

'Maximus-' – Hazardous Area Gas Generators

'Maximus-Ex' is the latest range of Ex Hazardous area rated Industrial Nitrogen Gas Generators from Noblegen Products.

Utilising the reliable and efficient PSA technique of separating Nitrogen and Oxygen is used to produce high quality Nitrogen Gas at various flows and purities (see performance data sheets).

Using an EX-D explosion proof electrical control panel, EX rated valves and I.S. instrumentation to allow the use of the system in a Hazardous Area location.



Features

- Range of Flow-rates
- Air Compressor available
- Compact and Quiet design
- Purity 99.9995% - 95%
- Oxygen Analyser as standard
- Auto-run facility
- Energy saving mode
- Outlet flow indicator (% flow)
- Trend graphs into MS excel
- Alarms with help menu
- Audible alarm sounder
- Remote access via internet



EX-D Electrical Panel

Applications

- Pharmaceutical
- Oil & Gas
- Liquefied Gas
- Fire Protection

'Maximus' Nitrogen Generator range from Noblegen Products is your reliable and efficient alternative to conventional high pressure cylinder and liquid gas supplies. Taking away the on-going costs, safety considerations and transportation of traditional gas supplies, the 'Maximus' on-site Nitrogen systems are some of the most advanced and intelligent available. The control system gives the user all the information necessary to ensure an efficient and consistent supply of gas is always available. From the process to flow and alarms, including auto-start / stop function, Trend graphs, service alarm and service records page, there is simply no other laboratory nitrogen system quite like Maximus.

The 'Maximus' is one of the most economical range of nitrogen generators on the market for both purchase price and on-going running / maintenance costs. Together with our unrivalled experience and knowledge of nitrogen gas generators with 1000's running world-wide supported by our national and international partners.

Nitrogen Outlet Flowrate - Nm³/hr vs Oxygen Concentration

Model	5ppm	50ppm	100ppm	250ppm	500ppm	0.1%	0.5%	1.0%	2.0%	3.0%	5.0%
MNG104	2.0	3.8	5.5	7.1	8.6	9.0	14.1	17.8	22.0	25.8	32.2
MNG106	3.0	5.8	8.5	10.7	13.0	13.5	21.2	26.6	32.8	38.7	48.3
MNG108	4.0	7.8	11.0	14.3	17.3	18.0	28.3	35.5	43.8	51.6	64.4
MNG110	5.0	9.6	14.0	17.8	21.6	22.5	35.5	44.4	54.7	64.5	80.4
MNG112	6.0	11.5	16.5	21.4	26.0	26.8	42.4	53.5	65.7	77.4	96.5
MNG116	8.0	14.5	21.0	27.1	32.8	34.0	53.7	67.5	83.2	98.1	122.3
MNG120	10.0	17.5	25.3	32.8	39.7	41.2	65.0	81.7	100.7	118.7	148
Air:N ₂ ratio	10:1	8:1	6:1	5:1	3.6:1	3.4:1	2.8:1	2.6:1	2.4:1	2.2:1	2.0:1
With PDS	9.5:1	7.7:1	5.6:1	4.6:1	3.2:1	3.0:1	2.5:1	2.3:1	2.1:1	1.9:1	1.8:1

Specification based on 7 barg (102 psig) air inlet pressure @ 20°-25°C (68°-77°F) ambient air temperature. For inlet pressures and ambient air temperature outside these conditions please contact the Noblegen technical department.

General Specifications

Ambient Temp Range	5-45 °C (41-113°F)
Hazardous Area Rating	Zone 1, IIB, T6
Air Inlet Pressure	7-10 bar g (101.5-145 psi g)
Nitrogen Outlet Pressure*	Up to 9 bar g (130.5 psi g)
Air Inlet Requirement	Dew-point -40 °C (-40 °F) Particulate: <0.1 micron Oil: <0.01 mg/m ³
Electrical Supply	230v a.c. / 1ph / 50-60Hz 115v a.c. / 1ph / 50-60Hz
Socket Inlet	Gland Entry (MCB) 10A
Communications	Volt-Free Common Alarm
Inlet / Outlet Connections	1" BSPP x 2 PDS ENERGY SAVING



N ₂ DEMAND	ENERGY SAVING%
100%	12%
90%	33%
80%	40%
70%	45%
60%	51%
50%	58%
40%	64%
30%	72%
20%	76%
10%	83%

Energy saving relating to compressed air saved

Dimensions (mm) and Weights (kg)

Model	Length	Width	Height	Weight
MNG104	900	600	1870	280
MNG106	1030	600	1870	400
MNG108	1160	600	1870	495
MNG110	1290	600	1870	590
MNG112	1420	600	1870	685
MNG116	1730	600	1870	870
MNG120	1990	600	1870	1010



Pressure Correction Factors

Bar G	PSI G	CV factor
7.0	101	1.0
7.5	109	1.14
8.0	116	1.21
8.5	123	1.29
9.0	131	1.36
9.5	138	1.43
10.0	145	1.50

Temperature Correction Factors

°C	°F	Correction
5	41	0.8
10	50	0.9
15	59	0.94
20	68	1.0
25	77	1.0
30	86	0.98
35	95	0.95
40	104	0.90
45	113	0.85

Options:-

- PDS – Purity Dependant Switching (energy saving)
- Modbus, RS232, Ethernet communications