## **Specialty Gas Equipment**

#### Low- and Mid-Flow Nitrogen Generators

Description: The Airgas<sup>®</sup> Low-Flow Nitrogen Generators include models N2-04, N2-14, N2-14A that produce up to 61 SLPM of compressed nitrogen, on-site. The Airgas<sup>®</sup> Mid-Flow Nitrogen Generators include models N2-22, N2-22ANA, N2-35, and N2-35ANA that produce 132 SLPM of compressed nitrogen, onsite. The purity level of the nitrogen stream is defined by the user, for the application, and may range from 95% to 99.5%.

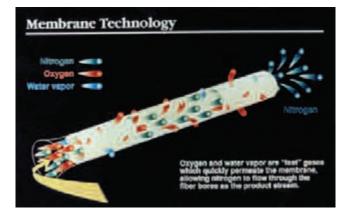
Low-Flow Model N2-14ANA and Mid-Flow Models N2-22ANA and N2-35ANA Nitrogen Generators include an oxygen analyzer which monitors the oxygen concentration of the nitrogen stream. An audible alarm signals high or low oxygen concentrations. Airgas® Nitrogen Generators are complete systems engineered to transform standard compressed air into nitrogen at safe, regulated pressures, on demand, without the need for operator attention.

Nitrogen is produced by utilizing a combination of filtration and membrane separation technologies. A high efficiency prefiltration system pretreats 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.

Typical applications include: LC/MS, nebulizer gas, chemical and solvent evaporation, instrument purge and supply, evaporative light scattering detector use (ELSD), and sparging.



This Technology Features Advanced HiFluxx Fiber!





#### **Design Features**

Recommended and used by all major LC/MS manufacturers Models N2-04, N2-14, N2-22, N2-35 require no electricity Compact design frees up valuable laboratory floor space Phthalate-free, no organic vapors Unlike PSA technology, membrane will not suppress corona needle discharge.

#### Principal Specifications

Principal Specifications	
Models	N2-04, N2-14, N2-14ANA, N2-22, N2-22ANA, N2-35 and N2-35ANA
Nitrogen Purity	95.0% - 99.5%
Atmospheric Dewpoint	-58°F (-50°C)
Suspended Liquids	None
Particles > 0.01µm	None
Commercially Sterile	Yes
Phthalate-free	Yes
Hydrocarbon-free	Yes
Min./Max. Operating Pressure	60/145 psig
Max. Press. Drop @ 99% N2 Purity, 125 psig	10 psig
Recommended Ambient Operating Temperature	68°F (20°C)
Max. Inlet Air Temperature	110°F (43°C)
Inlet/Outlet Ports	1/4" NPT
Electrical Requirements N2-04, N2-14, N2-22, N2-35	None
N2-14ANA, N2-22ANA, N2-35ANA	120 VAC/60 Hz/25 Watts
Shipping Weight N2-04 N2-14 N2-14ANA, N2-22, N2-22ANA N2-35, N2-35ANA	42.5 lbs (19 kg) 75 lbs (34 kg) 80 lbs (36 kg) 90 lbs (41 kg)
Oxygen Analyzer	Included with Model N2-14ANA, N2-22ANA, N2-35ANA
Dimensions, N2-04	16.1"h x 10.7"w x 13.4"d (40.9cm x 27.2cm x 34cm)
Dimensions, N2-14, N2-14ANA, N2-22, N2-22ANA, N2-35, N2-35ANA	51.5"h x 18"w x 16.2"d (130.8cm x 45.7cm x 41.1cm)

#### GENERATORS



Model N2-22 Mid-Flow

# **Specialty Gas Equipment**



GENERATORS

Model N2-22 Mid-Flow

### Low- and Mid-Flow Nitrogen

**Generators Cont.** 

	Nitrogen Purity / Flow Chart															
	Flow measured in SLPM at indicated Operating Pressure, psig. Flows for Model N2-04 printed in black, flows for Models N2-14 and N2-14A in red.															
% N <sub>2</sub>	N <sub>2</sub> 145		125		110		100		90		80		70		60	
99.5 99	- 6	11 18	- 5	10 16	- 5	9 15	- 4	8 13	- 4	7 11	- 3	6 10	- 3	5 8	- 2	4 7
98 97	11 15	29 40	10 13	25 34	9 13	25 33	8 10	20 27	7 9	18 25	6	16 21	5 7	13 18	4 6	11 15
96 95	20 24	50 60	17 21	43 52	16 20	42 51	13 17	34 42	12 15	31 37	10 13	26 32	9 11	22 28	7 9	19 24

	Nitrogen Purity / Flow Chart															
	Flow measured in SLPM at indicated Operating Pressure, psig. Flows for Model N2-22, N2-22A printed in black, flows for Models N2-35, N2-35A in red.															
% N <sub>2</sub>	l₂ 145 ∣ 125			5	1	10	100		90		80		70		60	
99	19	29	16	25	14	22	13	20	12	18	10	16	9	13	17	11
99 98	29 44	44 66	25 38	37 57	22 34	33 51	20 30	30 46	18 27	27 41	15 24	23 36	13 20	20 30	11	17 26
97	59	83	50	74	45	65	40	57	36	52	31	46	26	40	23	35
96 95	73 88	109 131	63 177	94 114	56 69	84 102	50 61	75 90	45 55	67 81	39 48	59 71	32 41	50 60	27	42 52

Ordering Information for assistance, call 1-800-939-5711, 8 to 5 Eastern Standard Time											
Description	Galvanic Cell	Annual Installation Kit	Installation Kit	Preventative Maintenance Plan	Extended Support with 24 Month Warranty						
Y80-N204	N/A	MK7840	IK7572	N2-04 -PM	N2-04-DN2						
Y80-N214	N/A	MK7572C	IK7572	N2-14-PM	N2-14-DN2						
Y80-N214ANA	72695A	MK7572C	IK7572	N2-14A-PM	N2-14A-DN2						
Y80-N222, Y80-N235	N/A	MK7572C	IK7572	N2-22-PM, N2-35-PM	N2-22-DN2, N2-35-DN2						
Y80-N222ANA, Y80-N235ANA	72695A	MK7572C	IK7572	N2-22A-PM, N2-35A-PM	N2-22A-DN2, N2-35A-DN2						