

PSA LC/MS Nitrogen Generators

Applications: LC/MS



Purity

N₂: >99%
to
99.999%

High purity onsite generation of laboratory gases with improved efficiency, economy and safety

The AiroGen® PSA LC/MS Nitrogen Generators use Pressure Swing Adsorption (PSA) technology to produce pure nitrogen gas. This technique uses a Carbon Molecular Sieve (CMS) to selectively remove oxygen and other contaminants from atmospheric air. The CMS bed alternates between purification and regeneration modes to ensure continuous nitrogen production.

LC-MS analysers do not all share the same requirements in terms of type, flow rate, pressure and purity of the gases needed for their operation; That's why the PSA LC/MS Nitrogen Generator range from IATT was developed to meet the needs of all LC/MS analyses on the market.

IATT offer 5 types of PSA LC/MS Nitrogen Generators with options for with or without built-in-air compressor.

Type 1: With max. output of 35 L/min of N₂ gas.

Type 2: With max. output of 64 L/min of N₂ gas.

Type 3: The dual flow, specifically designed for nebulization and collision gas requirements. The generator provides two continuous streams of nitrogen from a single 'plug & play' unit.

Types 3-4: With max. output of 15 or 25 L/min of N₂ gas.

Type 5: The triple flow, specifically designed to supply Curtain, Source & Exhaust Gases with dry air and nitrogen for ABI SCIEX LCMS instruments.

Features

- Fully regenerative PSA technology - reduced risk of gas contamination and is phthalate free.
- Flow rates suited to LC-MS analyser requirements.
- Outlet pressures up to 7 barg.
- HMI touch screen technology to display the process in real time for inlet/outlet pressures.
- Integral oil free compressor option on most types offers a fully secure N₂ supply.
- Quiet operation using a soundproofed compressor enclosure and anti-vibration features.
- Auto start.
- Audible and alarm display with help menu.
- Visual maintenance indication.
- Outlet flow indicator.
- Trend graph for QA reporting.
- Energy saving mode: Enables the compressor to switch off when nitrogen supply is not required.
- Remote access to screen using Internet or GSM (Global Systems for Mobile communication).
- Can be fitted with wheels for mobility.

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| Models | | Outlet Flow rate | Outlet Pressure Bar g | Inlet Air pressure required | Inlet Air Flow rate required | Size |
|------------------|---|---|--------------------------|--------------------------------|---------------------------------|--------|
| MAESTRO-35 LCMS | 0 | 35 l/min N2 | ? | 10 | 109 l/min | Size 3 |
| | 1 | 35 l/min N2 | ? | - | - | Size 3 |
| MAESTRO-64 LCMS | 0 | 64 l/min N2 | ? | 10 | 115 l/min | Size 4 |
| | 1 | 64 l/min N2 | ? | - | - | Size 5 |
| MAESTRO-DF LCMS | 1 | - 35 l/min N2 @ 99% for Drying, sheath/nebulisation gas - 200 ml/min N2 @ 99.999% for collision gas | ? | - | - | Size 4 |
| MAESTRO-TF LCMS | 1 | - 12 l/min N2 for curtain gas - 24 l/min dry air for source gas - 8 l/min dry air for exhaust gas | @ 5.5 @ 7.6 @ 4.2 | - | - | Size 4 |
| MAESTRO-15 LCMS | 0 | 15 l/min | ? | 10 | 53 l/min | Size 3 |
| | 1 | 15 l/min | ? | - | - | Size 3 |
| MAESTRO -25 LCMS | 0 | 25 l/min | ? | 10 | 68 l/min | Size 3 |
| | 1 | 25 l/min | ? | - | - | Size 3 |