

Flows to 557 LPM

Nitrogen

GENERATORS

Description: These Airgas® Membrane Nitrogen Generators Y80-N245, Y80-N280 and Y80-N2135 are designed to supply single or multiple LC/MS instruments with dry nitrogen at purities of 99% to 99.95%. The generator can also be used for solvent evaporation as well as supplying dry nitrogen to analytical instruments.

Installation requires a minimum of 60 psig of compressed air to a 1/4" or 1/2" inlet connection. The outlet nitrogen supply is then directed to your analytical instruments. No electrical connections are required for the Y80-N245 and the Y80-N2135 and the only maintenance is to change prefilters periodically.

Airgas® Membrane Nitrogen Generators are recommended and used by virtually all major LC/MS instrument manufacturers. Their compact design frees up valuable laboratory floor space. And, unlike PSA and Hosmer technologies, the membrane will not suppress coronal needle discharge. Paybacks on the nitrogen systems typically range from six months up to two years. Applications include: LC/MS, solvent evaporation and analytical instruments requiring nitrogen. The Airgas® Membrane Nitrogen Generators are also available with purity monitors.



Design Features

Membrane Separator Technology
requires minimal maintenance.

No Electricity Required
periodic prefilters 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 lpm (liters per minute), at 68° F (25° C) inlet air temperature and operating pressure, psig.
Flows for Y80-N280 are noted with a straight underline.
Flows for Y80-N2135 are noted with a wavy underline.

Purity % N ₂	145 psig			125 psig			110 psig			100 psig			90 psig			80 psig		
99.95	37	<u>70</u>	<u>104</u>	32	<u>61</u>	<u>90</u>	26	<u>52</u>	<u>85</u>	23	<u>47</u>	<u>76</u>	20	<u>38</u>	<u>61</u>	16	<u>28</u>	<u>52</u>
99	62	<u>124</u>	<u>151</u>	52	<u>104</u>	<u>142</u>	42	<u>84</u>	<u>123</u>	38	<u>76</u>	<u>113</u>	31	<u>62</u>	<u>90</u>	28	<u>56</u>	<u>80</u>
98	98	<u>196</u>	<u>236</u>	84	<u>168</u>	<u>222</u>	73	<u>146</u>	<u>193</u>	66	<u>132</u>	<u>179</u>	56	<u>112</u>	<u>142</u>	45	<u>90</u>	<u>123</u>
97	133	<u>266</u>	<u>312</u>	114	<u>228</u>	<u>288</u>	99	<u>198</u>	<u>260</u>	89	<u>178</u>	<u>236</u>	76	<u>152</u>	<u>189</u>	60	<u>120</u>	<u>165</u>
96	168	<u>336</u>	<u>425</u>	143	<u>286</u>	<u>387</u>	125	<u>250</u>	<u>345</u>	112	<u>224</u>	<u>312</u>	95	<u>190</u>	<u>250</u>	76	<u>152</u>	<u>217</u>
95	205	<u>410</u>	<u>557</u>	176	<u>352</u>	<u>463</u>	153	<u>306</u>	<u>411</u>	137	<u>274</u>	<u>373</u>	116	<u>232</u>	<u>297</u>	92	<u>184</u>	<u>260</u>

Specifications

Min/Max Inlet Air Pressure	80–145 psig
Rec. Ambient Operating Temperature	≤68° F (25° C)
Max Ambient Air Temperature	1200° F (50° C)
Nitrogen Outlet	1/4" FNPT
Nitrogen Product Pressure	60–100 psig
Commercially Sterile	Yes
Particles > 0.01 µm	None
Suspended Liquids	None
Atmospheric Dew Point Down to	-58° F (-50° C)
Electrical Requirements*	N245 none N280 120VAC/60Hz N2135 none
Dimensions (WxHxD)	24" W x 20" D x 67" H (61 cm x 51 cm x 170 cm)
Weight	250 lbs (114 kg)

*No electrical power required for the Y80-N245 unless used with an electrical accessory e.g. an oxygen analyzer. 120VAC/60 Hz for model N22010 and N280.

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Flows to 557 LPM Cont.

Ordering Information

Product Number	Analyzer	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-N245	No	16-62	No	145	80	10 psi	99.95%
Y80-N245A	Yes	16-62	Yes	145	80	10 psi	99.95%
Y80-N280A	Yes	28-124	Yes	145	80	10 psi	99.95%
Y80-N2135	No	52-151	No	145	80	10 psi	99.95%

Available Options

Product Number	Description
Y80-438027	Prefilters
Y80-N220102	Oxygen Analyzer
Y80-IK572	Installation Kit for all models
Y80-75344 (New)	Activated Carbon Tower
Y80-75345 (Rebuilt)	Activated Carbon Tower