

# HP PLUS RACK NITROGEN GENERATOR



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## DESCRIPTION

The VICI DBS® HP Plus Rack produces nitrogen by utilizing a combination of filtration and pressure swing adsorption (PSA) technology. Standard compressed air is filtered by high efficiency coalescing filters to remove all contaminants down to 5 micron. For ultra sensitive applications the 19" rack units also include the additional heated catalyst module to ensure hydrocarbons are removed to <0.1 ppm. The air then passes through two columns filled with a carbon molecular sieve (CMS) which removes O<sub>2</sub>, CO<sub>2</sub> and moisture. These are desorbed to atmosphere during the pressure swing cycle leaving a supply of ultra pure nitrogen.



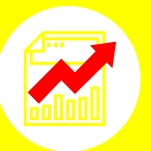
### INCREASE EFFICIENCY

A constant gas supply with a guaranteed purity, eliminates interruptions of analysis to change cylinders and reduces the amount of instrument re-calibrations required.



### IMPROVE SAFETY

Nitrogen produced at low pressure and ambient temperature, removes the need for high pressure cylinders.



### ENHANCE PERFORMANCE

Gas generators can be installed in the 19" rack cabinet with the instrument, eliminating the need for long gas lines from external cylinder supplies. A constant guaranteed high purity gas supply improves stability and ensures greater reproducibility of results.



### RETURN ON INVESTMENT

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





## FEATURES

Produces a continuous supply of zero grade nitrogen | On-demand supply 24/7 | Flow rate: up to 500 mL/min | Purity: <0.1 ppm THC | Pressure: up to 5 barg (75 psig) | Proprietary carbon molecular sieve technology | 2-year complete product warranty | Easy to install, operate and maintain



## 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 | Ideal for analyzer applications - stable baseline with increased sensitivity and reputability | Exceeds the requirements for the most demanding applications | Superior nitrogen purification with long life catalyst | Peace of mind | Improve your laboratory work flow and productivity



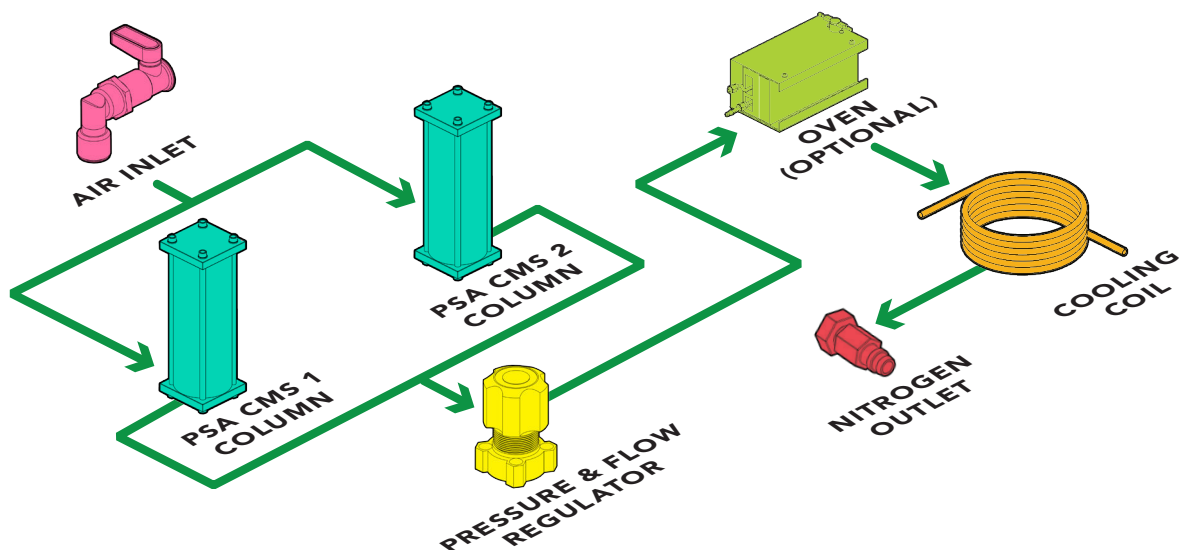
## APPLICATIONS

### ANALYZER APPLICATIONS

- Online GC-FID
- MUDD Logging
- Carrier gas and make up gas
- Total Hydrocarbon Analyzer (THA) fuel gas

## OPERATING DIAGRAM

Standard compressed air is filtered by high efficiency coalescing filters to remove all contaminants. For ultra sensitive applications the VICI DBS HP Plus Rack also includes an additional heated catalyst module to ensure hydrocarbon removal. The air then passes through two PSA columns that removes oxygen, carbon dioxide and water from compressed air. Thus resulting in a stream of ultra pure nitrogen ideal for many analyzer applications.



**MODELS & SPECS**

	<b>HP PLUS RACK 500</b>
Flow mL/min	500
Purity	>99.999%
Hydrocarbon purity (measured as methane)	<0.1 ppm
Dewpoint	-50 °C
Outlet pressure barg (psig)	up to 5 (75)
Inlet pressure barg (psig)	7 to 10 (100 to 160)
Actual inlet air requirement litres - at 8 barg (116 psig)	11
Recommended compressor air inlet - at 8 barg (116 psig)	22
Pressure drop barg (psig)	1.5 (22)
Inlet air quality	Clean dry compressed air ISO8573-1:2010 Class 1.2.1
Technology	Carbon molecular sieve
Warm up time (minutes)	60
LED indicators	Power on/off, system ready, errors
Electrical supply	110-120V 60Hz / 220-240V 50Hz
Power consumption (watts)	270
Noise level	Minimal
Dimensions mm (inches)	19"W x 3UH x 500D (19"W x 3UH x 19.6D)
Weight kg (lbs)	10 (22)
Shipping dimensions mm (inches)	720W x 565H x 375D (28.3W x 22.2H x 14.7D)
Shipping weight kg (lbs)	14 (31)
Operating temp °C (°F)	15 to 35 (59 to 95)
Inlet connection	1/4" OD Swagelok or 6 mm OD rapid fitting
Outlet connection	1/8" OD Swagelok or 4 mm OD rapid fitting

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

**HP PLUS RACK 500**

**DB-N2R-500-O-EU** 230-240V/50-60Hz

**DB-N2R-500-O-US** 100-110V/60Hz