

# Z.NESO

## Zero Nitrogen Gas Generator for GC

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



### Description

With 3 models, 1 l/min to 5 l/min, the Z.NESO Nitrogen range provide a High Purity Nitrogen solution for GC/ICP/TOC instrument.

For the Z.NESO, a heated catalyst oxidises CH<sub>4</sub> from the Nitrogen gas flow providing Zero Nitrogen with Total hydrocarbon less than 0.05 ppm.

The Z.NESO 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, N<sub>2</sub> Flow and status of the system with remote access for diagnostic control.

Utilizing **Advanced technology PSA** of separating Nitrogen and Oxygen to produce high quality Nitrogen gas on demand 24/7.



UNIQUE AND INTELLIGENT OPERATOR INTERFACE WITH REMOTE ACCESS

### Applications

GC-ECD

GC-Carrier gas

### 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 gas produced as standard.

#### IMPROVED SAFETY

Nitrogen 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 N<sub>2</sub> 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 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

N<sub>2</sub>

MODELS	Z.NESO.1		Z.NESO.3		Z.NESO.5	
Compressor	0 (Without)	1 (With)	0 (Without)	1 (With)	0 (Without)	1 (With)
<b>GENERALS INFORMATIONS</b>						
Max Nitrogen Flow rate	1 L/min		3 L/min		5 L/min	
Max Nitrogen pressure	6 bar (87 psi)					
Nitrogen purity	99.9995% (< 5 ppm O2) ; Total HCs < 0.05 ppm					
Particles	0.01 μ					
Inlet Air flow required @ 8 bar (116 psi) max	12 L/min	N/A	36 L/min	N/A	30 L/min	N/A
Min Inlet Air quality	ISO8573 - 1:2010 1.4.1	N/A	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)	< 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)	56 / 122	60 / 132	73 / 161	96 / 211	93 / 205	120 / 264
Power consumption	430 VA	655 VA	430 VA	1130 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					
<b>CONNECTIONS</b>						
Nitrogen outlet	G 1/4" (BSP) Female					
Air Inlet	G 1/4" (BSP) Female	N/A	G 1/4" (BSP) Female	N/A	G 1/4" (BSP) Female	N/A
<b>COMMUNICATION</b>						
USB/PC Control	In series					

## Gold Service

— 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](http://www.f-dgs.com)

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