



Schmidlin
Swiss Made  Innovation



Gas generators for Laboratory



Hydrogen

The LNI Schmidlin SA hydrogen generators are economical alternative to high pressure gas cylinders in the laboratories. Purities of up to 99.9999% are available and the generators offer silent operation at pressure up to 10.9 bar (155 PSI).

The generators require just demineralised or distilled water to produce hydrogen. No caustic solution are needed and no cell maintenance is required at all. PG-Plus is the ideal fuel gas for the GC-FID's or as reactor gas for other types of detectors in gas-chromatography. NM-Plus has been designed to replace helium or nitrogen as carrier gas. NM-Plus generator offer important advantages over helium or nitrogen in terms of speed analysis, sensitivity and resolution.

Other hydrogen applications include total hydrocarbon analyzers, sulfur analyzers and air-pollution monitoring systems. NM-Plus and PG-Plus generators are "No Maintenance" systems which require little bench space.

NM-Plus

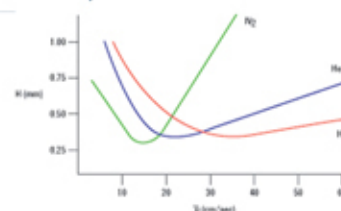


Models

NM-Plus 100
NM-Plus 160
NM-Plus 250
NM-Plus 300
NM-Plus 500
NM-Plus 600
NM-Plus 1000

Purity > 99.9999% / 1.4 to 11 bar (11.8 internal)

100 Nml/min of hydrogen
160 Nml/min of hydrogen
250 Nml/min of hydrogen
300 Nml/min of hydrogen
500 Nml/min of hydrogen
600 Nml/min of hydrogen
1000 Nml/min of hydrogen



PG-Plus



Models

PG-Plus 100
PG-Plus 160
PG-Plus 250
PG-Plus 300
PG-Plus 500
PG-Plus 600

Purity > 99.999% / 0.5 to 10.9 bar

100 Nml/min of hydrogen
160 Nml/min of hydrogen
250 Nml/min of hydrogen
300 Nml/min of hydrogen
500 Nml/min of hydrogen
600 Nml/min of hydrogen

H2 Sensor

H2 detector for GC oven.
Improve the security of the generator



Rapid Oven Cooler

LNI Schmidlin SA ROC system is able to quickly cool down the GC oven temperatures. Starting from the 400°C the ROC will help the GC oven to reach the 30°C in less than 6 minutes and 20°C in less than 10 minutes, without using CO2 or liquid nitrogen. This makes the ROC a must that will help each laboratory to increase the number of measurements per day and have a higher profitability and return of investments.

Benefits of the ROC: better results from analytical instruments, better laboratory efficiency, cost saving and simple installation






Nitrogen





Space and noise are more and more an issue in the laboratories. The HP-N2 generator is small in size and includes - as an option - an internal oil-free air compressor (HP-N2-C). It works on the PSA (Pressure Swing Absorption) principle and delivers a continuous stream of N₂ with a purity of up to 99.999% without the need of additional purification. The HP-N2 series is ideal for all kind of laboratory and chromatography applications where nitrogen is required. Other typical applications are ICP, ELSD, PID or incubators.

High Purity Nitrogen Generator

Models		Models	Flow rate @ 5 bar	
HP-N2-C 500		HP-N2-NC 500	500 Nml/min / 99.999%	<i>HC < 0.1 ppm with scrubber option for zero nitrogen</i>
HP-N2-C 750		HP-N2-NC 750	750 Nml/min / 99.999%	
HP-N2-C 1300		HP-N2-NC 1300	1300 Nml/min / 99.99%	
HP-N2-C 4000		HP-N2-NC 4000	4000 Nml/min / 98%	

The Mistral LCMS and the Whisper have been specially designed to aliment LCMS systems. The Mistral LCMS is working with the PSA technology and the Whisper is using the membrane technology. The Mistral-LCMS include an internal compressor and deliver up to 35 NI/min nitrogen with a quality of 98.5%.

Mistral Evolution LCMS Nitrogen Generator PSA

	Models	N ₂ Purity 98%	
	Mistral LCMS Evolution	35 NI/min N ₂ Up to 8 bar	
	Mistral Hybrid for AB Sciex	10 NI/min N ₂ Up to 5 bar 35 NI/min Air Up to 7 bar	
			 including internal compressor

The compressed air can be sourced either from a centralized compressed air source or a dedicated air compressor. The installation has no moving parts, resulting in reliable and trouble free operation with virtually no maintenance.

Whisper LCMS Nitrogen Generator Membrane

	Models	N ₂ Purity 98.5% / up to 8 bar	
	Mini Whisper	8 NI/min	external compressed air requested
	Whisper 0-40 L	40 NI/min	
	Whisper 0-80 L	80 NI/min	
	Whisper 0-120 L	120 NI/min	

Gas Station 4100 MP

	Models	Purity 99.5%	
	Gas Station 4100 MP	25 NI/min N ₂ Up to 6 bar 35NI/min Air Up to 7 bar	
			including internal compressor

Zero air


LNI Schmidlin SA has developed zero air generators (with and without compressor) which fit almost any laboratory requirement for clean air. The GC/ZAS is a typical device used to produce quality air for FID, removing the total hydrocarbons from the inlet air (supplied by external compressed air). The GT/UZAS removes particules, moisture, CO, CO₂, HC, NO_x, SO₂ and O₃ contaminants. The typical flow rates are from 1500Nml/min up to 30000Nml/min. If no compressed air is available, ZAS and UZAS with internal compressor and tank management can be used.



Zero Air Generator

	Models	External compressed air required	HC free < 0.1 ppm CO free < 0.1 ppm <i>*if inlet pressure is sufficient</i>
	GC 1500 GC 3000 GC 6000 GC 15000 GC 30000	1500 Nml/min Air up to 9 bar * 3000 Nml/min Air up to 9 bar * 6000 Nml/min Air up to 9 bar * 15000 Nml/min Air up to 9 bar * 30000 Nml/min Air up to 9 bar *	

Ultra Zero Air Generator

	Models	External compressed air required	HC < 0.1 ppm CO < 0.1 ppm CO ₂ < 5 ppm NO _x < 0.1 ppm SO _x < 0.1 ppm <i>*if inlet pressure is sufficient</i>
	GT 1500 GT 3000 GT 6000 GT 15000 GT 30000	1500 Nml/min Air up to 9 bar * 3000 Nml/min Air up to 9 bar * 6000 Nml/min Air up to 9 bar * 15000 Nml/min Air up to 9 bar * 30000 Nml/min Air up to 9 bar *	



Zero Air Station

	Models	With internal compressor	HC free < 0.1 ppm CO free < 0.1 ppm DP < -20°C
	ZAS 6 L ZAS 30 L	6000 Nml/min Air up to 6 bar 30000 Nml/min Air up to 6 bar	

Ultra Zero Air Station

	Models	With internal compressor	HC < 0.1 ppm CO < 0.1 ppm CO ₂ < 5 ppm NO _x < 0.1 ppm SO _x < 0.1 ppm DP < -50°C
	UZAS 6 L UZAS 30 L	6000 Nml/min Air up to 5 bar 30000 Nml/min Air up to 5 bar	

Compressed Air Station

	Models	With internal compressor	DP < -20°C
	Mini 1.5 L	1.5 Nl/min Air up to 5 bar	



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