

nano GEN₂ MAX: nitrogen gas generators

GEN2-MAX 31K

100 - 240 VAC/50 or 60 Hz - nitrogen generator

The nano GEN₂ MAX nitrogen generator is designed to deliver nitrogen gas at a specified purity, flow and pressure as required by the application. The nano GEN₂ MAX operates on the pressure swing adsorption principle, which allows for a continuous supply of nitrogen from clean dry compressed air. The nano GEN₂ MAX generator offers a cost-effective, reliable and safe alternative to the use of liquid or bottled nitrogen.



general characteristics	
rated capacity (scfh) @ 95% / 99.5% / 99.999% ⁽¹⁾⁽²⁾	62,850 / 30,533 / 8,204
rated capacity (Nm ³ /hr) @ 95% / 99.5% / 99.999% ⁽¹⁾⁽²⁾	1780 / 865 / 232
absorbed power (watt)	<200
power supply	100-240 VAC / 50 or 60 Hz
operating limits	
design operating pressure range psig (barg)	72.5 to 145 (5 to 10)
design operating temperature range °F (°C) ⁽³⁾	41 to 122 (5 to 50)
recommended operating temperature range °F (°C) ⁽³⁾	41 to 95 (5 to 35)
media chambers	
material of construction	carbon steel
media type	carbon molecular sieve (CMS)
controls/design	
generator design	pressure swing adsorption (PSA)
controller type	VISION ⁰¹ programmable logic controller (PLC)
interface type	touchscreen (HMI)
electrical rating	IP 31 / NEMA 2
connections	
compressed air inlet (flange) ⁽⁴⁾	6"
nitrogen outlet to buffer vessel (flange) ⁽⁴⁾	6"
nitrogen return from buffer vessel (flange) ⁽⁴⁾	4" % units / 2" PPM units
nitrogen outlet (flange) ⁽⁴⁾	4"

(1) 101.5 psig inlet pressure / 68°F inlet temperature (7 barg / 20°C)
 (2) consult factory for N₂ capacities between 95 to 99.999% that are now shown
 (3) low ambient(+14°F) option available
 (4) flange type ANSI or DIN dependent on model ordered

scope of supply

mechanical components	
<ul style="list-style-type: none"> two welded adsorption vessels with full shell size top flange, lifting lug, inlet and outlet strainers high density fill of high grade carbon molecular sieve (CMS) thermal relief safety valves for each welded vessel self-regulating nitrogen pressure reducing valve pipng with standard flange tie-in connections pneumatic actuated inlet, blow off, equalization and outlet valves 	<ul style="list-style-type: none"> blow-off line with silencer (depressurization and off spec nitrogen blow-off) pilot control air filter and pressure regulator structural base frame with integrated forklift slots high quality butterfly valves with stainless steel trim compliance with international electrical (IEC or UL) and mechanical codes (ASME/CE)

nano

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controls and monitoring

- VISION⁰¹ control and monitoring system uses advanced algorithms for maximum reliability
 - 31 languages facilitating easy communication
 - comprehensive, proactive maintenance display
 - ICONS as standard for remote service and performance monitoring
 - user-friendly, intuitive navigation system
 - ethernet connection for local monitoring via LAN/DCS system
 - optional Modbus interface
- integrated zirconia oxygen sensor - 5 year life
- nitrogen thermal mass flow meter
- inlet air pressure, temperature and dew point sensors
- nitrogen vessel pressure sensors
- ecomode energy saving and PDES control modes as standard

dimensions & weight

length in (mm)	146 (3708)
depth in (mm)	123 (3124)
height in (mm)	157 (3988)
weight lbs (kgs)	22708 (10300)

