



# Gas Generators

Pneumatech designs and manufactures both standard and engineered on-site gas generator products. Nitrogen and oxygen generators are available with Pressure Swing Adsorption (PSA) technology, while also membrane technology is offered for nitrogen purity levels up to 99,5%.

Pre-defined high-pressure nitrogen skids have been developed as a plug-and-play solution for various applications like laser-cutting. Our engineering department hence becomes your best partner for all kinds of special requests.

## **PPNG 150 - 800 HE -**

Nitrogen generators with Pressure Swing Adsorption technology

# PPNG 150 - 800 HE - Nitrogen generators with Pressure Swing Adsorption technology

## Features & Benefits

- ▶ Advanced energy saving control
  - Reduced air consumption at low nitrogen demand
  - Also compensates for altering ambient conditions and purity settings
  - No compressed air use when no nitrogen is consumed
- ▶ Outstanding air factors thanks to back-flow pressurization
- ▶ High-quality, high-efficient Carbon Molecular Sieves selected for the right application  
Guaranteed purity
- ▶ Automatically regulates to the requested nitrogen pressure and purity
- ▶ Zirconia sensors for reliable purity measurement
  - Designed & tested for cyclic load
  - Optimal control and monitoring thanks to Purelogic™ Controller
- ▶ Self-protective monitoring of the feed air quality
- ▶ Feed-air blow-off in case of contamination
- ▶ Nitrogen flow, purity and pressure measured and controlled
- ▶ Automatic start-up

## General Specifications

- ▶ Nitrogen purity achievable: 95%-99.9% (PCT Variant) & 99.95%-99.999% (PPM variant)
- ▶ Inlet pressure range: 5-10 bar / 72-150 PSI
- ▶ Ambient temperature range: 5-45°C / 41-113°F
- ▶ Inlet temperature range: 5-55°C / 41-131°F
- ▶ Required inlet air quality: 1-4-1 according to ISO 8573-1:2010
- ▶ Power supply: 230V / 50-60Hz



## Options



Wooden  
packaging



Outlet PDP sensor



The PPNG150-800 HE series is Pneumatech's premium on-site nitrogen solution for high flows, with best-in-class performance and the most complete scope of supply.

The generator has outstanding air factors at full load thanks to the use of highly efficient Carbon Molecular Sieves (CMS) and back-flow pressurization.

The air consumption is also optimized at reduced nitrogen flow or pressure demands, thanks to the advanced energy saving algorithm, which automatically adjusts the cycle times of the generator.

The control and monitoring capabilities of the PPNG150-800 HE are truly impressive. Purity is guaranteed at all times by opening the consumer valve only at the requested purity level and flushing nitrogen when purity is not reached. Feed air quality is controlled by monitoring temperature, pressure and PDP. The feed air is blown off in case of contamination. All risks of possible CMS damage are eliminated thanks to the automatic start-up feature.

Technical specifications for PPNG150 - 800 HE												
Specifications	Units	Variant	Product → Purity ↓	PPNG 150 HE	PPNG 200 HE	PPNG 250 HE	PPNG 300 HE	PPNG 350 HE	PPNG 400 HE	PPNG 500 HE	PPNG 650 HE	PPNG 800 HE
Nominal free Nitrogen delivery <sup>(1)</sup>	m³/hr	PCT(%)	95%	469	604	734	865	1063	1244	1607	2038	2592
			99.9%	169	218	265	312	384	449	580	735	935
		PPM	99.999%	75	96	117	138	169	198	253	321	408
Nominal air consumption <sup>(1)</sup>	m³/hr	PCT(%)	95%	886	1142	1387	1635	2010	2351	3036	3852	4898
			99.9%	549	708	859	1013	1245	1456	1881	2386	3034
		PPM	99.999%	377	486	590	695	854	999	1303	1653	2102
Air factor		PCT(%)	95%	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
			99.9%	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		PPM	99.999%	5.1	5.1	5.1	5.1	5.1	5.1	5.2	5.2	5.2
Pressure dewpoint outlet (°C)		°C/°F		-40	-40	-40	-40	-40	-40	-40	-40	-40
Maximum pressure drop (bar)		PCT(%)	95-99.9%	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1	1,5 - 1
		PPM	99.95% - 99.999%	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Length	mm			1800	1800	1800	2300	2300	2300	3120	3120	3120
	Inch			70.9	70.9	70.9	90.6	90.6	90.6	122.8	122.8	122.8
Width	mm			2230	2570	2650	2720	2850	2900	3660	3760	3860
	Inch			87.8	101.2	104.3	107.1	112.2	114.2	144.1	148.0	152.0
Height	mm			2610	2640	2625	3020	3050	3040	3970	4175	4405
	Inch			102.8	103.9	103.3	118.9	120.1	119.7	156.3	164.4	173.4
Mass	Kg			3200	3800	4800	6400	7000	7700	10300	12000	14200
	lbs			7054.8	8377.6	10582.2	14109.6	15432.3	16975.6	22707.6	26455.4	31305.6
N2 & Air Receiver size	liters			3000	4000	5000	6000	8000	8000	12000	16000	20000
Nitrogen to buffer connection	DN			80	80	80	80	80	80	100	100	100
Nitrogen from buffer connection	DN	PCT(%)	95-99.9%	50	50	50	80	80	80	100	100	100
	DN	PPM	99.95% - 99.999%	40	40	40	40	40	40	50	50	50
Nitrogen outlet connection	DN	PCT(%)	95-99.9%	50	50	50	80	80	80	100	100	100
	DN	PPM	99.95% - 99.999%	50	50	50	50	50	50	50	50	50
Waste gas blow-off	mm			315	315	315	400	400	400	600	600	600

1. Flow is measured at Reference Conditions: 1 Bar(a) and 20°C at operating pressure of 7 bar (g), inlet temperature 20°C & Air Inlet Quality of ISO 8573-1:2010 class 1-4-1



Pneumatech reserves the right to change or revise specifications and product design in connection with any features of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

© 2017 Pneumatech. All rights reserved.

