



LNI Schmidlin SA

The innovative  swiss made products



HIGH PURITY NITROGEN STATION

N₂ GENERATOR

The LNI SCHMIDLIN SA High Purity Nitrogen Generators produces 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.

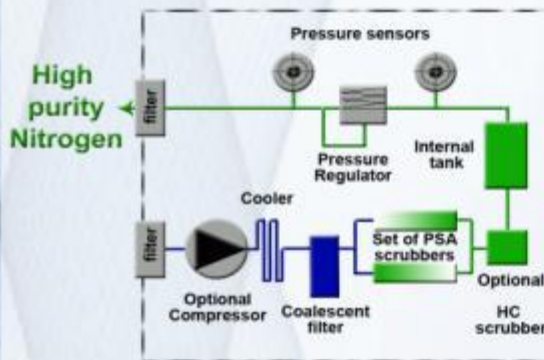
The High purity Nitrogen removes Oxygen to less than 10 ppm and HC pollutants (if the option is installed to less than 0.1 ppm).

The typical flows are 500 Nml/min, 750 Nml/min, 1300 Nml/min and 4000 Nml/min



NEW-TECH LINE

Functioning principle:



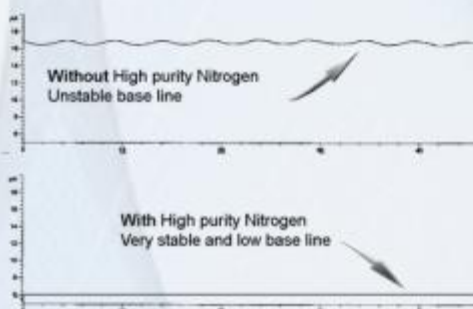
The optional internal pump compresses the ambient air. Once compressed, the air is cooled and dried by an automatic coalescent filter. Air is passed into a dual column pressure swing adsorption air dryer (CMS) to remove oxygen. While one of the dryer columns is active, the other is regenerating by back purging the excess Oxygen. The adsorbed water and Oxygen are vented to atmosphere. A solenoid valve automatically switches from the air supply to the newly regenerated column when this process is complete. Air is next channeled into an optional stainless steel catalyst chamber where any background hydrocarbons or carbon monoxide are oxidized. This chamber is filled with a highly efficient platinum + palladium catalyst, heated to very high temperature to insure hydrocarbon removal to less than 0.1 ppm. A final high-grade filter is used to remove 99.99% of particulates greater than 0.5 microns in size. The compressor stops once the tank has reached its upper pressure level and starts again, once the tank has reached its lower pressure level.

THE APPLICATIONS

LABORATORY

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. The device can be set (as option) with an internal Compressor. Due to it's original tank management, the compressor will not work continuously and will have an extended life time.

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 Station 500	Flowrate : 500 Nml/min / purity 99.999%
High purity Nitrogen Station 750	Flowrate : 750 Nml/min / purity 99.999%
High purity Nitrogen Station 1300	Flowrate : 1300 Nml/min / purity 99.995%
High purity Nitrogen Station 4000	Flowrate : 4000 Nml/min / purity 98%
Delivery pressure:	Up to 5 barg (75 Psig) / input pressure for model without compressor : 7 barg min
Air purity :	< 0.1 ppm Total Hydrocarbons (if Option is installed) < -50°C DP (-58°F)
Internal tank :	8L to 32 L depending on the model
Sound level	< 60 dbA (if compressor installed)
Particle filtration level:	50 µm
Fittings:	Outlet Air 1/4" swagelock / Inlet Air (if compressor is not installed)
User interface:	Pressure setting, system status, user parameter / Touch screen / LCD graphic display
Remote command:	USB / download of the logfile possible (only with the models with compressor)
Dimensions [cm] :	36x64x67 (WxDxH) with compressor or 35x40x30 without compressor
Shipping Dim [cm] :	45x80x80 (WxDxH)
Net weight [Kg] :	15 to 50 depending of the options
Shipping weight [Kg] :	15 to 60 depending of the options
Power consumptions [watt]:	600 with compressor or 100 without compressor
Power requirements:	230V/50Hz - 230V/60Hz - 115V/60Hz - 100V/60Hz

ARTICLES, OPTIONS AND SPARE PARTS

6711 03 Y1Z.x High purity Nitrogen 500
 6711 03 Y2Z.x High purity Nitrogen 750
 6711 03 Y4Z.x High purity Nitrogen 1300
 6711 03 Y5Z.x High purity Nitrogen 4000

Where Y=1 Includes internal compressor (large casing)
 Y=0 Need external compressed Air (small casing)

Z=1 With catalytic HC remover
 Z=0 No catalytic HC remover

X=0 for 230V/50Hz or 230V/60Hz
 X=2 for 115V/60Hz
 X=4 for 100V/60Hz

SPARE PARTS and CONSUMABLES for maintenance :

6711 02 220 Set of filters (coalescent / dust filter)
 5735 00 182.1 Replacement catalysis oven (new) / 230V
 5735 00 182.2 Replacement catalysis oven (new) / 100V-115V



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46, Chemin de l'Étang CH-1219 Genève, Suisse
 Tel : +41 22 979 37 24 fax : +41 22 979 37 20
 e-mail : info@lnsgas.com www.Lnsgas.com



PARTNER OF TRIANGOLO