



Leman Instruments

SWISS TECHNOLOGY

NITRO50LS – HIGH FLOW ULTRA, HIGH PURITY & HC FREE NITROGEN GENERATOR



N₂

APPLICATIONS

- ✓ Makeup gas for GC
- ✓ ICP, ELSD, CORONA, PID
- ✓ Protection gas for metal processing and cell culture
- ✓ Carrier gas for calibrators

DESCRIPTION

LEMAN-INSTRUMENTS designed the **High Flow Ultra High Purity Nitrogen Generator NITRO 50LS**, to fit almost any type of application which needs independent supply of **Ultra-pure Nitrogen** close to the consumer in laboratory environment.

Nitrogen is extracted from compressed AIR, supplied by an external source, by a set of filters filled up with high performance CMS, organized in cascade (dual step), and based on the field proven Pressure Swing Adsorption (PSA) technology. After the extracting process, N₂ goes through a hot catalytic oven (Option: Methan CH₄ Scrubber), where HC, CH₄ and CO are removed and then stored in a buffer and filtered of remaining particulates down to 0.01µm; finally output pressure is regulated electronically to the set value, between 1 and 5 bar. (10 to 72 psig).

Model with outflow of **10, 15 and 20 l/min N₂**

Each instrument is equipped with high performance communication interfaces USB, RS485 and Ethernet to create a very flexible gas network with local or central control.

Due to the software being focused on safety, automatic regulation and reliable communications, the **NITRO 50LS** is easy to install, reliable, safe and pleasant to operate.

BENEFITS

- ✓ Reduces in operation costs. Return on investment within 15 months.
- ✓ Improves reproducibility of measurements.
- ✓ Provides High pressure stability.
- ✓ Nitrogen available 24/7 at constant purity. No contamination.
- ✓ Independent source of N₂. Requires only compressed Air and power. Can be easily moved around the laboratory.
- ✓ Remote control from PC, I-phone and tablet.
- ✓ Low noise
- ✓ No handling, No storage, No cylinder rental fee.

NITRO50LS

SPECIFICATIONS

Models	NITRO50LS-10 ; NITRO50LS-15 , NITRO50LS-20
N2 Outflow @ 1013/20°C	NITRO50LS-10 : 10L/min ; NITRO50LS-15 : 15L/min NITRO50LS-20 : 20L/min
Output N2 purity	<ul style="list-style-type: none">▪ > 99.999% N2▪ < -60°C dew point▪ < 10ppm O2▪ particulates <0.1µm▪ <0.05ppm HC-CH4 (option)
Output N2 Pressure	From 1 to 5 bar, adjustable by software. (10 to 72 psig)
Input AIR Quality / Pressure	Oil free, dried compressed Air; according to DIN ISO 8573-1 class3 / 4 bar (50psi) minimum over output pressure Maximum 14 bar (200 psi) EX: For 5bar N2 output => 9bar input AIR
Manual control	Through a 4.3" TFT-LCD color display with touch screen, located on the front panel. Display of major parameters, pressure, functioning status and alarms. Intuitive navigation to functions by menus and sub menus.
Remote control, Communications	<ul style="list-style-type: none">■ USB. RS485 (Mod-Bus) or Display..■ Trough Ethernet 10/100 network.■ Log book download by USB.
Sound pressure	< 45 dB(A), measured at 1m
Ambient Temperature	+10 to +35°C
Output fitting	Stainless steel 1/4" compression
Power supply	From 90VAC to 260 VAC, 50-60Hz, 2 phases
Power consumption	NITRO50LS-xx : maximum 650W
Dimensions	W=550mm, H=1500mm, D=600mm with castors / Depend of the model
Weight (net)	NITRO50LS-10 : 140Kg; NITRO50LS-15/20 : 180Kg
Certification	CE

ORDERING NUMBERS

Model	Article #
NITRO50LS-10	745211
NITRO50LS-15	745212

Model	Article #
NITRO50LS-20	745213
METHAN (CH4) SCRUBBER 3	715093

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