

# nitrogen generators for small flow applications

#### **FEATURES**

- produces nitrogen in-house simply and inexpensively requiring only a pre-treated compressed air system using proven PSA technology
- 3 models with rated flows from 49.4 to 547.4 scfh
- purities from 95 to 99.9%
- typical payback between 6 to 24 months
- plug and play system can be installed easily with minimum cost and disruption
- compact design allows installation in spaces too small for twin tower generator systems
- 100% function and performance tested at factory with 2 year warranty
- lower air consumption and refined controls provide greater energy efficiency
- optional mass flow controller to ensure a consistent nitrogen outlet flow rate removing any fluctuations caused by changes in pressure
- optional oxygen analyzer to allow outlet nitrogen purity to be monitored and displayed on PLC screen
- applications include wine production, food packaging and atmosphere blanketing



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### easy to install

the compact design allows installation in spaces too small for twin tower generator systems



#### safe & reliable

eliminates the safety hazards of transporting and storing pressurized gas cylinders or liquid nitrogen





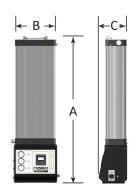
## **SPECIFICATIONS**

| model       | rated<br>outlet<br>flow <sup>(1)</sup> | 99.9%<br>(0.10%) | 99.5%<br>(0.50%) | 99%<br>(1%) | 98%<br>(2%) | 97%<br>(3%) | 96%<br>(4%) | 95%<br>(5%) | dimensions (inches) |    |    | approx.<br>weight |
|-------------|--|------------------|------------------|-------------|-------------|-------------|-------------|-------------|---------------------|----|----|-------------------|
|             |  |                  |                  |             |             |             |             |             | А                   | В  | С  | lbs               |
| ECOGEN2 090 | scfh                                   | 49.4             | 77.7             | 95.4        | 130.7       | 162.5       | 187.2       | 208.4       | 42                  | 17 | 14 | 119               |
| ECOGEN2 110 | scfh                                   | 84.8             | 120.1            | 151.9       | 204.8       | 254.3       | 296.6       | 332.0       | 54                  | 17 | 14 | 172               |
| ECOGEN2 130 | scfh                                   | 141.3            | 197.8            | 250.7       | 339.0       | 423.8       | 490.9       | 547.4       | 79                  | 17 | 14 | 262               |

| 87 to 145 psig             |  |  |  |  |  |
|----------------------------|--|--|--|--|--|
| 41 to 122°F                |  |  |  |  |  |
| 0.1 micron                 |  |  |  |  |  |
| 0.01 micron (2)            |  |  |  |  |  |
| 38°F PDP <sup>(3)</sup>    |  |  |  |  |  |
| 100 - 240 VAC (50 or 60Hz) |  |  |  |  |  |
|                            | 41 to 122°F<br>0.1 micron<br>0.01 micron (2)<br>38°F PDP (3) |  |  |  |  |

| pressure correction factors ( | 4)   |      |      |      |      |
|-------------------------------|------|------|------|------|------|
| operating pressure (psig)     | 90   | 100  | 115  | 130  | 145  |
| operating pressure (barg)     | 6    | 7    | 8    | 9    | 10   |
| correction factor             | 0.90 | 1.00 | 1.10 | 1.20 | 1.30 |

| temperature correction factors <sup>(4)</sup> |     |     |      |      |      |      |      |      |      |      |
|---|-----|-----|------|------|------|------|------|------|------|------|
| inlet temperature (°F)                        | 41  | 50  | 59   | 68   | 77   | 86   | 95   | 104  | 113  | 122  |
| inlet temperature (°C)                        | 5   | 10  | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
| correction factor                             | 0.8 | 0.9 | 0.94 | 1.00 | 1.00 | 0.98 | 0.95 | 0.90 | 0.85 | 0.72 |



ECOGEN2 090 to ECOGEN2 130

- (1) at 100 psig (7 barg) inlet pressure and 68 77°F (20 25°C) inlet temperature. For outlet flow at all other conditions refer to the correction factors above or contact support@n-psi.com
- (2) including oil vapor
- (3) requires an upstream dryer. Contact nano for assistance selecting the optimum dryer for your application
- (4) to be used as a rough guide only. All applications should be confirmed by nano. Contact nano for sizing assistance
- (5) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

