GeniSys MicroGeN₂





Laboratory Gas Generators





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The GeniSys MicroGeN2 is the smallest, most versatile Nitrogen Generator on the market. And at only 48 cm high with purity up to 99.9995% @ 200 cc/min.... Small Wonder.



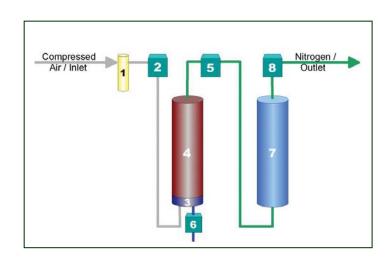
Overview

The GeniSys MicroGeN₂ Nitrogen Generator is based on the award-winning NitroGenerator and produces flows of up to 200cc/min of high purity nitrogen, whilst having the smallest footprint of any nitrogen generator on the market. If you don't need high purity, the MicroGeN₂ can be configured for greater rates of flow (up to 1 litre/min).

You don't even have to pipe compressed air from other places in the lab - the MicroGeN2 has an optional state-of-the art mini compressor and is still only 48cm high.

Process Description

MicroGeN2 employs Pressure swing adsorption (PSA) technology with a stand-by system to produce small flows of high purity nitrogen when you need it. The compressed air enters the generator via a filter [1] that expels contaminants and bulk moisture using an integrated auto drain. When the control system assesses that more nitrogen is required, the solenoid valves open [2] and the pressure is allowed to build up in the 1st column [4] containing Carbon Molecular Sieve (CMS) and residue catcher [3]. This sieve adsorbs the oxygen and leaves the dry nitrogen free to flow into the reservoir [7]. After this point, the nitrogen is allowed to flow to the application via the pressure and flow regulator [8].



Features and Benefits

- Flows up to 200 cc/min
- High Purity nitrogen to 99.9995%
- Very compact
- Light weight construction
- Optional Integrated Compressor
- Very Low Acoustic Noise
- Low power requirement
- Easy Installation
- Simple maintenance

Typical Applications

- Gas Chromatography (GC)
- Total Organic Carbon (TOC)
- "Fast GC"
- Flame Ionisation Detector (FID)
- GC-MS
- · Laser Beam Optics Purging
- And any other application requiring low flow rates of high purity nitrogen





Technical Specifications

Model:	MicroGeN ₂	MicroGeN ₂ -C	
Integrated Compressor	NO	YES	
Inlet Pressure (Barg / PSIg)	7 / 102		
Separation Method	Pressure Swing Adsorption by CMS		
Power Rating (W)	12	112	
Voltage (VAC)	110-230	115 / 230	
Weight (kg / lbs)	10 / 22	12 / 26	
Depth (cm / ins)	21.4 / 8.4		
Height (cm / ins)	48 / 18.9		
Width (cm / ins)	18 / 7.1		
Connection Ports	I/8 inch Rc (PT)		

Hi-Purity System Performance				
Purity	Flow rate	Max Pressure	Dewpoint	
99.9995% (5 ppm O2)	Up to 200 cc/min	5.5 Barg / 80 PSIg	-40 C PDP	

Hi-Flow System Performance					
Purity	Flow Rate	Max Pressure	Dewpoint		
99.99% (100 ppm O2)	300 cc/min	4.5 Barg / 65 PSIg	-40 C PDP		
99.95% (500 ppm O2)	400 cc/min	4.0 Barg / 58 PSIg	-40 C PDP		
99.8% (2000 ppm O2)	500 cc/min	3.8 Barg / 55 PSIg	-40 C PDP		
99.7% (3000 ppm O2)	1000 cc/min	2.0 Barg / 29 PSIg	-40 C PDP		



