

# MISTRAL EVOLUTION GAS STATION NITROGEN + AIR GENERATOR



## DESCRIPTION

The VICI DBS® Mistral Evolution Gas Station is a self contained generator that produces up to 25 L/min of pure nitrogen and 35 L/min of air specifically for the Agilent MP AES 4100 & 4200 instruments. 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 on the market.

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. Air is produced using an additional third stage compressor maintaining a separate constant flow and pressure.



### INCREASE EFFICIENCY

The relatively high gas volumes required by MP AES 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 12 to 18 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 Agilent MP AES analysis, results and reproducibility.



### SUPERIOR TECHNOLOGY

The 3-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 | On-demand supply 24/7 | Flow rate: 25 L/min of N<sub>2</sub> and 35 L/min of air | Purity: MP AES 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 a cylinder system | Flow capacity to match your specific instrument demands | Simple installation and operation | Superior air purification | Peace of mind | Install directly in the laboratory



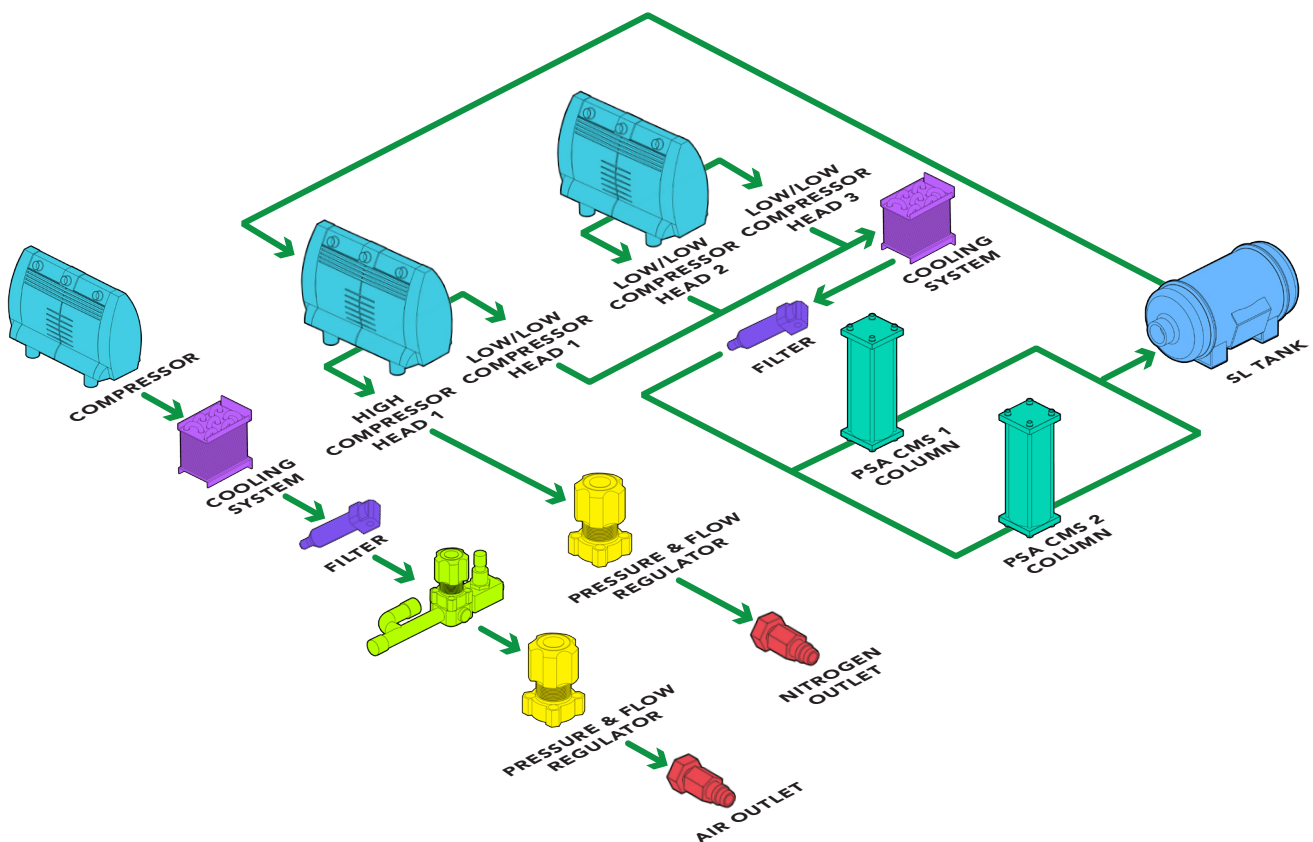
## APPLICATIONS

### MICROWAVE PLASMA ATOMIC EMISSION SPECTROMETRY

- Agilent MP AES 4100 & 4200

## OPERATING DIAGRAM

Two integral oil-free compressors and a pressure swing adsorption system (PSA) produce 25 L/min of high purity nitrogen. In parallel an additional oil-free compressor and dryer are dedicated to the 35 L/min of dry air. With two separate outlets the generator is ideal to support the gas requirements of the Agilent MP AES systems.



**MODELS & SPECS**

|                             | <b>MISTRAL EVOLUTION GAS STATION</b>     |
|-----------------------------|--|
| Nitrogen flow rate L/min    | 25 @ 5.5 barg (80 psig)                  |
| Air 1 - flow rate L/min     | 35 @ 5.5 barg (80 psig)                  |
| Nitrogen purity             | 99.5%                                    |
| Dewpoint °C (°F)            | -40 (-40)                                |
| Outlet pressure barg (psig) | 7 (100)                                  |
| Technology                  | Carbon molecular sieve                   |
| Warm up time (minutes)      | 20                                       |
| Electrical supply           | 110-120V 60 Hz / 220-240V 50Hz           |
| Power consumption (watts)   | 2700                                     |
| Dimensions mm (in)          | 482W x 641H x 1235D (18.9W x 25H x 48D)  |
| Weight kg (lbs)             | 110 (243)                                |
| Shipping dimensions mm (in) | 550W x 800H x 940D (21.6W x 31.4H x 37D) |
| Shipping weight kg (lbs)    | 141 (311)                                |
| Operating temp °C (°F)      | 15 to 35 (59 to 95)                      |
| Outlet connection           | 2 x 6mm OD compression or 1/4"           |
| Certification               | CE, FCC, MET (UL and CSA compliant)      |

**MISTRAL EVOLUTION GAS STATION****DB-EVO-GS-EU**

220V/50Hz

**DB-EVO-GS-US**

115V/60Hz