FODGSi
Innovative Gas System Company

LCMS NITROGEN GENERATOR NG6/1DF (dual flow)

The dual flow nitrogen generator has been specifically designed to meet the drying, sheath, nebulisation and collision gas requirements of the Agilent 6400 and 6500 LCMS instruments.

The Nitrogen generator use pressure swing adsorption technology (PSA) at a purity > 99% and low flow of N2 gas at high purity > 99.999%

The generators provide two continuous streams of high purity nitrogen from a single 'plug & play' unit. The model is available with an integral oil free compressor, and is extremely quiet in operation, .The Generator is controlled using the latest in HMI touch screen technology to display the process in real time, inlet/outlet pressures.

BENEFITS AND SAVINGS

Improve analytical instruments performance : production of a constant flow of gas improves the consistency of the analysis results and hence reproducibility.

Improve laboratory efficiency :
The relatively high gas volumes required by LCMS instruments make cylinder supply inappropriate for such applications. A constant, uninterrupted gas supply eliminates interruptions of analyses to change cylinders.

Improve economy :
- Quick return on investment < 1 years
- No gas cylinder rental bottles, no price inflation

Improve safety :
Nitrogen produced at low pressure and ambient temperature removes the hazards associated with high pressure cylinders and liquid Dewar's

STANDARD FEATURES

* **Complete 'Plug and Play' system specifically designed for the Agilent 6400 & 6500**
* **N2 FLOW RATE:**
  35 L/min at 7 bars, **Nitrogen purity** > 99%
  200 ml/min at 3 bars, **Nitrogen purity** > 99.999%
* **Integral oil free air compressor with noise reduction technology**
* **Auto start**
* **Alarm display with help menu**
* **Audible alarm sounder**
* **Outlet flow indicator**
* **Trend graphs for QA reporting**
* **Energy saving Mode**
* **Compressor over temperature alarm**

LCMS NITROGEN GENERATOR
NG6/1 DF (dual flow)

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 8.5 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. Whist 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.

Nitrogen Outlet Flow rate—L/min vs Oxygen Concentration						
Model	Flow rate		Purity		Outlet Pressure	Integral air compressor
	Drying, sheath/nebulisation N2	Collision gas N2	Drying, sheath/nebulisation N2	Collision gas N2		
NG6/1 DF	35 L/min	200 ml/min	> 99%	>99.999%	7 bar	Yes

Dimensions and Weights

Enclosure Size	Height cm	Width cm	Depth cm	Weight Kg
	82	60	68	150

Technical Data

Ambient Temp range	5-35°C (41-95°F)
Maximum air Inlet Pressure	8.5 barg
Nitrogen Outlet Pressure	See above table
Electrical Supply	220v a.c. / 1ph / 50-60Hz
	110v a.c. / 1ph / 50-60Hz
Outlet connections	G 1/4" (BSP) Female

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