Point of use nitrogen

The interface between HPLC and Mass Spectrometry requires a constant flow of nitrogen gas. Parker understands that a point of use, constant supply of nitrogen is essential in any lab to increase uptime and sample throughput.

We provide nitrogen gas generators for drying, sheath and nebulizing gas use giving you a dry, high purity nitrogen for use in LC/MS and other applications, that is both consistently available and cost-efficient.



The Parker nitrogen gas generators employ robust, field proven technology to meet the drying, sheath and nebulisation gas requirements of today's latest LC/MS instrumentation. Four models operate at flow rates from 20 L/min to 50 L/min.

The LC/MS generators provide a continuous stream of high purity nitrogen from a single 'plug & play' unit. Models are available with and without an integral oil free compressor, are extremely quiet in operation and are fully approved for use by major instrumentation manufacturers.

Innovative design and technology facilitate maximum instrument uptime, attractive return on investment and proven analytical performance, eliminating the need for other modes of supply.



NITROFLOW LAB

NitroFlow Lab is a self contained generator that produces up to 32 lpm of pure LC/MS grade nitrogen at pressures up to 8 bar. Nitrogen is produced by utilising a combination of compressor and membrane separation technologies. High and low pressure compressors are carefully matched to the hollow fibre membranes to ensure quiet and reliable operation. Oil free compressed air is passed through the unique proprietary hollow fibre membranes which separate the air into a concentrated nitrogen stream.

Typical applications include LC/MS, LC/MS/MS, nebuliser gases for APCI and ESI, ELSD, Turbo Vaps and chemical solvent evaporation. The NitroFlow Lab has been tried and tested by all the major LC/MS manufacturers.

MEMBRANE LC/MS NITROGEN GENERATOR

The Parker membrane nitrogen generators can produce up to 228 lpm of pure LC/MS grade nitrogen at pressures up to 8 bar. Generators are complete systems engineered to transform standard compressed air into a safe regulated nitrogen supply with minimal operator attention.

Typical applications include LC/MS, LC/MS/MS, nebuliser gases for APCI and ESI, ELSD, Turbo Vaps and chemical solvent evaporation. The membrane nitrogen generators have been tried and tested by all the major LC/MS manufactures.

PSA LC/MS Nitrogen Generator Product Selection

Model	Flow Rate	Purity*	Air Inlet @ 8.5 bar g (123.3 psi g)	Delivery Pressure		Integral Compressor	
	L/min	%	L/min	bar g	psi g		
LCMS20-0	20	99,5	70	7	101.5	No	
LCMS20-1	20	99,5	n/a	7	101.5	Yes	
LCMS30-0	30	99	130	7	101.5	No	
LCMS30-1	30	99	n/a	7	101.5	Yes	
LCMS40-0	40	99,5	130	7	101.5	No	
LCMS50-0	50	99,5	130	7	101.5	No	

^{*}Purity with respect to oxygen

Note: Add suffix 'E' for 207-253V 50/60Hz 'W' for 103 -126V 60Hz ie LCMS15-0-W

Technical Data

Ambient Temperature Range	5 - 40°C 41 - 104°F			
Inlet Air Quality *	Clean dry compressed air IS08573-1:2001 Class 2			
Supply Voltage Range	103 - 126V 60Hz 207 - 253V 50/60Hz			
Port Connections Outlet / Inlet *	1/4" Compression Fitting			

^{*}Non compressor models only

LC/MS-ECOMax Add-on-Module (Optional Extra)

Product	Description	Compatibility	Installation	Height (H)		Width (W		Depth (D)		Weight	
				mm	in	mm	in	mm	in	Kg	lb
LC/MS- ECOMax-230V	Enables economy mode cycle supplying nitrogen gas only when required, whilst maintaining constant purity	LC/MS20-50 models with and without integral compressor	All required fittings supplied with ECOMax module	103	4.06	303	11.93	408	16.06	7.8	17.2

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (without cmpressor)		
Model	mm	in	mm	in	mm	in	kg	lb	
LCMS 20-1	705	28	510	20	826	33	129	284	
LCMS 30-1	705	28	510	20	826	33	129	284	
LCMS 20-0	705	28	510	20	559	22	89	196	
LCMS 30-0	705	28	510	20	760	23	135	298	
LCMS 40-0	705	28	510	20	760	23	135	298	
LCMS 50-0	705	28	510	20	760	23	135	298	

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
Filter Kit - all models	606272251	12 Months
Compressor Kit 230V - Option 1 models	606272253	12 Months
Compressor Kit 120V - Option 1 models	606272261	12 Months

Optional Extras

Description	Part Number	Required for
Installation kit	IK7572	Suitable for all LC/MS nitrogen generators