

GENERATORS

Nitrogen

Flows to 72 LPM



Description: The Airgas® Y80-N214 and Y80-N222 Membrane Nitrogen Gas Generators produce up to 72 slpm of compressed nitrogen on-site. The purity level of the nitrogen is defined by the user for the application and may range from 95% to 99.95%. The generator can also be used for solvent evaporation as well as supplying dry nitrogen to analytical instruments.

Airgas® Membrane Nitrogen Gas Generators are complete systems engineered to transform standard compressed air into nitrogen at safe, regulated pressures on demand without the need for operator attention. These systems eliminate the need for dewars and cylinders in the laboratory.

Utilizing a combination of filtration and membrane separation technologies produces nitrogen. A high-efficiency prefiltration system pretreats the compressed air to remove all

contaminants down to 0.10 micron. Hollow fiber membranes subsequently separate the clean air into a concentrated nitrogen output stream and oxygen enriched permeate stream which is vented from the system. The combination of these technologies produces a continuous on-demand supply of pure nitrogen. Typical application include: nebulizer gas, chemical and solvent evaporation, instrument purge and supply, evaporative light scattering detector use (HPLC), and sparging.

Design Features

Membrane Separator Technology

requires minimal maintenance.

No Electricity Required

periodic prefilter changeout is only maintenance.

Paybacks

6 months to 2 years.

Enhanced Instrument Performance

due to LC/MS grade purity of nitrogen.

Recommended, Certified, and Used by all Major LC/MS Instrument Manufacturers

Nitrogen Purity / Flow Chart

Flow measured in slpm at indicated operating pressure psig. Flows for Y80-N222 are noted with an asterisk*

Purity % N ₂	145	*	125	*	110	*	100	*	90	*	80	*	70	*	60	*
99.95	8	16	7	14	6	12	5	10	4	8	8	6	2	4	1	2
99	14	28	12	24	10	20	9	18	8	16	6	12	5	10	4	8
98	20	40	17	34	14	28	13	26	11	22	9	18	7	14	6	12
97	24	48	20	40	17	34	16	32	13	26	11	22	9	18	7	14
96	29	58	25	50	22	44	19	38	16	32	14	28	11	22	8	16
95	36	72	31	62	27	54	24	48	21	42	17	34	13	26	11	22

Specifications

Max Inlet Air Pressure		145 psig
Min. Inlet Air Pressure		60 psig
Rec. Ambient Operating Temperature		≤ 68° F (25° C)
Max Ambient Air Temperature		110° F (34° C)
Nitrogen Outlet		1/4" FNPT
Nitrogen Product Pressure		60-100 psig
Suspended Liquids		None
Particles > 0.01 µm		None
Commercially Sterile		Yes
Atmospheric Dew Point Down To		-58° F (-50° C)
Electrical Requirements		
	N214/N222	NONE
	N214A/N222A	120 VAC/60 Hz/25 Watts
Dimensions (WxHxD)	N214/N222	50" W x 16" H x 16" D (127cm x 40cm x 40cm)
Weight	N214	75 lbs. (34 kg)
	N214A	80 lbs. (36 kg)
	N222	101 lbs. (46 kg)
	N222A	106 lbs (48 kg)

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Ordering Information						
Product Number	Flow Ranges (LPM)	O ₂ Analyzer	Max. Inlet Pressure (psig)	Min. Inlet Pressure (psig)	Max. Pressure Drop (@ 99% N ₂ Purity, 125 psi)	Nitrogen Purity
Y80-N214	8-36	No	145	80	10 psi	99.95%
Y80-N222	16-72	No	145	80	10 psi	99.95%
Y80-N214A	8-36	Yes	145	80	10 psi	99.95%
Y80-N222A	16-72	Yes	145	80	10 psi	99.95%

Available Options	
Product Number	Description
Y80-438027	Prefilters
Y80-IK572	Installation Kit for all models