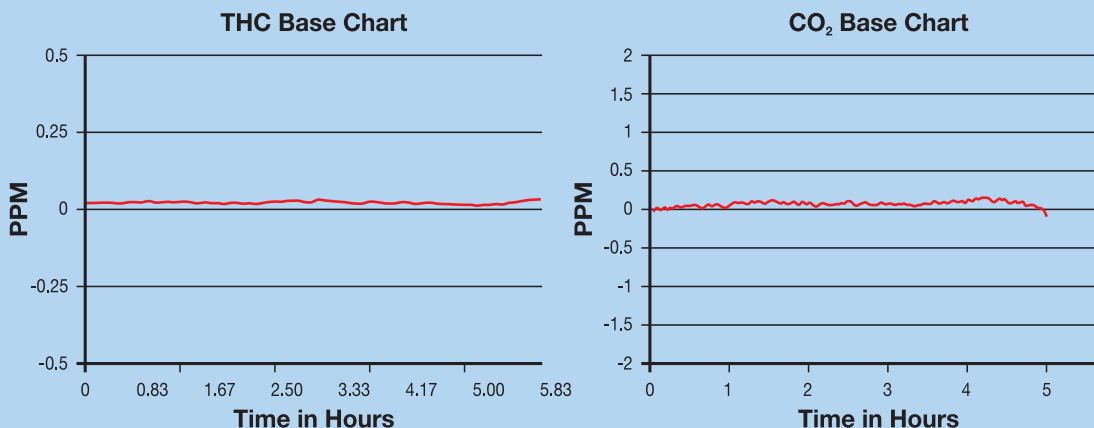


# TOC Gas Generator

## Baseline Supplied by a Parker Balston TOC Gas Generator



Baselines of THC Analyzer (above) and CO<sub>2</sub> Content Analyzer (right) after 5 hours supplied by a Parker Balston® TOC Gas Generator.

## Principal Specifications

TOC Gas Generator	Model TOC-625	Model TOC-1250
Max. TOC Gas Flow Rate (outlet) at 100 psig	0.625 lpm (650 cc/min)	1.25 lpm (1,250 cc/min)
Outlet Hydrocarbon Concentration (as methane)	< 0.05 ppm	0.1 ppm
Outlet CO <sub>2</sub> Concentration	< 1 ppm	< 1 ppm
Outlet CO Concentration	< 1 ppm	< 1 ppm
Dewpoint	< -100°F (-73°C)	< -100°F (-73°C)
Inlet and Outlet Port Connections	1/4" NPT (female)	1/4" NPT (female)
Min/Max Inlet Air Pressure	60 psig/125 psig	65 psig/125 psig
Max Inlet Air Temperature	78°F (25°C)	78°F (25°C)
Min Required Inlet Air Flow at 100 psig	2.0 lpm (2,000 cc/min)	2.5 lpm (2,500 cc/min)
Max Inlet Hydrocarbon Concentration (as methane)	100 ppm	100 ppm
Pressure Drop at Maximum Flow Rate	7 psig	7 psig
Warm-up Time	30 minutes	45 minutes
Electrical Requirements (1)	120VAC/60 Hz, 2.0 Amps.	120VAC/60 Hz, 2.0 Amps.
Dimensions	9" w x 12.5" h x 16" d (23 cm x 32 cm x 41 cm)	11" w x 17" h x 17" d (28 cm x 43 cm x 43 cm)
Shipping Weight	34 lbs. (15.42 kg)	48 lbs. (22 kg)

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

# 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



Model HPN2-1100

**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 O<sub>2</sub>, CO<sub>2</sub>, 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.

## Flow Chart

Inlet Air Pressure (psig)	Max Outlet Flow (cc/min.)	Max Outlet Pressure (psig)
<b>Models HPN2-1100, UHPN2-1100</b>		
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 Concentration	< 1 ppm	NA
CO <sub>2</sub> Concentration	< 1 ppm	< 1 ppm
O <sub>2</sub> Concentration	< 1 ppm	< 100 ppm
H <sub>2</sub> 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 (3,4)	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 and carbon monoxide
- 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.
- 4 Refer to voltage appendix for electrical and plug configurations for outside North America.

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
Preventive Maintenance Plan	HPN2-1100-PM, UHPN2-1100-PM, HPN2-2000-PM
Extended Support with 24 Month Warranty	HPN2-1100-DN2, UHPN2-1100-DN2, HPN2-2000-DN2

\*For Model HPN2-1100