



nano N₂: On-Site Gas Generators

GEN₂ i4.0-4130

100-240 VAC/50 or 60 Hz – Nitrogen Generator

The nano GEN₂ i4.0 nitrogen generator is designed to deliver nitrogen gas at a specified purity, flow and pressure as required by the application. The nano GEN₂ i4.0 operates on the pressure swing adsorption principle, which allows for a continuous supply of nitrogen from clean dry compressed air. The nano GEN₂ i4.0 generator offers a cost-effective, reliable and safe alternative to the use of liquid or bottled nitrogen.



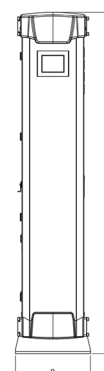
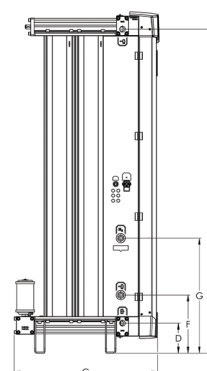
GENERAL CHARACTERISTICS	
Rated capacity (Nm ³ /h) @ 95% / 99.5% / 99.999% ⁽¹⁾	75.0 / 37.8 / 10.2
Absorbed power (kW)	72
Power supply (VAC/Hz)	85 to 264 / 50 or 60
OPERATING LIMITS	
Design operating pressure range (barg) ⁽²⁾	6 to 12
Design operating temperature range (°C)	5 to 50
Recommended operating temperature range (°C)	20 to 25
MEDIA CHAMBERS	
Material of construction	aluminium
Media type (CMS)	carbon molecular sieve
CONTROLS/ DESIGN	
Generator design (PSA)	pressure swing adsorption
Controller type (PLC)	programmable logic controller
Interface type (HMI)	touchscreen
Electrical rating	IP 31 / NEMA 2
CONNECTIONS	
Compressed air inlet (BSPP)	1"
Nitrogen outlet to buffer vessel (BSPP)	1"
Nitrogen return form buffer vessel (BSPP)	½"
Nitrogen outlet (BSPP)	½"

(1) 7 barg inlet pressure

(2) 12 barg maximum pressure standard with 16 barg option available.

Dimensions & Weight

DIMENSIONS AND WEIGHT	
A (mm)	1823
B (mm)	400
C (mm)	1109
Weight (kg)	418



GEN₂ i4.0: Nitrogen Generators

Features

- Reliable high performance piston valves
- Advanced PLC controller & touchscreen interface
- 12 barg maximum pressure standard with 16 barg option available
- Integrated zirconia oxygen analyser – 5 year life
- ecomode energy saving control as standard
- 2 year warranty
- Pressure equalisation at column switchover increases outlet flow
- Multi-bank design enables units to be added as needed.
- Mass flow controller & pressure regulator deliver precise pressure and flow.
- Outlet purity valve guarantees nitrogen gas purity level to application.

Advanced PLC/ HMI features

- Large 5.7" touchscreen interface
- Displays inlet and outlet pressure in barg or psid
- Recorded data can be downloaded via SD memory card or USB device.
- Low inlet & outlet pressure alarms
- Displays O₂ content with 4–20mA output signal as standard
- Select from multiple languages
- Optional purity dependent energy savings (PDES) saves compressed air.
- Service performed and alarms are logged and recorded.
- Multi-bank design enables units to be added as needed.
- Modbus TCP communications via RJ45 ethernet port

Technical specifications subject to change without notice.
Publication Reference: GEN₂i4.0-4130-UK-EN-Version-000
©2025 Air & Gas Solutions LLC

nano
Experience. Customer. Service.

nano-purification solutions
www.nano-purification.com

United Kingdom,
Gateshead, United Kingdom
Phone: +44 (0) 191 497 7700
Email: sales_uk@airandgassolutions.com

United States | Canada | United Kingdom | Germany | Singapore