

## Nitrogen Gas Purifier for LC/MS Applications

- Designed to purify nitrogen gas produced from liquid nitrogen
- Decrease baseline noise and increase LC/MS sensitivity
- Reduce background noise and ghost peaks



### Description

VICI Metronics nitrogen purifiers are optimized for the high flow nitrogen gas supply used on LC/MS instruments. Several types of contaminants are detrimental to LC/MS performance – notably moisture, hydrocarbons, halocarbons, and oxygen. A Metronics nitrogen purifier module placed in line with the nitrogen gas delivery system removes these contaminants, retaining them for the operating life of the purifier.

The purifier reduces most contaminant levels from many parts per million to levels that are below the lower limit of analytical detection, and absorbs a larger number and a greater variety of contaminants than other commonly used adsorptive materials. In particular, the Metronics nitrogen purifier has been shown to out perform the carbon-based hydrocarbon traps previously used for this application.

**Caution:**

This purifier is designed to be used with nitrogen gas produced from liquid nitrogen, or with nitrogen gas containing less than 500 ppm of oxygen. If this product is used on a stream with a high oxygen content, it may get hot enough to cause injury. Use our Purifier for Nitrogen Generators (P-350-1 and P-350-2) to purify high oxygen content nitrogen.

**Our successive bed format achieves the highest purity gas commercially available**

Two very high capacity hydrocarbon and moisture sorbents at the inlet for effective contaminant removal

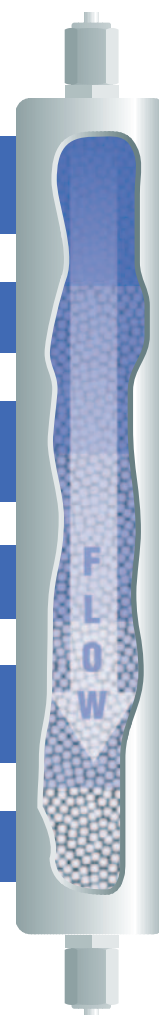
Unique proprietary broad spectrum sorbent material for multiple contaminant removal

Two oxygen scavenging materials for both high capacity and high efficiency O<sub>2</sub> removal

Multiple bed format to allow several step reduction in contaminants

Removal of H<sub>2</sub>O, O<sub>2</sub>, halocarbons, hydrocarbons, CO, CO<sub>2</sub>, H<sub>2</sub>, and sulfur containing compounds with a single purifier

Very high efficiency sorbents at the outlet for trace contaminant removal



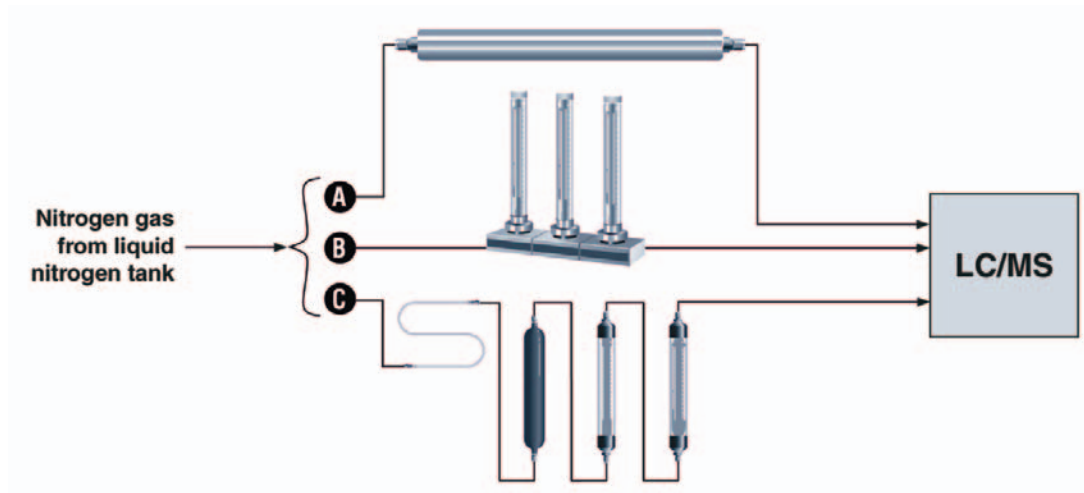
## Fittings: the Fewer the Better

Every connection in your gas delivery system has the potential for leaks; the more fittings you have, the greater the potential. In the illustration below, several gas purification options are depicted:

**A** The VICI Metronics nitrogen purifier minimizes the number of fittings. Total: **2 fittings**

**B** The “Manifold System” has two compression fittings for the system and one organic O-ring seal for each cartridge. Total: **At least 5 fittings**

**C** A typical “Contaminant Trap” configuration has several components. Before the gas supply even enters the instrument, there are at least 4 modules. Total: **At least 8 fittings**



## Specifications

Length ..... 53.3 cm (21")  
 Diameter ..... 3.8 cm (1.5")  
 Maximum inlet pressure ..... 6895 kPa (1000 psi)  
 Maximum recommended flow ..... 12 L/min

Pressure drop, 862 kPa (125 psi) inlet,  
 at a flow of 0 to 500 ml/min ..... <0.20 psi  
 Compression end fittings ..... 1/8" or 1/4"  
 Shipping weight ..... 1300 g (3.04 lb)

## Ordering Information

Product Description	Fitting	Product no.
Nitrogen purifier for LC/MS applications	1/8"	P-310-1
	1/4"	P-310-2

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