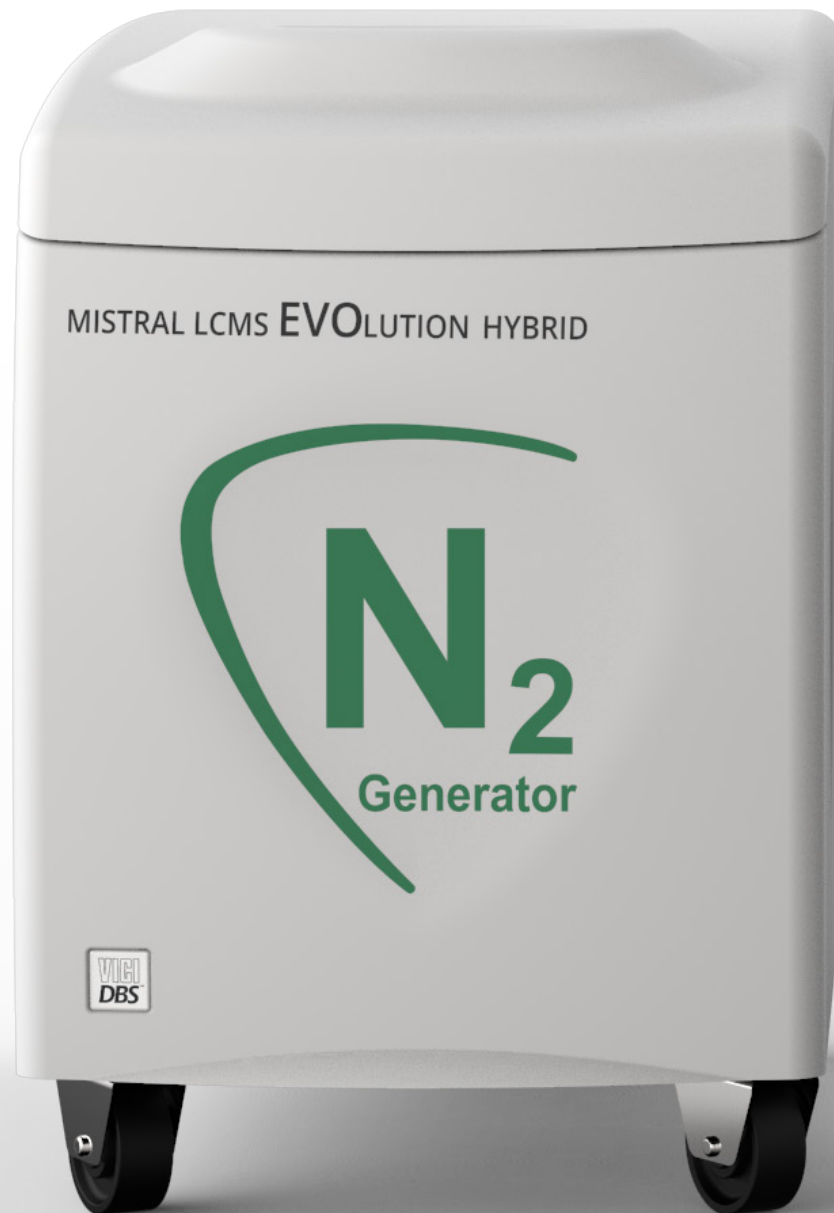


# MISTRAL EVOLUTION HYBRID NITROGEN + AIR GENERATOR

VICI DBS<sup>®</sup>  
www.vicidbs.com



North America & South America contact:

Europe, Asia, Africa, & Australia/Oceania contact:

## VICI DBS USA

tel: +1 713-263-6970  
fax: +1 713-263-6971  
web: www.vicidbs.com

## VICI AG INTERNATIONAL

tel: Int + 41 41 925-6200  
fax: Int + 41 41 925-6201  
web: www.vicidbs.com

## DESCRIPTION

The VICI DBS® Mistral Evolution Hybrid is a self contained generator that produces up to 12 L/min of high purity nitrogen and 22 L/min of air. The generator is designed to meet the specific requirements of the Sciex LC/MS. Nitrogen is produced by utilizing a combination of compressor and Carbon Molecular Sieve (CMS) technology. High and low pressure compressors are carefully matched to the CMS demand to ensure quiet and reliable operation. This unique combination of dual compressor technology has several unique advantages over all other nitrogen generators commercially available.

Nitrogen is produced at low pressure, which ensures a longer compressor life and then compressed to 8 barg (116 psig) using a second stage compressor. This combination guarantees a long compressor life reducing maintenance costs and down time.



### INCREASE EFFICIENCY

The relatively high gas volumes required by LC/MS/MS instruments make cylinder supply inappropriate and liquid nitrogen expensive. A constant, uninterrupted gas supply eliminates interruptions of analysis to change cylinders.



### RETURN ON INVESTMENT

Payback period can be as short as 6 to 12 months.



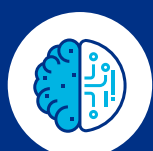
### IMPROVE SAFETY

Nitrogen produced at low pressure and ambient temperature removes the hazards associated with high pressure cylinders and liquid Dewars.



### ENHANCE PERFORMANCE

Production of a constant flow and pressure of nitrogen and air improves the consistency of the Sciex LC/MS analysis, results and reproducibility.



### SUPERIOR TECHNOLOGY

The 2-stage pressure design allows the compressors to work at their optimum pressure range reducing the stress and results in extending the life time of the compressors. This reduces maintenance costs and associated downtime.





## FEATURES

Produces a continuous supply of high purity nitrogen and air for Sciex LC/MS | On-demand supply 24/7 | Flow rate: 12 L/min of N<sub>2</sub> and 35 L/min of air | Purity: LC/MS grade | Integrated low noise oil free compressors | Proprietary carbon molecular sieve technology | 2-year complete product warranty | Complete "plug and play" LC/MS solution



## BENEFITS

Eliminates dangerous high pressure cylinders helping to keep your employees safer | Removes the logistics, inconvenience, downtime and costs of cylinder and dewar systems | Flow capacity to match your specific instrument demands | Ideal for all Sciex LC/MS applications | Simple installation and operation | Superior air purification | Peace of mind | Install directly in the laboratory



## APPLICATIONS

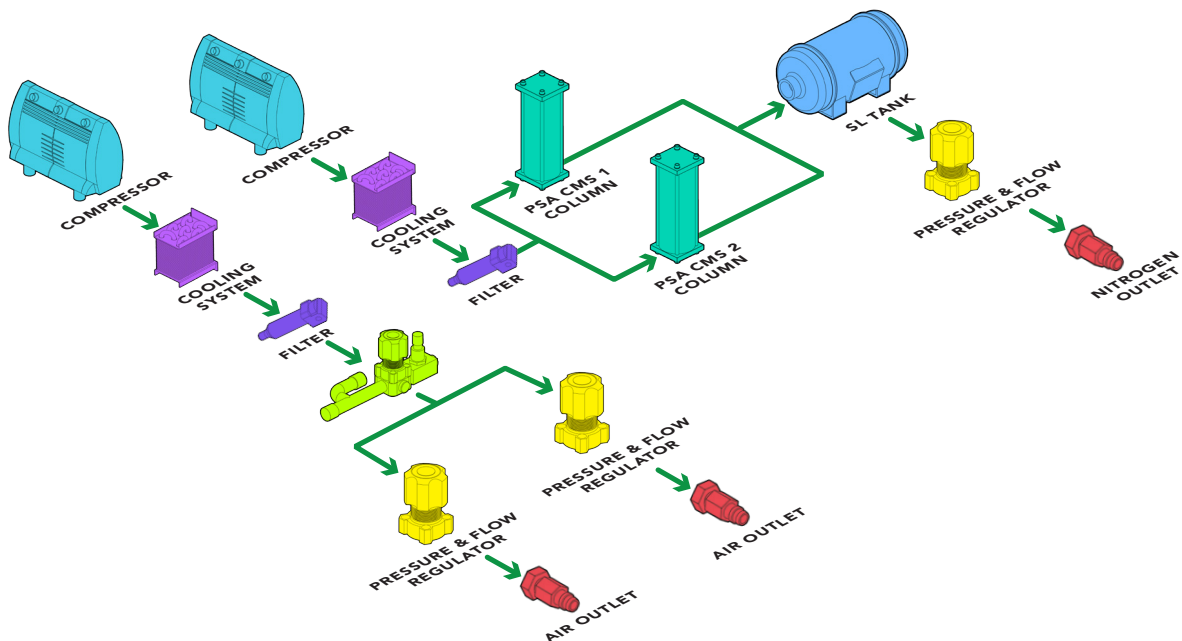
### PRODUCTS FOR LC/MS

- Sciex LC/MS

## OPERATING DIAGRAM

The Mistral Evolution Hybrid (PSA technology) includes an integral oil-free air compressor and delivers a continuous stream of pure nitrogen gas of 98.5% with a flow rate of 40 L/min.

It uses the pressure swing adsorption (PSA) system that removes oxygen, carbon dioxide and water from compressed air. The resulting stream of pure nitrogen is ideal for laboratory applications like LCMS techniques and other inert gas applications.



**MODELS & SPECS**

	<b>MISTRAL EVOLUTION HYBRID</b>
Nitrogen flow rate L/min	12 @ 5 barg (80 psig)
Air 1 - flow rate L/min	8 @ 4 barg (60 psig)
Air 2 - flow rate L/min	24 @ 7 barg (100 psig)
Nitrogen purity	+98%
Dewpoint	-50 °C
Outlet pressure barg (psig)	7 (100)
Technology	Carbon molecular sieve
Warm up time (minutes)	20
Electrical supply	110-120V 60Hz / 220-240V 50Hz
Power consumption (watts)	1800
Noise level	55 dBA @ 1 meter
Dimensions mm (in)	482W x 641H x 835D (18.9W x 25H x 33D)
Weight kg (lbs)	90 (198)
Shipping dimensions mm (in)	550W x 800H x 940D (21.6W x 31.4H x 37D)
Shipping weight kg (lbs)	115 (254)
Operating temp °C (°F)	15 to 35 (59 to 95)
Outlet connections	3 x 6mm OD Compression or 1/4"
Certification	CE, FCC, MET (UL and CSA Compliant)

**ORDERING INFORMATION** (for best service, please call to discuss your application before placing your order).

**MISTRAL EVOLUTION HYBRID**

**DB-EVO-HY-EU** 220V/50Hz

**DB-EVO-HY-US** 110V/60Hz