

Datasheet 20141128

High Purity Nitrogen Station EVO (HP-N2 EVO) N₂ Generator

Description

The LNI Schmidlin SA **High Purity Nitrogen** generators (HP-N2 Evo) produce laboratory high grade nitrogen for most of the laboratory applications and equipments. Designed with safety and convenience in mind, this system generates purified nitrogen, eliminating the need for inconvenient cumbersome high-pressure gas cylinders.

The **HP-N2 EVO** removes oxygen from air to less than 10 ppm (HC pollutants to less than 0.1ppm if the option is installed). The typical flows are 500 Nml/min, 750 Nml/min, 1300 Nml/min and 4000Nml/min. The HP-N2 EVO is available with a smart low noise scroll compressor with smart compressor management, or can be used with an external compressed air source.



Functioning principle:

The HP-N2 needs compressed Air. Air is passed into a dual column pressure swing adsorption (PSA) to remove oxygen. While one of the dryer columns is active, the other is regenerating by back purging the excess Oxygen. The adsorbed oxygen is vented to atmosphere.

Nitrogen is next channelled into an **optional** stainless steel catalyst chamber where any background hydrocarbons or carbon monoxide are removed to less than 0.1 ppm. A final high-grade filter is used to remove particulates

greater than 0.5 microns. The compressor stops once the tank has reached its upper pressure level and starts again, once the tank has reached its lower pressure level.

- ☒ **CH4 Scrubber option**
- ☒ **Low Maintenance**
- ☒ **Wall mount**
On top of scroll compressor
as floor case.
- ☒ **No Cylinder**

Applications



The Ultra Pure Nitrogen is mainly used to aliment ICP, ELSD and is ideal as nitrogen gas supply for all kind of Laboratory and Chromatography applications.

As option, an internal catalytic oven can be installed. With this additional feature, the generated Nitrogen will be free of hydrocarbons. This option is necessary, if the Nitrogen is used to aliment a GC with FID detector.

Application of High Purity Nitrogen:

- ICP / ELSD
- GC / FTIR
- Incubators

Specifications

High Purity Nitrogen 500	Flow rate :	500	Nml/min	/ purity 99.999%
High Purity Nitrogen 750	Flow rate :	750	Nml/min	/ purity 99.999%
High Purity Nitrogen 1300	Flow rate :	1300	Nml/min	/ purity 99.99%
High Purity Nitrogen 4000	Flow rate :	4000	Nml/min	/ purity 98%
Delivery pressure:	Up to 5 barg (75 Psig)			
Input pressure :	External compressed Air source : min 7 barg min (110 PSI) / Non condensing and oil free Air or with Compressed Air station SC-60-8			
N2 purity :	< 0.1 ppm Total Hydrocarbons (if Option is installed) < -50°C DP (-58°F)			
Sound level	< 35 dbA (without compressor) < 45 dbA (with compressor)			
Particle filtration level:	50 µm			
Fittings:	1/4" Swagelok for outlet N2 and Inlet Air			
User interface:	Pressure setting and gauge at the back panel. Alarms and status by blinking LED on the front panel.			
Dimensions WxDxH [mm] :	450x200x365			
Net weight [Kg] :	20 to 25 depending of the options			
Power consumptions [watt]:	30 to 250 W with oven / 30 W without oven			
Power requirements:	230V/(50Hz or 60Hz) or 115V/60Hz			

Options – Accessories – Spare parts

Device :

6912 00 050.x HP-N2-EVO-500
6912 00 075.x HP-N2-EVO -750
6912 00 130.x HP-N2-EVO -1300
6912 00 400.x HP-N2-EVO -4000

Need external compressed Air

X=1 for 230V/50Hz or 230V/60Hz

X=2 for 115V/60Hz

Option :

6912 01 000 HC scrubber 230V
6912 01 001 HC scrubber 115V

Consumable :

3709 04 183 Filter Element of the coalescent filter

Accessories :

6900 80 000 Oil free Scroll compressor (oly 230V)



Schmidlin
Swiss Made Innovation

46 chemin de l'étang
1219 Geneva - Switzerland

Phone +41 22 979 37 24
Fax +41 22 979 37 20

info@lmi-schmidlin.com
www.lmi-schmidlin.com

