# Portable Small Membrane Nitrogen Generator Technology 100 Nm3/Hr 95% 10 Bar

Our Product Introduction

## Basic Information

- Place of Origin: SUZHOU, CHINA
- Brand Name: SUMAIRUI GAS
- Certification: ISO9001, CE, BV, SGS, TUV, ASME, GOST,NB,NR ETC
- Model Number: OSM
- Minimum Order Quantity: 1 set
- Price: Negotiable
- Packaging Details: Exporting wooden case /Film packing
- Delivery Time: 30-45 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 100 sets/months

## Product Specification

- Material: Mild Steel/Stainless Steel
- Certificates: CE, ISO, ASME, GOST, KGS, NB Etc
- Capacity: 1000 CFM
- Purity: 95%-99.9%
- Pressure: 150psi/10 Bar
- Container: Yes
- Movable: Yes
- Application: Purging
- Condition: New
- Warranty: 1 Year
- Voltage: 220v/380v/50-60hz
- Weight: Actual Weight)
- Dimension(l*w*h): Actual Size
- Power(w): 0.5KW
- Color: White/customized

Our Product Introduction

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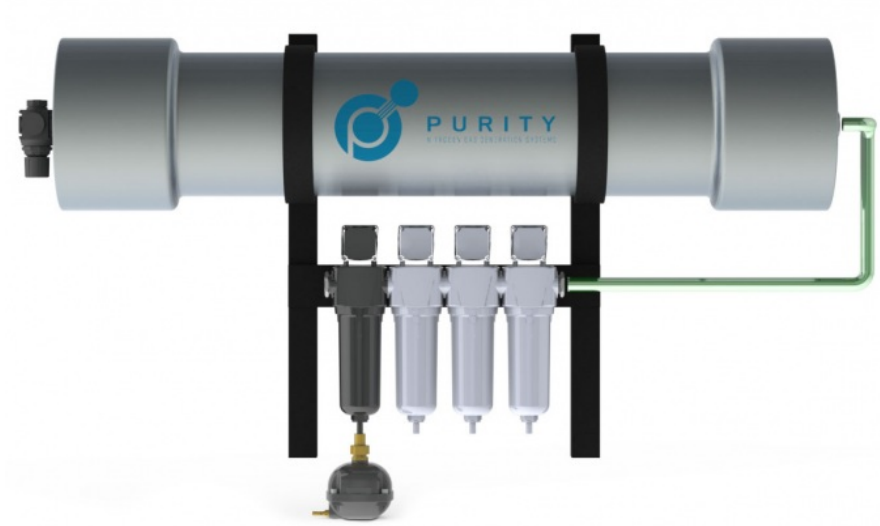
## Product Description

**Portable small membrane nitrogen generator 100 Nm3/hr 95% pressure 10 bar plug and play models with ASME certificates**

WHAT IS MEMBRANE GAS GENERATION?

Let's start from the basics. The air we breathe is made up of 78% nitrogen, 21% oxygen and the remainder are trace gases (argon, carbon dioxide and other gases). The membrane nitrogen gas generator uses a process called selective permeation to separate the nitrogen molecules from the oxygen and other trace gases. For the process to work, the air has to permeate through thousands of porous hollow fibres. Each molecule passing through the fibres has a specific permeation rate that results in either diffusing through or dissolving out of the fibre membrane.




WHY CHOOSE MEMBRANE?
It is the most cost-effective solution for low flow applications, up to 400 scfh at 99.9% purity or 2500 scfh at 95% purity. The membrane generator has a relatively small footprint which allows for easy installations and can be installed vertically or horizontally.
There are no moving parts and there is no electricity required so it is easy to use and maintain. This design still allows the generator to achieve output purity levels between 95% – 99.9%. Furthermore, it is fairly quiet; it operates at less than 70 dBA. To put that in perspective, normal conversation ranges between 60 – 70 dBA, a vacuum cleaner operates in the 75 dBA range and the noise inside a car travelling at 100 kph is 70 – 80 dBA.

| Item | Nitrogen purity (Nm3/hr) | | | | | Dimensions | Weight |
|---|---|---|---|---|---|---|---|
| | 90% | 95% | 99% | 99.5% | 99.9% | (L*W*H) mm | KG |
| OSM15 | 135 | 61 | 23 | 15 | 6.5 | 450*300*1300 | 100 |
| OSM30 | 270 | 122 | 46 | 30 | 13 | 550*500*1300 | 140 |
| OSM60 | 540 | 244 | 92 | 60 | 26 | 900*850*1300 | 200 |
| OSM120 | 1080 | 488 | 184 | 120 | 52 | 1200*1000*1500 | 280 |
| OSM180 | 1620 | 732 | 276 | 180 | 78 | 1500*1200*1500 | 400 |
| OSM240 | 1890 | 854 | 322 | 240 | 104 | 1800*1200*1600 | 520 |
| OSM300 | 2700 | 1220 | 460 | 300 | 130 | 2300*1350*1800 | 600 |
| OSM450 | 4050 | 1830 | 690 | 450 | 195 | 3850*1500*2000 | 800 |
| OSM525 | 4725 | 2135 | 805 | 525 | 227.5 | 4200*1550*2100 | 950 |
| OSM600 | 5400 | 2440 | 920 | 600 | 260 | 5000*1800*2250 | 1050 |
| OSM675 | 6075 | 2745 | 1035 | 675 | 292.5 | 5500*1800*2350 | 1250 |
| OSM750 | 6750 | 3050 | 1150 | 750 | 325 | 5850*1850*2400 | 1500 |
| OSM900 | 8100 | 3660 | 1380 | 900 | 390 | 6500*1950*2400 | 1700 |
| OSM1050 | 9450 | 4270 | 1610 | 1050 | 455 | 7800*2100*2450 | 1950 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OSM1500 | 13500 | 6100 | 2300 | 1500 | 650 | 10500*2300*2600 | 2100 |
| OSM1800 | 16200 | 7320 | 2760 | 1800 | 780 | 13000*2350*2600 | 2600 |

Design reference :
Compressed air inlet pressure 9 bar(g)/130 psi(g)
Air quality 1.4.1 according to ISO 8573-1:2010
Nitrogen outlet pressure 7 bar(g)/101psi(g)
Nitrogen quality 1.2.1 according to ISO 8573-1:2010.
Designed working temperature max 50 ℃
Dew point at Nitrogen outlet - 50 ℃

Notes:

Compressed air inlet pressure decide membrane performance
Following request of membrane nitrogen generator will be customized :
Compressed air pressure ＞14 bar(g)/203 psi(g) max up to 24 bar(g)/350 psi(g)
Working pressure ＞24 bar(g)/350 psi(g)
Dew point ＜ - 50 ℃
Movable/containerized , plug and play
Diesel drive
Other special requirements as per site conditions

## Advantages of membrane nitrogen plant :

**Why Choose Nitrogen Generator Membrane Units:**

Extensive experience producing PSA and membrane units
All the facilities are ISO 9001 Certified
Modular design for easy installation
Systems designed for long-term reliability
Smallest physical footprint available
Strategic alliance with dryer and compressor suppliers
Extensive global service network
A top-rated membrane when comparing nitrogen/air ratio

## Application :

Aircraft Fuel Tank Inserting
Agriculture
Liquid Sparging
Autoclave
Bacteria Elimination
Blanketing
Carbon Fiber Cutting
Bio-fuels
Fire Suppression

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