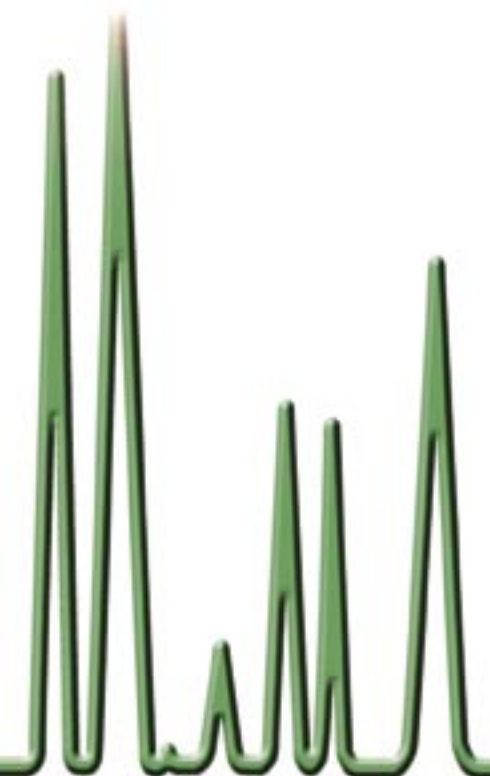
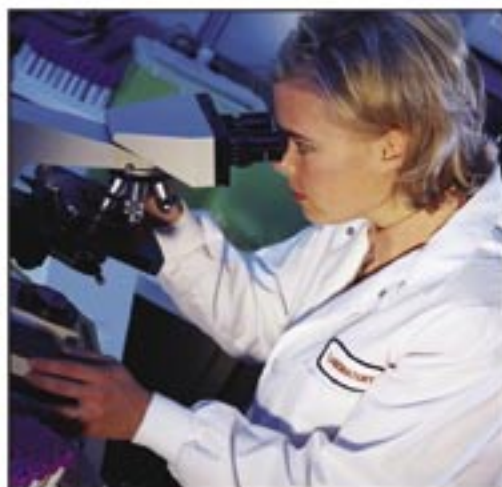




Analytical Gas Systems

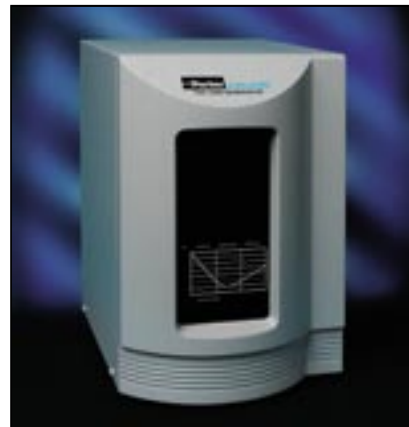
Analytical Gas Systems Product Catalog

Products for the Laboratory



TOC Gas Generator

- ▲ Replaces high pressure oxygen or nitrogen gas cylinders with hydrocarbon-free, CO₂-free compressed gas for TOC Analyzers
- ▲ Ensures consistent, reliable, TOC operation and reduces instrument service and maintenance costs
- ▲ Compact design frees up valuable laboratory floor space
- ▲ Purity meets or exceeds all TOC manufacturers' gas purity requirements
- ▲ Unique display shows qualitative gas purity at a glance



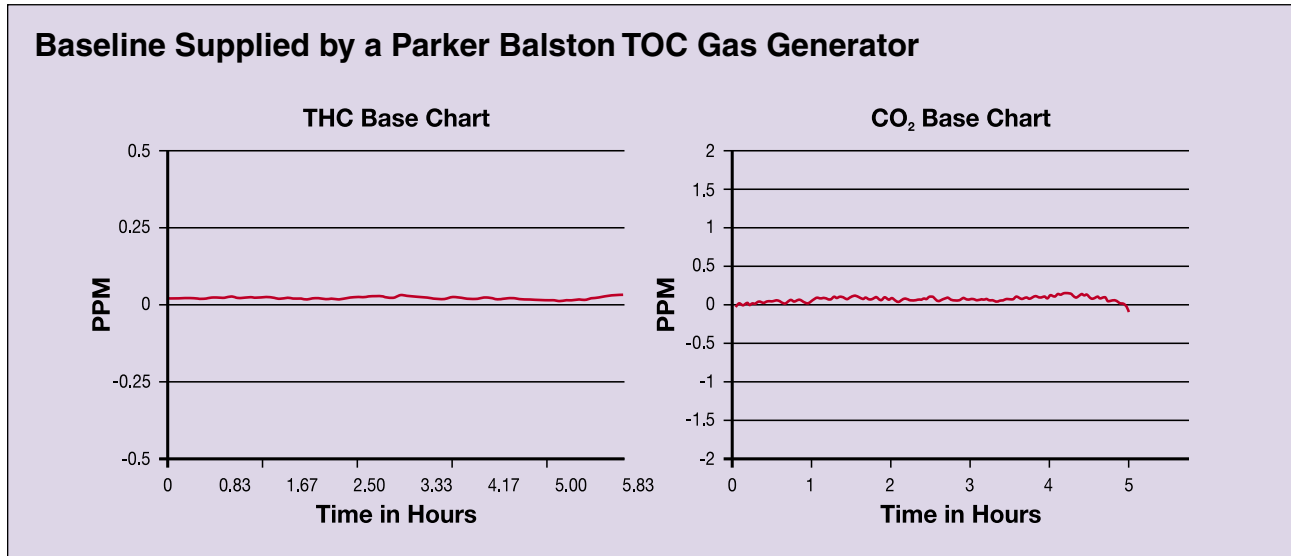
Model TOC-1250

The Parker Balston® TOC-1250 Gas Generator produces carrier/combustion gas, from an existing compressed air supply, for TOC instruments, eliminating the need to purchase expensive, inconvenient, high pressure cylinders of air, nitrogen, or oxygen. The Parker Balston TOC-1250 utilizes catalytic oxidation and pressure swing adsorption technologies to remove hydrocarbons to 0.1 ppm (measured as methane), CO₂ to 1 ppm, and water vapor to 1 ppm (-100°F/-73°C dewpoint).

The Parker Balston TOC Gas Generator eliminates all the inconveniences and costs of cylinder gas supplies and dependence on outside vendors. Uncontrollable vendor price increases, contract negotiations, long term commitments and tank rentals are no longer a concern. The Parker Balston TOC Gas Generator offers long-term cost stability.

The Parker Balston TOC-1250 is a complete system with carefully matched components engineered for easy installation, operation, and long term reliability. Installation consists of connecting a standard compressed air line to the inlet and connecting the outlet to the TOC gas supply line. Plug the generator into a standard electrical wall outlet and within minutes high purity carrier/combustion gas is supplied!

TOC Gas Generator



Baselines of THC Analyzer (above) and CO₂ Content Analyzer (right) after 5 hours supplied by a Parker Balston® TOC Gas Generator.

Principal Specifications

Model TOC-1250 TOC Gas Generator

Max. TOC Gas Flow Rate (outlet) at 100 psig	1.25 lpm (1,250 cc/min)
Outlet Hydrocarbon Concentration (as methane)	0.1 ppm
Outlet CO ₂ Concentration	< 1 ppm
Dewpoint	< -100°F (-73°C)
Inlet and Outlet Port Connections	1/4" NPT (female)
Min/Max Inlet Air Pressure	65 psig/125 psig
Max Inlet Air Temperature	78°F (25°C)
Min Required Inlet Air Flow at 100 psig	2.5 lpm (2,500 cc/min)
Max Inlet Hydrocarbon Concentration (as methane)	100 ppm
Pressure Drop at Maximum Flow Rate	7 psig
Warm-up Time	45 minutes
Electrical Requirements	120VAC/60 Hz, 2.0 Amps.
Dimensions	11" w x 17" h x 17" d (28 cm x 43 cm x 43 cm)
Shipping Weight	48 lbs. (22 kg)

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

Description	Model Number
TOC Gas Generator	TOC-1250
Annual Maintenance Kit	MK7840
Installation Kit	IK76803
Preventative Maintenance Contract	MFZATOC-PM
Extended Support with 24 Month Warranty	TOC-1250-DN2

Nitrogen Generators for TOC

- ▲ Produces a continuous supply of high purity nitrogen gas from existing compressed air
- ▲ Eliminates the need for costly, dangerous, inconvenient nitrogen cylinders in the laboratory
- ▲ Ideal for all combustion, UV persulfate, and wet oxidation sampling techniques
- ▲ Compact design frees up valuable laboratory floor space
- ▲ Offers long term cost stability - uncontrollable vendor price increases, contract negotiations, long term commitments and tank rentals are no longer a concern

The Parker Balston® Models HPN2-1100 and UHPN2-1100 Nitrogen Generators can produce up to 1.1 lpm of ultra high purity nitrogen gas. These systems are completely engineered to transform standard compressed air into 99.9999% nitrogen, exceeding the specification of UHP cylinder gas.

Nitrogen is produced by utilizing a combination of state-of-the art purification technologies and high efficiency filtration. The Model HPN2-2000 can produce up to 2 lpm of 99.99% pure nitrogen gas from standard compressed air.

Pressure swing adsorption removes O₂, CO₂, and water vapor. A catalyst module is incorporated in the UHPN2-1100 to

oxidize hydrocarbons from the inlet air supply. The generators also have high efficiency coalescing prefilters and a 0.01 micron (absolute) membrane filter incorporated into their design.

The Parker Balston UHP Nitrogen Generators are engineered and packaged in a small cabinet to fit nearly any benchtop. The systems eliminate the need for costly, inconvenient high pressure nitrogen cylinders. The HPN2-1100 and UHPN2-1100 are ideal for TOC carrier gas and purge applications.



Model HPN2-1100

Flow Chart

Inlet Air Pressure (psig)	Max Outlet Flow (cc/min.)	Max Outlet Pressure (psig)
Models HPN2-1100, UHPN2-1100		
125	1100	85
110	1000	75
100	900	65
90	800	60
80	700	50
70	600	45
60	500	35

Nitrogen Generators for TOC

Principal Specifications		
Model	HPN2-1100, UHPN2-1100	HPN2-2000
Max Nitrogen flow rate	See Flow Table	2 lpm
Nitrogen Purity	99.9999%	99.99%
Max Nitrogen output pressure	See Table	90 psig
CO ₂ concentration	< 1 ppm	< 1 ppm
O ₂ concentration	< 1 ppm	< 100 ppm
H ₂ O Concentration	< 1 ppm	< 1 ppm
Hydrocarbon concentration (1)	< 0.1 ppm	NA
Argon concentration (2)	0.9%	0.9%
Min/Max inlet pressure	60 psig/125 psig	75 psig/120 psig
Recommended inlet temperature	78°F (25°C)	78°F (25°C)
Ambient operating temperature	60°F-100°F (16°C-38°C)	60°F-100°F (16°C-38°C)
Max air consumption	42 lpm (1.5 scfm)	42 lpm (1.5 scfm)
Inlet connection	1/4" NPT (female)	1/4" NPT (female)
Outlet connection	1/8" NPT (female)	1/8" NPT (female)
Electrical requirements (3)	120 VAC/60 Hz	120 VAC/60 Hz
Dimensions	12" w x 16" d x 35" h (31cm x 41cm x 89cm)	12" w x 16" d x 35" h (31cm x 41cm x 89cm)
Shipping Weight	110 lbs. (50 kg)	110 lbs. (50 kg)

Notes:

- 1 Model HPN2-1100 does not remove hydrocarbons.
- 2 Purity specification for Nitrogen does not include Argon concentration.
- 3 Power Consumption is as follows:
Model HPN2-1100 = 25 Watts,
Model UHPN2-1100 = 700 Watts,
Model HPN2-2000 = 25 Watts.

Ordering Information <small>call 800-343-4048, 8 to 5 EST</small>	
Description	Model Numbers
High Purity Nitrogen Generator	HPN2-1100, HPN2-2000
Ultra High Purity Nitrogen Generator	UHPN2-1100
Purity Indicator/Scrubber	72092
Optional Prefilter System	2002N-1B1-DX
Maintenance Kit	MK7692*, MK7694
Installation Kit for all Models	IK7694
Annual Preventative Maintenance Contract	LFHPN2-PM, LFUHPN2-PM, MFHPN2-PM
Extended Support with 24 Month Warranty	HPN2-1100-DN2, UHPN2-1100-DN2, HPN2-2000-DN2

*For Model HPN2-1100