# 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.

## PSA LC/MS NITROGEN GENERATOR

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.

#### Compressor-less Membrane LC/MS Nitrogen Generator Product Selection

Model	Flow Rate	Purity*
Model	L/min	%
N2-14	34	Up to 99.5 %
N2-22	50	Up to 99.5 %
N2-35	75	Up to 99.5 %
N2-45	117	Up to 99.5 %
N2-80	175	Up to 99.5 %
N2-135	233	Up to 99.5 %

\*Purity with respect to oxygen. For versions with oxygen analysers add AEU or AUK ie N2-14AEU

#### **Technical Data**

Ambient Temperature Range	10 - 35°C 50 - 95°F					
Electrical Requirements	None					
Port Connections Outlet / Inlet *	N2-14 - N2-35 <sup>1</sup> /4" NPT					
	N2-45 - N2135 <sup>1</sup> /2" NPT					

## Weights and Dimensions

Model		Height (H)	Width (W)			Depth (D)	Weight		
	mm	in	mm	in	mm	in	kg	lb	
N2-14	1270	50	400	16	400	16	30	66	
N2-22	1270	50	400	16	400	16	42	93	
N2-35	1270	50	400	16	400	16	48	98	
N2-45	1700	67	610	24	510	20	104	229	
N2-80	1700	67	610	24	510	20	104	229	
N2-135	1700	67	610	24	510	20	104	229	

#### **Preventative Maintenance**

Preventative Maintenance Kit	Part Number	Change Frequency
Maintenance Kit for N2-14, N2-22, N2-35	MK7572C	6 Months (kit contains one year supply)
Maintenance Kit for N2-45, N2-80, N2-135	75478	6 Months (kit contains one year supply)
Carbon Tower for N2-45, N2-80, N2-135	75344	6 Months

#### **Optional Extras**

Description	Part Number
Installation Kit for N2-14, N2-22, N2-35	IK7572
Installation Kit for N2-45, N2-80, N2-135	IK75880

#### Purity

Generator	N2-14		N2-22		N2-35		N2-45		N2-80		N2-135	
Purity %	8 Bar*	100 PSIG*	8 Bar	100 PSIG	8 Bar	100 PSIG						
99,5	9,3	8,1	15,5	13,3	23,9	20,5	50	39	75	59	100	78
99,0	15	13	23,6	20,2	35,4	30,6	67	53	100	79	133	106
98,0	23,9	20,5	35,6	30,7	53,4	46	96	73	144	110	192	147
97,0	32,1	27,6	47,1	40,6	66,9	57,8	117	94	175	141	233	187
96,0	40,1	34,4	58,5	50,4	87,3	75,2	142	114	213	171	283	228
95,0	48,6	42	71	61,2	105,5	90,9	167	134	250	201	333	268

\*For more pressures, please request full purity tables. - Flow rates in SLPM. - Purity is shown in percent nitrogen. All readings are +/-.5%, for more accurate readings, an oxygen analyzer is recommended. - All data is based on an operating temperature of 25°C.