

## NITROGEN GENERATORS

### MINI WHISPER & MINI WHISPER Hybrid

The Mini-Whisper Nitrogen Generator has been developed to meet flow, purity, and pressure requirements for light scattering detectors and LCMS interfaces.

The **Mini Whisper Hybrid** is the solution for LC-MS that also requires filtered and dried air. The simple, high efficiency membrane technology separates nitrogen from the other components of a compressed air supply. The low pressure drop means that the Mini-Whisper can share a dry, oil-free compressed air source already in the lab



### BENEFITS

✓ **BETTER RESULTS FROM ANALYTICAL INSTRUMENTS**

The constant purity of the nitrogen improves system stability and ensures reproducible results.

✓ **LAB SAFETY**

Nitrogen produced at low pressure and room temperature eliminates the risks associated with high pressure gas bottles and the handling of liquid nitrogen.

✓ **COST SAVING**

The equipment cost is normally recovered in less than a year. In addition, no pipeline is required to carry gas from the storeroom to the lab

✓ **SIMPLE INSTALLATION**

The Mini-Whisper nitrogen generator is very easy to install in the lab. No power connection is required. It can sit on the bench top or be wall-mounted to save bench space

### MINI WHISPER FEATURES

- ✓ Flow rate 8/12 l/min
- ✓ Output Pressure up to 7 bar (101 psig)
- ✓ Nitrogen purity >98 – 99.5%
- ✓ Minimal maintenance

### 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 membranes end ready for use.

## Specification **MINI WHISPER**

Model	N2-Mini-Whisper	N2-Mini-Whisper Hybrid
Out max flow	12 L/min	N2 12 L/min - Air 10 L/min
Purity	99% - 99,5%	99% at max flow rate
Dew Point	-50°C	-40°C
Inlet Air requirement	25 Lt/min	96 Lt/min
Inlet pressure	8,5 to 10 bar	8,5 to 10 bar
Pressure drop	1.5 bar	1.5 bar
Recommended compressor air inlet	120 Lt/min	190 Lt/min
Air inlet quality	Clean dry compressed air ISO8573-1:2010 Class 3.2.2	
Technology	Membrane	
Warm up time	None	
Electrical supply	None	
Noise level	None	
Operating temperature range	from 15 to 35 °C	
Connections IN/OUT	3/8" gas / 1/4" compression	
Product dimensions (mm)	735H x 348W x 350D Weight 8 Kg	
Shipping dimension (mm)	890W x 445H x 530D Wheight 14 Kg	
Certification	CE	