

# N2 PSA Nitrogen Generator System For Sale Household Appliances Industry

### **Basic Information**

Place of Origin: SUZHOU, CHINABrand Name: SUMAIRUI GAS

• Certification: ISO9001, CE, BV, SGS, TUV, ASME,

GOST,NB,NR ETC

Model Number: OSP
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**

• Design Code: ASME, CE, ISO9001

• Capacity: 100SCFM

Purity: 99.99%-99.999%
 Pressure: 80-105 Psig
 Material: Mild Steel

• Certificates: CE, ISO, ASME, GOST, KGS, NB Etc

PLC: Siemens S7-1200/1500
 HMI: 7inches/12 Inches
 Flow Meter: Vortex Type/ Metal Rota

Oxygen Analyzer: YesMonometer: 1 Lot

Working Mode: Fully AutomaticType Of N2 Generator: PSA Modular CMS

Working Life: >10 YearsMovable: Customize

#### **Product Description**

#### 100SCFM OSP series nitrogen generator for household appliances Industry with ISO, ASME, CE certificates

Our simple turnkey Pressure Swing Adsorption (PSA) type Nitrogen Generator provides a cost-effective means for on-site N2 gas generation. It is based on using the latest PSA technology and utilizes Carbon Molecular Sieve (CMS) to separate nitrogen from the other gases contained in air. The Nitrogen Generator uses two beds of CMS to separate compressed air into a high-pressure nitrogen product stream and low-pressure oxygen enriched waste stream. Typical feed air pressure is 110 psig/7.6 barg. Typical nitrogen product purity for our systems is 99%. Product flow rate for the same system will be higher with better nitrogen recovery if a higher oxygen content can be accepted in the nitrogen product. Systems are available with a product purity up to 99.999% nitrogen (10 ppmv oxygen).

Generators are supplied as complete systems, ready for hookup to a compressed air supply, including air filters and controls for automatic operation. Start up is at the flip of a switch and maintenance is limited to changing filters every three to twelve months. Each Nitrogen Generator comes pre-tested and fine tuned to meet the customer specified nitrogen flow rate and purity.

Benefits compared to previous models

Higher quality materials Lower energy consumption Shorter lead time Longer N2 generator lifetime

How did we do it

Simplification - 80% less parts used in our production process

Automation - state-of-the-art welding and bending robots

Modular isolation - two standard size PSA pressure vessels for all capacities

Service and maintenance

A smaller power consumption requires a smaller compressor. As a result, you will not only save on energy but also on running/service costs of the compressor. Furthermore, the stainless-steel valves have a longer lifetime than brass.

| Item    | Nitrogen purity (Nm³/hr) |      |       |       |        |         |         | Dimensions     | Weight |
|---------|--------------------------|------|-------|-------|--------|---------|---------|----------------|--------|
|         | 95%                      | 99%  | 99.5% | 99.9% | 99.99% | 99.995% | 99.999% | (L*W*H) mm     | KG     |
| OSP5    | 21                       | 13   | 11    | 8     | 5      | 4.2     | 3       | 1100*600*1700  | 300    |
| OSP10   | 38                       | 29   | 25    | 15    | 10     | 7.5     | 6.1     | 1200*650*1800  | 450    |
| OSP20   | 80                       | 56   | 52    | 32    | 20     | 16      | 14      | 1600*1000*2200 | 450    |
| OSP40   | 160                      | 116  | 105.2 | 67.2  | 40     | 34      | 28      | 1800*1000*2200 | 600    |
| OSP60   | 252                      | 174  | 157.8 | 100.8 | 60     | 51      | 45      | 1900*1200*2200 | 750    |
| OSP80   | 339.2                    | 232  | 211   | 132   | 80     | 70      | 62      | 2000*1200*2400 | 980    |
| OSP100  | 420                      | 290  | 263   | 168   | 100    | 90      | 78      | 2100*1600*2500 | 1300   |
| OSP150  | 630                      | 435  | 394.5 | 252   | 150    | 135     | 120     | 2500*1800*2600 | 1600   |
| OSP200  | 848                      | 580  | 526   | 336   | 200    | 180     | 160     | 2800*1900*2850 | 2200   |
| OSP250  | 1060                     | 725  | 657.5 | 420   | 250    | 225     | 200     | 3100*2000*3200 | 2600   |
| OSP300  | 1270                     | 870  | 780   | 500   | 300    | 260     | 240     | 3900*2600*3400 | 3850   |
| OSP400  | 1696                     | 1160 | 1052  | 672   | 400    | 360     | 320     | 4500*3250*3600 | 5000   |
| OSP500  | 2120                     | 1450 | 1300  | 840   | 500    | 450     | 400     | 4900*3600*3800 | 6500   |
| OSP600  | 2540                     | 1740 | 1578  | 1000  | 600    | 540     | 480     | 5300*3600*3900 | 7800   |
| OSP800  | 3390                     | 2320 | 2100  | 1340  | 800    | 720     | 640     | 5600*3900*4100 | 10200  |
| OSP1000 | 4240                     | 2900 | 2630  | 1680  | 1000   | 900     | 800     | 5800*4000*4500 | 11800  |

#### Design reference:

Compressed air inlet pressure 7.5 bar(g)/108 psi(g)

Air quality 1.4.1 according to ISO 8573-1:2010

Nitrogen outlet pressure 6 bar(g)/87psi(g)

Nitrogen quality 1.2.1 according to ISO 8573-1:2010.

Designed working temperature max 50 °C

Dew point at Nitrogen outlet - 40 °C

#### Notes:

OSP nitrogen generator max working pressure 10 bar(g)/145psi(g)

Following request of PSA on-site nitrogen generator will be customized:

Working pressure >10 bar(g)/145 psi(g)

Dew point < - 50 °C

Plug and play

Movable/containerized

Other special requirements as per site conditions





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