



Analytical Gas Generators for GC/MS and LC/MS

Chromatography/ Mass Spectrometry



PerkinElmer offers a comprehensive range of analytical gas supply solutions that goes beyond simply 'gas generators'. PerkinElmer is committed to providing analytical chemists with gas solutions that enable them to get the most out of their instruments. Whether the requirement be for ultra high purity hydrogen for use as a GC and GC/MS carrier gas or multiple gases to operate a sophisticated LC/MS instrumentation, PerkinElmer's offerings always keep the end user in mind.

Hydrogen Generators	Ultra High Purity Hydrogen Generators	Zero Air Generators	LC/MS Nitrogen Generators
			
<ul style="list-style-type: none"> • Ultra safe operation • >99.999% purity • High purity guaranteed, 24/7 • Class leading PEM cell featuring 2-year warranty as standard • CE, UL and CSA approved • Low life cycle cost, excellent return on investment • Large capacity water tank with optional Auto Water Fill 	<ul style="list-style-type: none"> • Ultra safe operation • >99.9999% purity • High purity guaranteed, 24/7 • Class leading PEM cell featuring 2-year warranty as standard • CE, UL and CSA approved • Low life cycle cost, excellent return on investment • Large capacity water tank with optional Auto Water Fill 	<ul style="list-style-type: none"> • High performance heated platinum catalyst • High efficiency filtration • Modular and stackable with all PerkinElmer hydrogen generators • CE, UL and CSA approved • Low life cycle cost, excellent return on investment • Superior resolution and lowered limits of detection • Safe and sustainable 	<ul style="list-style-type: none"> • Continuous automatic operation, 24/7 • Phthalate-free componentry • Low life cycle cost, excellent return on investment • CE, UL and CSA approved • Safe and sustainable • Field proven Pressure Swing Adsorption (PSA) technology • Compact and robust design

Product Selection

Hydrogen Gas Generators for Fuel Gas Applications

Model	Product No	Flow Rate	Purity	Water Consumption (24/7, full flow)	Delivery Pressure	Height (H)	Width (W)	Depth (D)	Weight (Empty)
		ml/min	%	L/week	psig	ins	ins	ins	lbs
20H	N9303225	160	>99.999	1.25	5-100	17.9	13.5	17.2	41.9
40H	N9303226	250	>99.999	2	5-100	17.9	13.5	17.2	41.9
60H	N9303227	500	>99.999	4	5-100	17.9	13.5	17.2	41.9

Preventative Maintenance Kit	Product No
Desiccant Cartridge	N9303237
Six Month PM Kit	N9303235
24-Month PM Kit	N9303236

Ultra High Purity Hydrogen Gas Generators for Carrier Gas Applications

Model	Product No	Flow Rate	Purity	Water Consumption (24/7, full flow)	Delivery Pressure	Height (H)	Width (W)	Depth (D)	Weight (Empty)
		ml/min	%	L/week	psig	ins	ins	ins	lbs
20H-MD	N9303201	160	>99.9999	1.69	10-100	17.9	13.5	18.5	45.2
40H-MD	N9303202	250	>99.9999	2.41	10-100	17.9	13.5	18.5	45.2
60H-MD	N9303203	500	>99.9999	4.82	10-100	17.9	13.5	18.5	45.2
110H-MD	N9303204	1100	>99.9999	10.60	10-100	17.9	13.5	18.5	51.8

Ambient Temperature Range		41 - 104 °F
Water Quality		Deionized. ASTM II, >1 MΩ, <1 μs, filtered to <100 μm
Supply Voltage Range		120 / 230V ± 10% (60 / 50Hz)
Port Connections	Hydrogen Outlet Water Drain	1/8" Compression Fitting Quick Release Push in Fitting

Preventative Maintenance Kit	Product No
Six Month PM	N9303238
24-Month PM Kit	N9303239

Zero Air Generators

Model	Product No (120V)	Product No (230V)	Flow Rate	Organic Purity	Air Inlet @ 58-145 psig	Delivery Pressure	Height (H)	Width (W)	Depth (D)	Weight
			L/min	ppm	L/m	psig	ins	ins	ins	lbs
UHP-35ZA-S	N9303206	N9303205	3.5	<0.1	4.2	58-145	17.9	13.4	16.7	31.3
UHP-50ZA-S	N9303208	N9303207	5.0	<0.1	6.0	58-145	17.9	13.4	16.7	31.3
UHP-150ZA-S	N9303210	N9303209	15	<0.1	18	58-145	17.9	13.4	16.7	31.3
UHP-300ZA-S	N9303212	N9303211	30	<0.1	35	58-145	17.9	13.4	16.7	31.3

Ambient Temperature Range		41 - 104 °F
Required Inlet Air Quality		Clean dry compressed air ISO8573-1:2001 Class 3.2.1
Supply Voltage Range		W (120V/60Hz) or E (230V/50-60Hz) plus/minus 10%
Port Connections	Outlet (N9303205 & N9303206) Inlet (N9303205 & N9303206) Outlet (N930320207 - N9303212) Inlet (N930320207 - N9303212)	1/8" Compression Fitting 1/8" Compression Fitting 1/4" Compression Fitting 1/4" Compression Fitting

Preventative Maintenance Kit	Product No
Inlet Filter	N9303240
Outlet Filter	N9303241
120V Fan Service Kit (need 2)	N9303243
230V Fan Service Kit (need 2)	N9303242

LC/MS Nitrogen Generators for GC/MS and LC/MS

PerkinElmer offers customers a new line of nitrogen generators to meet the growing need for cost effective and pure nitrogen.

Membrane Nitrogen Generators are designed to supply single or multiple LC/MS instruments with dry nitrogen at purities of 98% to 99.5%. The generator can also be used for solvent evaporation as well as supplying dry nitrogen to analytical instruments.

Nitrogen is produced by utilizing a combination of filtration and membrane separation technologies. A high efficiency pre-filtration system pre-treats the compressed air to remove all contaminants down to 0.01 micron. Hollow fiber membranes subsequently separate the clean air into a concentrated nitrogen output stream and an oxygen enriched permeate stream, which is vented from the system. The combination of these technologies produces a continuous on demand supply of pure nitrogen.



Nitroflow Lab	N2-22 Mid Flow Nitrogen Generator	N2-35 Mid Flow Nitrogen Generator	N2-45 Mid Flow Nitrogen Generator
			
<ul style="list-style-type: none">• Complete "Plug and Play" system• Phthalate-free, no organic vapors• 8,000 hours compressor warranty or two years• Special design ensures quiet operation• Dual oil-less air compressors	<ul style="list-style-type: none">• Eliminates the need for costly, dangerous, inconvenient nitrogen cylinders in the laboratory• Requires no electricity• Compact design frees up valuable laboratory floor space• Phthalate-free, no organic vapors	<ul style="list-style-type: none">• Eliminates the need for costly, dangerous, inconvenient nitrogen cylinders in the laboratory• Requires no electricity• Compact design frees up valuable laboratory floor space• Phthalate-free, no organic vapors	<ul style="list-style-type: none">• Eliminates the need for costly, dangerous, inconvenient nitrogen cylinders in the laboratory• Requires no electricity• Compact design frees up valuable laboratory floor space• Phthalate-free, no organic vapors

LC/MS Nitrogen Generators

Model	Product No (120V)	Product No (230V)	Flow Rate	Purity	Delivery Pressure	Height (H)	Width (W)	Depth (D)	Weight
			L/min	ppm	psig	ins	ins	ins	lbs
With integrated compressor									
LCMS30-1	N9303223	N9303224	30	>98	101.5	27.8	20.1	22.9	298

Ambient Temperature Range	41 - 104 °F
Supply Voltage Range	W (120V/60Hz) or E (230V/50-60Hz) plus/minus 10%
Port Connections Nitrogen Outlet	1/4" Compression Fitting

Preventative Maintenance Kit	Product No
8000 Hr Filter Kit	N9303228
8000 Hr 120V Compressor Kit	N9303229
8000 Hr 230V Compressor Kit	N9303230
24000 Hr 120V Valve Kit	N9303231
24000 Hr 230V Valve Kit	N9303232

Model	Product No	Flow Rate	Purity	Hydrocarbon Content (excluding methane)	Delivery Pressure	Height (H)	Width (W)	Depth (D)	Weight (Shipping)
		L/min	%	ppm	psig	in/cm	in/cm	in/cm	lbs/kg
NitroFlowLab 120V/60Hz	N9306213	10 - 30	94.0 - 99.5	<2	116	27.6 / 70	12.2 / 90	35.4 / 31	205 / 92.5
NitroFlowLab 230V/50Hz	N9306214	10 - 30	94.0 - 99.5	<2	116	27.6 / 70	12.2 / 90	35.4 / 31	205 / 92.5

Ambient Temperature Range	50 °F - 95 °F (10 °C - 35 °C)
Ambient Pressure Range	103mbar(a)
Electrical Requirements	Standard with 115V/60Hz: 20A/125 VAC; NEMA 5-20 straight blade. 230V/50Hz can be mounted locally as to local requirements
Power Conditioner	1400 Watts
Port Connections-Outlet Port	1/4" NPT

N2-22 Mid Flow Nitrogen Generator without Air Compressor

Model	Product No	Flow Rate	Purity	Min/Max Operating Pressure	Atmospheric Dewpoint	Height (H)	Width (W)	Depth (D)	Weight (Shipping)
		L/min	%	psig	°F / °C	in/cm	in/cm	in/cm	lbs/kg
N2-22	N9306210	13 - 38	95.0 - 99.5	60 - 145	-58 / -50	51.5 / 130	18 / 45	16.2 / 41	80 / 36

Ambient Temperature Range	60 °F - 95 °F (15 °C - 35 °C)
Max. Recommended Inlet Air Temperature	110 °F / 43 °C
Inlet Air Temperature Range	60 °F - 95 °F (15 °C - 35 °C)
Electrical Requirements	None
Port Connections Outlet Port Inlet Port	1/4" NPT 1/4" NPT

N2-35 Mid Flow Nitrogen Generator without Air Compressor

Model	Product No	Flow Rate	Purity	Min/Max Operating Pressure	Atmospheric Dewpoint	Height (H)	Width (W)	Depth (D)	Weight (Shipping)
		L/min	%	psig	°F / °C	in/cm	in/cm	in/cm	lbs/kg
N2-35	N9306211	20 - 44	95.0 - 99.5	60 - 145	-58 / -50	51.5 / 130	18 / 45	16.2 / 41	90 / 36

Ambient Temperature Range		60°F - 95°F (15°C - 35°C)
Max. Recommended Inlet Air Temperature		110°F / 43°C
Inlet Air Temperature Range		60°F - 95°F (15°C - 35°C)
Electrical Requirements		None
Port Connections	Outlet Port Inlet Port	1/4" NPT 1/4" NPT

N2-45 High Flow Nitrogen Generator without Air Oilless Compressor

Model	Product No	Flow Rate	Purity	Min/Max Operating Pressure	Atmospheric Dewpoint	Height (H)	Width (W)	Depth (D)	Weight (Shipping)
		L/min	%	psig	°F / °C	in/cm	in/cm	in/cm	lbs/kg
N2-45	N9306212	33 - 106	95.0 - 99.5	60 - 145	-58 / -50	67 / 140	24 / 61	20 / 50	250 / 114

Recommended Ambient Operating Temperature		72°F (22°C)
Max. Recommended Inlet Air Temperature		110°F / 43°C
Inlet Air Temperature Range		60°F - 95°F (15°C - 35°C)
Electrical Requirements		None
Port Connections	Outlet Port Inlet Port	1/4" NPT 1/4" NPT

Please go to www.perkinelmer.com for more information.

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