



## NITROGEN GENERATORS

### WHISPER 0

The **Whisper 0-40 Nitrogen Generator** has been developed to meet the flow, purity and pressure requirements of LCMS applications. It can also be used for the evaporation of solvents in samples being analyzed. The simple, high efficiency membrane technology separates nitrogen from the other components of a compressed air supply. The low pressure drop means that the Whisper can share a dry, oil-free compressed air source already in the lab.

#### APPLICATION

##### PRODUCTS FOR LC/MS INSTRUMENTS

Nebulizing Gas

Curtain Gas

Shield Gas

Sheath Gas

Electrospray Gas

APCI Gas

Jet Stream Gradient

##### OTHER LAB APPLICATIONS

Thermal Analyzers (TGA/DSC)

Nuclear Magnetic Resonance Spectrometers

Sample Concentrators

Evaporative Light Scattering Detector (**Elsd**)

Corona Detectors

Charged Aerosol (**Cad**)

Sample Evaporators

Cell Incubators

#### WHISPER FEATURES

- ✓ Flow rate from 40 to 120 L/min
- ✓ Output Pressure up to 7 bar (100 psig)
- ✓ Nitrogen purity from 97% – 99%
- ✓ Minimal maintenance
- ✓ Proprietary membrane technology
- ✓ Simple Installation

#### OPERATING PRINCIPLE

Compressed air is forced through hollow fibre membranes. The air components permeate outside the membrane, depending on their rate of diffusion. Oxygen, carbon dioxide, water vapor, and traces of rare gases have diffusion rate higher than nitrogen. Nitrogen diffuses through the membrane slower than the other components, so it remains inside the hollow membrane and it is discharged at the membrane end ready for use.

## Specification WHISPER 0

MODELS	WHISPER 0-40	WHISPER 0-80	WHISPER 0-120
Flow L/min.	40	80	120
Purity	from 95% to98%	from 97% to98%	from 95% to98%
Dew Point	-50° C		
Outlet Pressure	7 bar		
Inlet Pressure	from 8.5 to 10 bar		
Actual Inlet air requirement L/min	120 L/min	210 L/min	245 L/min
Recommended compressor air inlet	240 L/min	420 L/min	490 L/min
Pressure drop	1.5 bar		
Inlet air quality	Clean dry compressed air ISO8573-1:2010 Class 3.2.2		
Technology	Membrane		
Warm up time	None		
Noise level	None		
Product dimension	480W x 1300H x 300D		
Product weight Kg.	15	18	20
Shipping dimensions	1270W x 375H x 590D		
Shipping weight Kg	22	25	27
Operating temperature	15 to 35 ° C		
Inlet connection	3/8" G		
Outlet connection	1/4" compression		
Certification	CE		

The following option is available:

- 10 Liters tank
- 10 mt tube
- Special 100% teflon tubing