NITRO ELSD

PSA Nitrogen Generator for ELSD Detectors

Leman Instruments

DESCRIPTION:

LEMAN Instruments designed the NITRO-ELSD product line of Nitrogen Generators to fit almost any ELSD Detector that needs a high flow of dry and pure Nitrogen (> 99.5%) in a laboratory environment.

This generator is specifically designed for ELSD applications and covers the needs of the large majority of ELSD users.

Dry and clean compressed air, supplied by an external source, is first filtered from particulates down to 5µm. Based on the field-proven Pressure Swing Adsorption (PSA) technology, Nitrogen is then extracted from a set of filters filled with high-efficiency CMS. After the extracting process, N2 is filtered of remaining particulates down to 0.01µm, and pressure is regulated electronically to the set value, between 0.5 and 8 bar (7 to 116 psig), directly adjustable by the user on the 7" touchscreen.

A model with an adjustable outflow from 1 to 10 NL/min N2 is available.

Due to the software being focused on safety, automatic regulation, and reliable communications, the NITRO-ELSD Nitrogen Generator is easy to install, reliable, safe, and pleasant to operate.

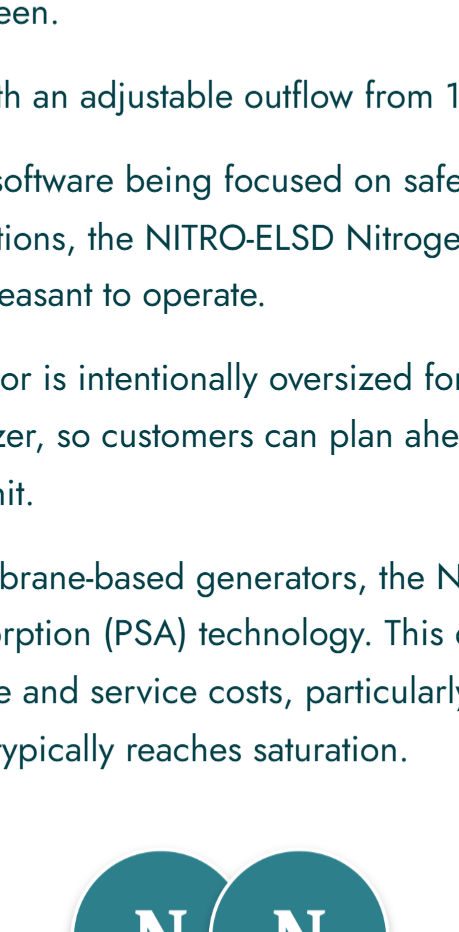
The generator is intentionally oversized for the standard consumption of a single ELSD analyzer, so customers can plan ahead to directly supply several ELSD units from one unit.

Unlike membrane-based generators, the NITRO-ELSD relies strictly on Pressure Swing Adsorption (PSA) technology. This drastically reduces long-term maintenance and service costs, particularly from year 5 onward, when a classic membrane typically reaches saturation.



APPLICATION TYPES:

- ELSD Detectors
- Sterilization
- Turbo Vaporizer
- Life science research
- Cell cultures
- Protection gas
- 3D Printing



FEATURES:

- Reduces in operation costs. Return on investment within 18 months.
- N2 available 24/7 at constant purity. No contamination.
- Independent source of dry N2. Needs only dry oil-free compressed air supply and electricity. Can be easily moved around the laboratory.
- Low functioning noise.
- Remote control.
- Very safe operation, internal leak-test, automatic shut-down.
- No handling, no storage, no cylinder rental fee.
- Internal maintenance free and zero consumables.

NITRO ELSD

PSA Nitrogen Generator for ELSD Detectors

Leman Instruments

MODELS	NITRO ELSD-10
N2 Outflow @1013 / 20°C	NITRO ELSD-10: 1 to 10 LPM
N2 purity	>99.5% N2 · particulates <0.01µm
Outlet Pressure	From 0.5 to 8 bar (7 to 116 psig)
Dimensions	W: 325mm / H: 690mm / D: 405mm
Net weight	45kg / 99lbs

Input AIR quality	Oil-free, dried compressed air; according to DIN ISO 8573-1 class 3
Input AIR Pressure	10 bar (145 psig) maximum. Inlet pressure must be at least 2 bar (30 psi) above the output N2 pressure, or purity cannot be guaranteed.
AIR consumption	Maximum ratio of 5. Air flow consumption for N2 flow generated.
Manual control	Through a 7" TFT-LCD color display with touchpad, located on the front panel. Display of major parameters, functioning status, and alarms. Intuitive navigation to functions by menus and sub-menus.
Remote control	Through Ethernet 10/100 network
Input & output fittings	Inlet G3/8" · outlet Stainless steel 1/4" compression
Power supply	Automatic switching from 90 to 260 VAC, 47 to 63 Hz
Power consumption	Maximum 300W