	Model Number	Change Frequency
Maintenance Kit 1LV and 2LV	MKNITROVAP	12 Months

TOC Gas Generators

for Total Organic Carbon Analysers



TOC carrier gas on Demand, up to 1,250 ml/min

The Parker Balston TOC (Total Organic Carbon) gas generators are a complete system with carefully matched components engineered for easy installation, operation and long term reliability.

They are designed to transform standard compressed air into safe supply of hydrocarbon free (<0.05ppm), dry (-73°C), CO₂ free (<1ppm) carrier gas. The TOC gas generators are an ideal alternative as a carrier / combustion gas to nitrogen, oxygen and air cylinders. Payback periods are typically less than one year.



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Product Features:

- Produces a continuous supply of gas for TOC's
- Designed to run continuously 24 hours/day
- Purity meets or exceeds all TOC manufacturer's gas purity requirements
- Compact design and minimal maintenance
- Ensures consistent, reliable TOC analysis
- Eliminate dangerous high pressure oxygen and nitrogen gas cylinders from the laboratory

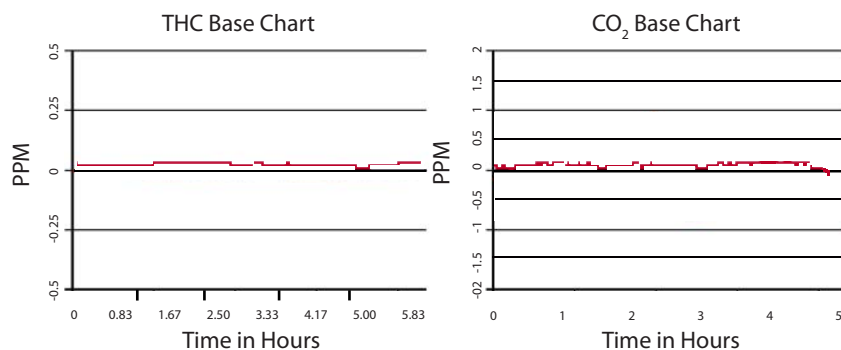
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TOC carrier gas is produced by utilising a combination of filtration, heated catalyst and pressure swing adsorption (PSA) technologies. Standard compressed air is filtered by high efficiency coalescing filters to remove all contaminants down to 0.01 micron.

The air is then purified using a state-of-art combined heated catalyst module to remove hydrocarbons. Finally the air then passes through two columns filled with molecular sieve which adsorb CO₂ and moisture.

These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure TOC grade air. Simply connect to the TOC instrument for consistent reliable analysis.



Principal Specification

Model	TOC-625	TOC-1250
Hydrocarbon Concentration	< 0.05 ppm	< 0.05 ppm
Carbon Dioxide Concentration	< 1.0 ppm	< 1.0 ppm
Dew Point	-73°C	-73°C
Flow Rates	625 ml/min	1250 ml/min
Inlet Pressure	4.5 bar to 8.6 bar	4.5 bar to 8.6 bar
Ambient Temperature	10 to 35°C	10 to 35°C
Electrical Requirements	230VAC - 50Hz	230VAC - 50Hz
Power Consumption	80 Watts	170 Watts
Dimensions (H x W x D)	318 x 229 x 406 mm	430 x 280 x 430 mm
Weight (Shipping)	13 Kg (15)	20 Kg (22)

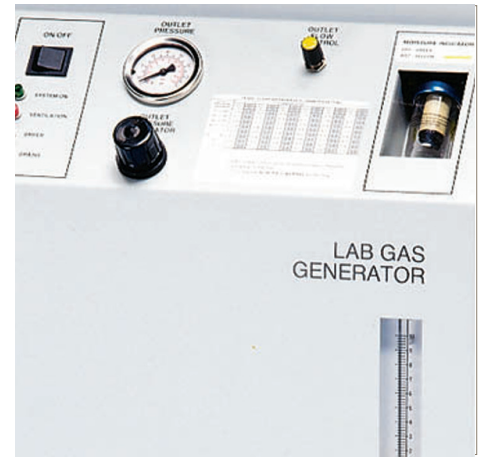
Ordering Information

Description	Model Number
625 ml/min TOC Gas Generator	TOC-625
1,250 ml/min TOC Gas Generator	TOC-1250
Receiver Tank - 3 litres at atmospheric pressure	72-007 (required to prevent pressure fluctuations)
Installation Kit	IK76803

Maintenance Items	Model Number	Change Frequency
Maintenance Kit for TOC-1250	MK7840	12 Months
Maintenance Kit for TOC-625	MKTOC625-12	12 Months
Maintenance Kit for TOC-625	MKTOC625-36	36 Months

FT-IR Purge Gas Generators

for Fourier Transform-Infrared



FT-IR Purge Gas on Demand, up to 28 lpm

The Parker Balston 'plug and play' FT-IR purge gas generator is engineered to transform standard compressed air from an integral state of the art oil-free compressor, into a safe regulated supply of dry (-73°C), CO₂ free (< 1 ppm) purge gas.

The FT-IR gas generators are an ideal alternative to nitrogen producing cleaner background spectra in a shorter time. Payback periods are typically less than one year. By removing CO₂ and water vapour the signal to noise ratio allows more accurate analysis, particularly from 1,200-2,000, 2,400 and 3,600-4,000 wave numbers.



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Product Features:

- Produces a continuous supply of purge gas for FT-IR's at a fraction of the cost of nitrogen
- Complete 'Plug and Play' generator
- Improve signal-to-noise ratio even on non-purge systems - cleaner spectra in a shorter time
- Recommended and used by all leading FT-IR manufacturers
- Eliminate costly nitrogen cylinders from the laboratory
- Internal acoustic dampening ensures quiet operation

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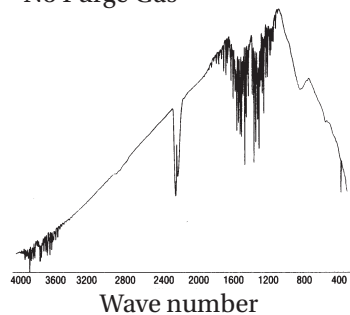
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FT- IR purge gas is produced by utilising a combination of compressor, filtration and pressure swing adsorption (PSA) technology. Compressed air is produced from an oil free compressor and then filtered by

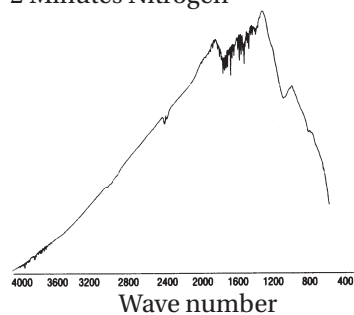
high efficiency coalescing filters to remove all contaminants down to 0.01 micron. The air then passes through two columns filled with molecular sieve which adsorb CO₂, moisture and hydrocarbons.

These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure air. Simply connect to the instrument for a continuous supply of FT-IR purge gas.

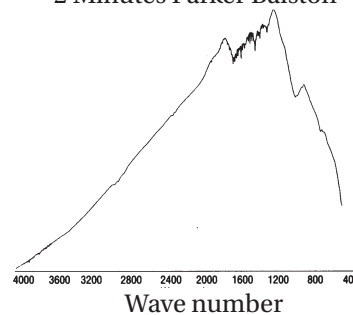
No Purge Gas



2 Minutes Nitrogen



2 Minutes Parker Balston



Principal Specification

Model	74-5041
Dew Point	-73°C
Carbon Dioxide Concentration	< 1.0 ppm
Delivery Pressure	5.5 bar
Ambient Temperature	10 to 35°C
Electrical Requirements	230VAC- 50Hz
Power Consumption	1.8 Kw
Dimensions (H x W x D)	700 x 310 x 900 mm
Weight (Shipping)	93 Kg (98)

Ordering Information

Description	Model Number
28 lpm FT-IR Purge Gas Generator	74-5041
Installation Kit	IK7572

Maintenance Items	Model Number	Change Frequency
Maintenance Kit	74065	12 Months
Replacement Compressor	74155	18 Months

FT-IR Purge Gas Generators

for Fourier Transform-Infrared



FT-IR Purge Gas on Demand, up to 85 lpm

The Parker Balston FT-IR purge gas generator is engineered to transform standard compressed air into a clean supply of dry (-73°C), CO₂ free (<1 ppm) purge gas. The FT-IR gas generators are an ideal alternative to nitrogen, producing cleaner background spectra in a shorter time.

Payback periods are typically less than one year. By removing CO₂ and water vapour the signal to noise ratio allows more accurate analysis, particularly from 1,200-2,000, 2,400 and 3,600-4,000 wave numbers.



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Product Features:

- Produces a continuous supply of purge gas for FT-IR's at a fraction of the cost of nitrogen
- Can supply FTIR with microscopes and other accessories
- Eliminate costly nitrogen cylinders in the laboratory
- Recommended and used by all leading FT-IR manufacturers
- Improve signal-to-noise ratio even on non-purge systems - cleaner spectra in a shorter time
- Simple, low cost annual maintenance

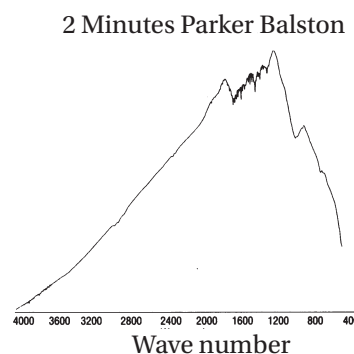
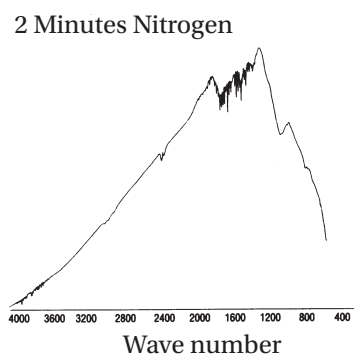
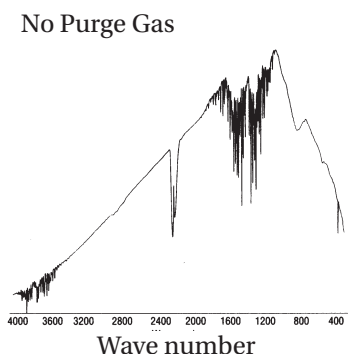
 
Analytical Gas Systems

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FT- IR purge gas is produced by utilising a combination of filtration and pressure swing adsorption (PSA) technology. An external supply of 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 molecular sieve which adsorb moisture and CO₂

These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure dry air.



Principal Specification

Model	75-45	75-52	75-62
Dew Point	-73°C	-73°C	-73°C
Carbon Dioxide Concentration	< 1.0 ppm	< 1.0 ppm	< 1.0 ppm
Flow Rates (at 6.9 bar)	14 lpm	28 lpm	85 lpm
Inlet/Outlet Pressure	4.1 to 8.6 bar	4.1 to 8.6 bar	4.1 to 8.6 bar
Inlet Connection	1/4" NPT (Female)	1/4" NPT (Female)	1/4" NPT (Female)
Outlet Connection	1/4" NPT (Female)	1/4" NPT (Female)	1/4" NPT (Female)
Ambient Temperature	10 to 35°C	10 to 35°C	10 to 35°C
Electrical Requirements	230 VAC - 50Hz - 12VDC	230 VAC - 50Hz - 12VDC	230 VAC - 50Hz - 12VDC
Power Consumption	100 Watts	100 Watts	100 Watts
Dimensions (H x W x D)	330 x 320 x 180 mm	710 x 320 x 220 mm	1120 x 320 x 220 mm
Weight (Shipping)	10 Kg (12)	24 Kg (27)	36 Kg (40)

Ordering Information

Description	Model Number
14 lpm FT-IR Purge Gas Generator	75-45
28 lpm FT-IR Purge Gas Generator	75-52
85 lpm FT-IR Purge Gas Generator	75-62
Installation Kit	IK7572

Maintenance Items	Model Number	Change Frequency
Maintenance Kit for 75-45	MK7505	12 Months
Maintenance Kit for 75-52	MK7552	12 Months
Maintenance Kit for 75-62	MK7520	12 Months