482W x 641H x 1235D (18.9W x 25H x 48D)



(ES) Equipements Scientifiques SA - Département Bio-tests & Industries - 127 rue de Buzenval BP 26 - 92380 Garches Tél. 01 47 95 99 90 - Fax. 01 47 01 16 22 - e-mail: bio@es-france.com - Site Web: www.es-france.com

# **Mistral-Evolution Family**



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## MISTRAL EVOLUTION FAMILY

The Mistral-Evolution Nitrogen Gas Generator is specifically designed and built to meet the requirements for flow-rates, purity and pressure of todays LCMS systems. Besides this application they are also used for sample preparation work such as solvent evaporation and others.

The simple but well proven pressure swing adsorption (PSA) technology is used to separate Nitrogen from the other gases present in compressed air.

## **MODELS AVAILABLE**

Mistral-Evolution 10 NI / min Mistral-Evolution 15 NI / min Mistral-Evolution 25 NI / min Mistral-Evolution 35 NI / min Mistral-Evolution 40 NI / min Mistral-Evolution Hybrid for the LCMS AB SCIEX Mistral-Evolution Gas-Station x Agilent AES 4100MP

## **ADVANTAGES**

The Mistral-Evolution is optimized to generate nitrogen of constant purity and hence improve the performance of the analytical instrument - which will result in an overall productivity improvement of the laboratory.

The large quantities of pure nitrogen used for LCMS require a continuous supply which cannot be provided by gas tanks. There will be no extra cost anymore for gas supply, transportation, storage and handling. The pure nitrogen is produced locally at low pressure and at ambient temperature which is a very much appreciated advantage over high pressure gas tanks or liquid nitrogen.

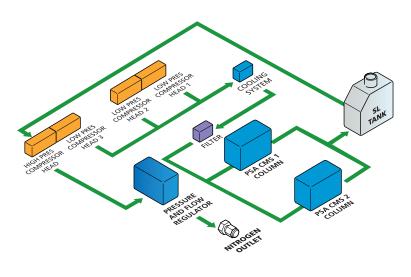
The Mistral-Evolution is easy to install - a 220V-50Hz optional 110V-60Hz power socket is all what is required. The low noise of the instrument allows the installation near the LCMS or next door up to 30 meters apart.

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## MISTRAL EVOLUTION

#### MISTRAL EVOLUTION

The Mistral LCMS Evolution (PSA technology) include an integral oilfree air compressor and deliver a continuous stream of pure nitrogen gas of 98.5% with a flow rate of 40 NI / min. It use the pressure swing adsorption (PSA) system that removes oxygen, carbon dioxide and water from compressed air. The resulting stream pure nitrogen is ideal for laboratory applications like LCMS techniques and other inert gas applications.



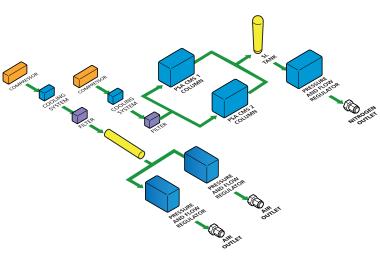
MODELS	MISTRAL EVOLUTION	
Flow	From 10 to 40 NI / min	
Pressure	Nitrogen Outlet : max 8 bar (116 psi)	
Purity	From 99.0% to 99.9% at STP	
Voltage	110V / 60Hz - 230V / 50Hz	
Weight	90 Kg net	
Consumption	1800 W	
Pressure accuracy	0.1 bar (± 0.5 %)	
Display	Graphic Display, 128 x 64 px	
Protection	IP2x	
Temperature	from 15°C to 40°C	
Noise	< 60 dB(A)	
Alarm relay	250 VAC, 16 A max	
Outlet	Nitrogen Outlet, rapid fitting for 6mm OD tube	
Dimensions (mm)	482 x 835 x 641 (L x P x A)	
Certification	CE, CSA, FCC	

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## MISTRAL EVOLUTION HYBRID

#### MISTRAL EVO HYBRID X LCMS AB SCIEX

The Mistral EVO Hybrid Nitrogen Generator was specifically designed to meet the flow, purity and pressure requirements of the LCMS of AB SCIEX with appropriate pressures and flows of nitrogen. The simple and proven pressure swing adsorption (PSA) technology is employed to remove nitrogen from compressed air. Selective molsieves (CMS) adsorb remaining oxygen and traces of humidity.



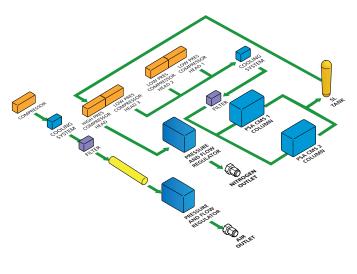
MODELS	MISTRAL EVOLUTION HYBRID
N2 Flow	Up to 12 NI / min at 80 psi
Source Air Gas	Up to 25 NI / min at 100psi
Exhaust Air Gas	Up to 10 NI / min at 60 psi
Purity	> 99%
Voltage	110V 60Hz - 220V 50Hz
Weight (kg)	90Kg net
Consumption	1800W
Pressure Accuracy	0.1 bar (± 0.5%)
Display	Graphic Display, 128x64px
Protection	IP2x
Temperature	15°C - 40°C
Air dewpoint at operating pressure	-40°C
Background noise	< 60dB
Alarm relay	250VAC, 16Amp max
Connections	6mm OD tube rapid fittings
Dimensions (mm)	482 x 835 x 641 (L x P x A)
Certification	CE, CSA, FCC

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## MISTRAL EVO GAS-STATION

#### **MISTRAL EVO GAS-STATION X AGILENT AES 4100MP**

The new generator Mistral EVO Gas-Station is the global dedicated solution for the new Microwave Agilent 4100MP system. The well known and proven pressure swing adsorption (PSA) technology is used to generate nitrogen with a purity >99.5% and a flow of up to 25 NI / min simultaneously with up to 40 NI / min of dry air for POP and EGM. This combination allows the system to stabilize quickly and be ready faster. Thanks to a particular insulation the Mistral EVO Gas-Station can be installed in the laboratory near the instrument or underneath the laboratory bench.



MODELS	MISTRAL EVOLUTION GAS-STATION
N2 Gas Flow	Up to 25 NI / min at 8 bar max
Air Gas Flow	Up to 40 NI / min at 8 bar max
Purity	> 99,5%
Voltage	110V 60Hz - 220V 50Hz
Weight (kg)	110Kg net
Consumption	2500W max
Pressure accuracy	0.1 bar (± 0.5%)
Display	Graphic Display, 128x64px
Protection	IP2x
Temperature	15°C - 40°C
Air ewpoint at operating pressure	-40°C
Background noise	< 60dB
Alarm relay	250VAC, 16Amp max
Connections	6mm OD tube rapid fittings
Dimension (mm)	482 x 1235 x 641 (L x P x A)
Certification	CE, CSA, FCC

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