

High-pressure nitrogen generation system for laser cutting

PPNG NX 1-6



The PPNG NX 1-6 is an all-in-one high-pressure nitrogen generation system engineered specifically for demanding applications like laser cutting, giving you faster cutting and quality results. The PPNG NX delivers a stable supply (24/7 if needed) of nitrogen with the right pressure, purity and quality at the lowest cost per unit of gas. Extremely compact in size, the PPNG NX fits easily into cramped workshops and can expand along with your operations thanks to its modular design.

A compact, all-in-one N₂ solution

The PPNG NX is a complete on-site nitrogen generation system in one ultra compact box. It includes our high-efficiency PPNG HE nitrogen generator; a 300-bar booster; aerosol, dust and oil filtration; high-pressure nitrogen storage; and an advanced controller for easy operation. No need to specify, integrate, and commission all these separate components. Installation of the plug-and-play system is fast and hassle-free. All you need is compressed air and a power supply.

Features and benefits

- Compact all-in-one solution
- Plug-and-play installation
- All components are built and tested to work together optimally
- 300-bar booster sized to minimize power use
- High-efficiency PPNG HE PSA N₂ generator with purity selection up to 99.999%
- Works with existing air supply or a dedicated compressor
- High-volume, high-pressure N₂ storage included
- Modular build allows for future expansion
- Additional filtration included as standard
- Advanced control, monitoring and connectivity
- Add-on high-pressure N₂ storage included as standard

General specifications

- Purity range: 99.95% to 99.999%
- Outlet pressures available: 300 barg*
- Ambient temperature range: 5-45°C/41-113°F
- Power supply IEC: 400/3/50
- Power supply UL: 460/3/60

* Standard outlet nitrogen pressure setting is 290 bar(g)

A host of applications

The PPNG NX is ideal for laser cutting, but also for any application that needs a reliable on-site supply of high-pressure, high-quality nitrogen:

- Food packaging
- Electronics
- Metallurgy
- Pharma & laboratories
- Chemical industry
- Oil & gas

The on-site nitrogen system for laser cutting

- **Super compact:** All-in-one N₂ generation system with the smallest footprint on the market.
- **Plug-and-play installation:** Works with existing air supply or a dedicated compressor.
- **Intuitive control:** Easy operation and remote monitoring.
- **Modular build allows for future expansion**
- **Made for laser cutting:**
 - » High-quality, high-pressure N₂ with the right purity for your laser(s).
 - » Faster cutting with clean, oxide-free edges.
 - » Thin sheet or thick plate cutting.
- **Produce your own nitrogen:**
 - » A reliable supply of N₂ with 24/7 availability.
 - » Eliminate N₂ delivery dependence.
 - » No delivery transportation emissions.
 - » Lowest cost per unit of gas.
 - » No more ordering, handling and storing of delivered N₂ cylinders.



Technical specifications for PPNG NX 1-6

Model				Unit	PPNG NX 1	PPNG NX 2	PPNG NX 3	PPNG NX 4	PPNG NX 5	PPNG NX 6
N ₂ capacity	99.999%			Nm ³ /h	11	18	25	29.7	33.7	42.1
				Nm ³ /day	264	432	600	713	809	1010
				cfm	6.5	10.6	14.7	17.5	19.8	24.8
				cfm/day	9319	15250	21180	25162	28551	35667
	99.9975%			Nm ³ /h	13.1	21.5	26.3	35.5	40	50
				Nm ³ /day	314	516	631	852	960	1200
				cfm	7.7	12.7	15.5	20.9	23.5	29.4
				cfm/day	11098	18215	22281	30076	33888	42360
	99.95%			Nm ³ /h	22.8	28.5	40	50	50	50
				Nm ³ /day	547	684	960	1200	1200	1200
				cfm	13.4	16.8	23.5	29.4	29.4	29.4
				cfm/day	19316	24145	33888	42360	42360	42360
Installed power				kW	6	6	15	15	15	15
PPNG HE size (incl)					28	41	50	65	75	90
Booster size (incl)					BSTAIR 7-300	BSTAIR 7-300	BSTAIR 20-300	BSTAIR 20-300	BSTAIR 20-300	BSTAIR 20-300
Outlet pressure Barg					300 Barg	300 Barg	300 Barg	300 Barg	300 Barg	300 Barg
Outlet pressure psig					4350	4350	4350	4350	4350	4350
Storage volume					18x50L (270 Nm ³)	18x50L (270 Nm ³)	18x50L (270 Nm ³)	18x50L (270 Nm ³)	18x50L (270 Nm ³)	18x50L (270 Nm ³)
Compressor power (excl)	@ 25ppm	ISO 8573-1 1:4:1 inlet quality	Approx absorbed power KW		8	14	16	19	23	28

Performance reference conditions:

Ambient/inlet air temperature: 20°C/68°F

Flow unit reference conditions:

Nm³/h: 20°C – 1 Bar(a) - 0% RH



Options

- High-pressure flow monitoring
- High-pressure storage on mezzanine
- Additional high-pressure storage
- Onboard gas mixer
- Oxygen room analyzer

General notes:

Nitrogen purity expressed as 100% minus oxygen content

- For different operating conditions & capacities, please consult your Pneumatech representative
- Standard outlet nitrogen pressure setting is 290 bar(g)