

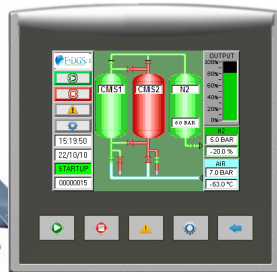


# Nitrogen generators Serie Maximus Lite



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**

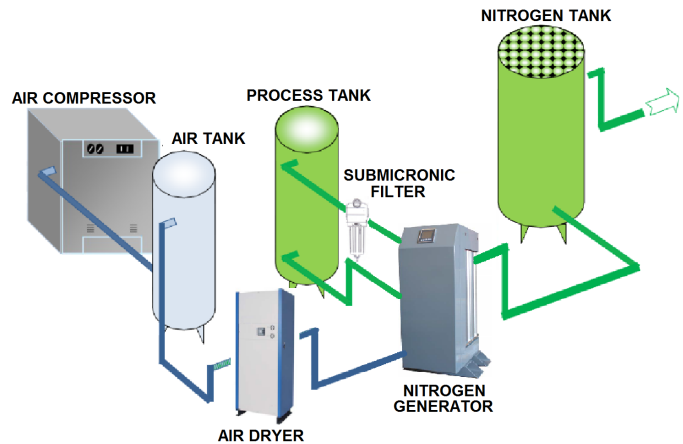
# Nitrogen generators

## 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	12	8	4.7	3.5	3.1	2.7	2.3	2.1	1.9

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

For inlet pressures and ambient air temperatures outside these conditions consult F-DGS for the new N2 flow rates.

### Technical Data

Ambient Temp range	5-50°C (41-95°F)
Air Inlet Pressure	6 to 10 barg (87 to 261 psig)
Nitrogen Outlet Pressure*	5 to 9 barg (72 to 232 psig)
Air Inlet Quality Requirement	Dewpoint: -40°C (-40°F)
	Particulate: <0.1 micron
	Oil: <0.01 mg/m <sup>3</sup>
Electrical Supply	220v a.c. / 1ph / 50Hz or
	110v a.c. / 1ph / 50-60Hz
Signal outlet / monitoring	Ethernet (RJ45 connection)
Inlet/outlet connections	G ½ (BSP) F

### Dimensions and Weights

Model	Height mm (ins)	Width mm (ins)	Depth mm (ins)	Weight Kg (lbs)
MNG104L	980 (38.5")	400 (15.7")	560 (22")	180
MNG106L	980 (74")	400 (23")	740 (29")	230