



# Nitrogen generators Serie Maximus Lite



The nitrogen generators serie Maximus Lite offer to you a unique, innovative solution to nitrogen gas supply. A reliable, secure source of nitrogen can be produced from your existing compressed air supply, eliminating the need for liquid nitrogen or high pressure gas cylinders.

Conceived for a continuous operation, the MAXIMUS LITE nitrogen generator can produce flow rates from a few liters per minutes to over NL/min at purities in oxygen content residual from 10 ppm to 3%.



The generator is controlled using the latest in HMI touch screen technology to display the process, pressures, inlet air dewpoint and oxygen levels with continuous monitoring complete with alarms.

**Applications:** food packaging, laser cutting, wine making and brewing, oil and gas, pharmaceutical and laboratory,

## Benefits and Savings

### Economy saving

- Quick return on investment < 1 year
- After installation, the generator require minimal attention and Maintenance

### Reliability and safety of use

- Nitrogen produced at low pressure and ambient temperature removes the hazards associated with high pressure cylinders and liquid Dewar's.
- Nitrogen available on request 24H per day ensuring the walk of the process in a regular and uninterrupted way

### Compact design and flexible modular option

The system demands less floor space

## Standard Features

***Varying flow rates and purities***

***HMI touch screen***

***O2 display and alarm***

***Air inlet dewpoint display and alarm***

***Maintenance indication***

***Visual and audible alarm***

***Analogue connections***

***Ethernet output via RJ45 connection***

***IP address for remote access via internet connection***

***Quick and easy maintenance:***

***Access from front, no rear access required***

***Automatic economy mode***

***Option: Hazardous area version***

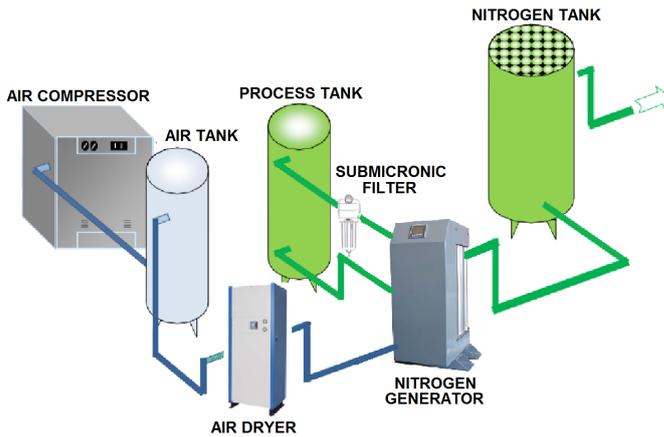
# Nitrogen generators

## Serie Maximus Lite

### Operating mode

The nitrogen generator operate on the Pressure Swing Adsorption (PSA).

This technique uses pairs of extruded aluminium columns, filled with carbon molecular sieve (CMS).



Pre-treated compressed air enters the bottom of the one line bed and flows up through the CMS. Oxygen and other trace gases are preferentially adsorbed by the CMS, allowing nitrogen to pass through. After a pre-set time when the on-line bed is almost saturated with adsorbed gases, the system automatically switches the bed to regenerative mode, venting the contaminants from the CMS. The second CMS bed then comes on-line and takes over the separation process. The pair of beds switches between separation and regeneration modes to ensure continuous nitrogen production.



### Technical Specifications

#### Nitrogen outlet flo rate NL/min vs Oxygen Concentration

MODEL	10ppm	100ppm	0.1%	0.5%	1.0%	2.0%	3.0%	4.0%	5.0%
MNG102L	10.0	20.0	30.0	45.0	50.0	70.0	85.0	-	-
MNG104L	20.0	40.0	60.0	90.0	100.0	140.0	170.0	-	-
MNG106L	30.0	60.0	90.0	135.0	150.0	210.0	255.0	-	-
Air/N2 ratio	10.8	5.9	3.6	3.4	2.8	2.6	2.4	2.2	2.1

Note : Integrated homogenisation tank is available on the MNG102L for any flow and until a 99,5% purity on MNG104L

### Technical Data

Ambient Temp range	5-45°C
Air Inlet Pressure	6 à 16 Barg
Nitrogen Outlet Pressure*	5 à 14 Barg
Air Inlet Quality Requirement	Point de rosé: -40°C (-40°F)
	Particule: <0.1 micron
	Huile : <0.01 mg/m³
Electrical Supply	90-264 VAC/ 1ph / 50-60Hz
	POWER 0.2KW
Signal outlet / monitoring	no volt alarm & RS232
Inlet/outlet connections	G ½ (BSP) F

Specification are based on 7barg air inlet pressure @ 20-25°C ambient air temperature

For other inlet pressures please find the table to calculate the nex flow rate :

Air inlet pressure in barg	7.5	8	8.5	9	9.5
Correction factor	1.14	1.21	1.29	1.36	1.43

### Dimensions and Weights

Modèle	Hauteur mm (ins)	Largeur mm (ins)	Profondeur mm (ins)	Poids Kg (lbs)
MNG102L	1150	400	580	150
MNG104L	1150	400	580	180
MNG106L	1150	400	760	230

