

# Nitrogen Gas Generator LCMS

« Serie Maestro-LCMS »

LC-MS analysers do not all share the same requirements in terms of flow rate, pressure and purity of the gases needed for their operation.

Available in 7 models with the option with/ or without / built in air compressor :

- **MAESTRO-15** : max. output of 15 L/min of N2 gas
- **MAESTRO-25** : max. output of 25 L/min of N2 gas
- **MAESTRO-35** : max. output of 35 L/min of N2 gas
- **MAESTRO-64** : max. output of 64 L/min of N2 gas
- **MAESTRO-DF** : The dual flow, specifically designed for the Agilent 6400 & 6500: to meet the drying, sheath, nebulisation and collision gas requirements. The generator provides two continuous streams of nitrogen from a single 'plug & play' unit.
- **MAESTRO-DF/EVOQ-TQ** : The dual flow generator has been specifically designed to meet the nitrogen and dry air needs to supply the Bruker EVOQ triple quadrupole Mass Spectrometer.
- **MAESTRO-TF / Maestro-TF-HF**: The triple flow, for ABI SCIEX LCMS specifically designed to supply Curtain, Source & Exhaust gases with dry air and nitrogen for ABI SCIEX LCMS instruments.



## BENEFITS AND 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

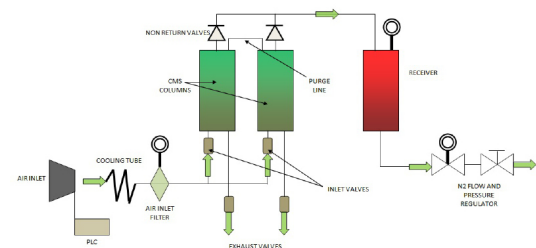
Gas generators can be installed in the laboratory, on or under a bench, eliminating the need for long gas lines from cylinders secured elsewhere.

## STANDARD FEATURES

- Fully regenerative PSA technology ; reduced risk of gas contamination and phthalate free
- HMI touch screen technology to display the process in real time, including process variables
- Integral oil free compressor in option : fully secure supply
- Quiet thanks to the Soundproofed compressor box and anti-vibration features
- Auto start
- Audible and Alarm display with help menu and history log
- Visual maintenance indication with alarm and history log
- Outlet flow indicator
- Energy saving Mode: Enables the compressor to switch off when nitrogen supply is not required
- Remote access to screen using internet via USB port
- Fit with wheels

The Nitrogen generator use pressure swing adsorption technology (PSA) to produce pure nitrogen gas.

This technique uses a bed of carbon molecular sieve (CMS) to selectively remove oxygen and other contaminants from atmospheric air. The bed alternates between purification and regeneration modes to ensure continuous nitrogen production. The gas generator is designed to take compressed air at 8 barg from an integral oil free air compressor which is firstly pre filtered. This filtered compressed air stream is then passed to the CMS bed currently in purification mode. Whilst passing through the bed, the oxygen, carbon dioxide, moisture and some hydrocarbons are removed from the compressed air, resulting in a product stream of clean, dry, high purity nitrogen gas.



Models		Outlet Flow rate	Outlet Pressure	Inlet Air pressure required	Inlet Air Flow rate required	Size
Maestro-15	0	15 L/min	7 bar (101 psi)	8 bar (116 psi)	53 L/min	Size 3
	1	15 L/min	7 bar (101 psi)	-	-	Size 3
Maestro-25	0	25 L/min	7 bar (101 psi)	8 bar (116 psi)	68 L/min	Size 3
	1	25 L/min	7 bar (101 psi)	-	-	Size 3
Maestro-35	0	35 L/min N2	7 bar (101 psi)	8 bar (116 psi)	109 L/min	Size 3
	1	35 L/min N2	7 bar (101 psi)	-	-	Size 3
Maestro-64	0	64 L/min N2	7 bar (101 psi)	8 bar (116 psi)	115 L/min	Size 4
	1	64 L/min N2	7 bar (101 psi)	-	-	Size 5
Maestro-DF	1	35 L/min N2 @ 99% for Drying, sheath/nebulisation gas	7 bar (101 psi)	-	-	Size 4
		200 ml/min N2 @ 99.999% for collision gas	3 bar (43 psi)			
Maestro-DF/ EVOQ-TQ	1	32 L/min N2 @ 99% 50 L/min AIR, dewpoint < -20°C (-4°F)	5,5 bar (80 psi)	-	-	Size 5
Maestro-TF LCMS	1	12 L/min N2 for curtain gas	5.5 bar (80 psi)	-	-	Size 5
		24 L/min Dry Air for source gas	7.6 bar (110 psi)			
		8 L/min Dry Air for exhaust gas	4.2 bar (61 psi)			
Maestro-TF-HF	1	18 L/min N2 for curtain gas	4.1 bar (54 psi)	-	-	Size 5
		26 L/min Dry Air for source gas	7.6 bar (110 psi)			
		25 L/min Dry Air for exhaust gas	4.1 bar (54 psi)			

					0	Without compressor
					1	With compressor
Enclosure size	Height (cm)	Width (cm)	Depth (cm)	Weight (kg/lbs)	Ambient Temp range	5 - 25°C (41 - 77°F)
Size 3	83 (33")	43 (17")	80 (31")	118 / 260	Air Inlet Requirement (units without compressor)	Dewpoint : -40°C (-40°F)
Size 4			100 (39")	150 / 330	Particulate : < 1 micron	
Size 5	113 (45")	160 / 352		Oil : < 0.01 mg/m³		
					Electrical Supply	220 V ac / 1 ph / 50 Hz
						110 V ac / 1 ph / 50 - 60 Hz
					Inlet / Outlet connections	G 1/4" (BSP) Female

## GoldService

— Satisfaction Guaranteed —

The products are guaranteed 12 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.

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