

Z.PROSPERO

Zero Nitrogen/Air Gas Generator for GC

Reference : Z.PROSPERO.[Flow rate]/0 (Without compressor)
Z.PROSPERO.[Flow rate]/1 (With compressor)



Description

The combined Zero Nitrogen/Air delivers a continuous stream of High Purity Nitrogen gas (> 99.9995%) and grade purify Air with Hydrocarbon content (< 0.1 ppm), ideal for application such as GC-Carrier gas, Make up and GC-FID. The Z.PROSPERO is available without or with integrated oil free air compressor using the **Energy Saving Technology mode (EST)**. It is extremely compact and quiet in operation. The generator is controlled using the latest in color touch screen technology to display the process in real time, inlet / outlet pressure, N2/Air Flow and status of the system with remote access for diagnostic control. Utilizing **Advanced technology PSA** of separating Nitrogen and O2 to produce high quality Nitrogen gas and activated alumina column to produced purify Air on demand 24/7. For the Z.PROSPERO, a heated catalyst oxidises CH4 from the Nitrogen gas flow providing Zero Nitrogen with Total hydrocarbon less than 0.05 ppm.



UNIQUE AND INTELLIGENT OPERATOR
INTERFACE WITH REMOTE ACCESS

Applications

GC-Carrier gas

GC-FID

GC-FPD

GC-Make up

GC-NPD

GC-TCD

Benefits & Savings

INCREASED LABORATORY EFFICIENCY

A constant, uninterrupted gas supply of guaranteed purity eliminates interruptions of analyses to change cylinders and reduces the amount of instrument re-calibrations required.

IMPROVED ECONOMY

Pure Nitrogen and Pure Air gas produced as standard.

IMPROVED SAFETY

Pure Nitrogen and Pure Air produced at low pressure and ambient temperature removes the need for high pressure cylinders.

SECURITY OF SUPPLY

Integral oil free air compressor as an option guarantees continuous gas supply, independent of in house compressed air supply.

SIMPLE INSTALLATION

Gas generators can be installed in the laboratory, on or under a bench, eliminating the need for long gas lines from cylinders secured elsewhere.

Standard Features

- Intelligent color touch screen to provide simple and user friendly management of all functions of the unit
- Fully regenerative PSA technology
- Without or with integral oil free air compressor
- Quiet thanks to the Soundproofed compressor box and anti-vibration features
- Option :
Oxygen sensor : Online N2 Purity monitoring capability
- Catalyst module : THC < 0.05 ppm
- Auto start
- Fast start-up purity < 60 min
- Audible alarm display and Visual maintenance indication with history log
- Outlet Nitrogen/Air flow indicator
- Energy Saving Technology (EST) :
 - Switch off the compressor when gas supply is not required
 - Allowing low energy consumption and increasing durability of the compressor
- Remote PC monitoring and diagnostic analysis via USB to interface the unit with customer's PC software (allow to carry out checks and maintenance effectively, only via a remote connection)
- Compact design
- Fit with wheels

N2
AIR

MODELS	Z.PROSPERO.1		Z.PROSPERO.3	
Compressor	0 (Without)	1 (With)	0 (Without)	1 (With)
GENERALS INFORMATIONS				
Max Nitrogen Flow rate	1 L/min		3 L/min	
Max Pure Air Flow rate	1.5 L/min		3 L/min	
Max N2/Air pressure	6 bar (87 psi)			
Nitrogen purity	> 99.9995% (< 5 ppm O2) ; Total HCs < 0.05 ppm			
Pure Air purity	HCs < 0.1 ppm ; Air Dew Point < -55°C (-67°F)			
Particles	0.01 μ			
Inlet Air flow required @ 8 bar (116 psi) max	16 L/min	N/A	42 L/min	N/A
Min Inlet Air quality	ISO8573 - 1:2010 1.4.1	N/A	ISO8573 - 1:2010 1.4.1	N/A
Touch screen	Touch screen (operating parameters, system status, alarms and maintenance)			
Max Relative Humidity	80% RH @ 25°C (77°F)			
Temperature range	From 5 - 25°C (41 - 77°F)			
Max Altitude	3000 Meters			
Noise level @ 1M	25 dB (A)	50 dB (A)	25 dB (A)	52 dB (A)
Dimensions (W x H x D)	47.5 x 66.2 x 65 cm (18.7" x 26" x 25.6")		47.5 x 66.2 x 79 cm (18.7" x 26" x 31")	
Weight (kg/lbs)	59 / 130	66 / 145	101 / 223	113 / 249
Power consumption	430 VA	630 VA	430 VA	1130 VA
Electrical supply	220 - 240 V ac / 1 ph / 50 - 60 Hz			
	110 - 120 V ac / 1 ph / 50 - 60 Hz			
Fuse	10A			
CONNECTIONS				
Nitrogen/Air outlet	G 1/4" (BSP) Female			
Air Inlet	G 1/4" (BSP) Female	N/A	G 1/4" (BSP) Female	N/A
COMMUNICATION				
USB/PC Control	In series			

GoldService
 — Satisfaction Guaranteed —

The products are guaranteed 24 months*. Beyond, your investment continues to be supported by our maintenance program [Gold Service]. Our world class technical assistance offers Programmed preventive maintenance to ensure optimal performance of your Gas generator F-DGSi and a priority intervention in case of failure.

*Year 2 of warranty subject to generator being serviced at end of the first year by a F-DGSi-approved agent in accordance with fixed annual maintenance schedule. For full terms and conditions, visit www.f-dgs.com

GS: TECNOLOGIA APLICADA

Certified Product

