



# Leman Instruments

## NITRO50R – ULTRA HIGH PURITY NITROGEN GENERATOR, HC FREE



# N<sub>2</sub>

### APPLICATIONS

- ✓ Makeup gas for GC, without organic compound trace.
- ✓ ICP, ELSD, CORONA, incubators
- ✓ Carrier gas for calibrators

### DESCRIPTION

LEMAN-Instruments designed the **NITRO50R** product line of **Ultra High Purity Nitrogen**, to fit almost any type of application which needs independent supply of **pure Nitrogen** close to the consumer in an elegant 19" casing with full color display and touchpad.

Compressed Air is first filtered from particulates down to 5µm and dried by a static dryer. Based on the field proven Pressure Swing Adsorption (PSA) technology, Nitrogen is extracted from a set of filters filled up with CMS. After the extracting process, N<sub>2</sub> passes throughout a hot catalytic chamber (Option: Methan CH<sub>4</sub> Scrubber) to remove the last traces of organic compounds, is then stored in a buffer and filtered of remaining particulates down to 0.1µm; finally output pressure is regulated electronically to the set value, between 0.5 and 5 bar.

Models with outflows of **200, 500,1000 Nml/min N<sub>2</sub>** are available.

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

Due to the softwares being focused on safety, automatic regulation and intuitive and reliable communications, the **NITRO50R** is easy to install, reliable, safe and pleasant to operate.

### BENEFITS

- ✓ Reduces in operation costs. Return on investment within 15 months.
- ✓ Improves resolution and detection limit. Improves baseline stability.
- ✓ Nitrogen available 24/7 at constant purity. No contamination.
- ✓ Independent source of N<sub>2</sub>. Does not require any piping. Can be easily moved around the laboratory.
- ✓ Low noise < 55dB (A).
- ✓ Long life
- ✓ No handling, No storage, No cylinder rental fee.

# NITRO50R

## SPECIFICATIONS

<b>Models</b>	<b>NITRO50R-200, NITRO50R-500, NITRO50R-1000</b>
N2 Outflow @ 1013/20°C	NITRO50R-200= 0.2NI/min ; NITRO50R-500= 0.5NI/min ; NITRO50R-1000= 1 NI/min
Output N2 purity	<ul style="list-style-type: none"><li>▪ &gt; 99.999% N2</li><li>▪ &lt; -60°C dew point</li><li>▪ &lt; 10ppm O2</li><li>▪ particulates &lt;0.1µm</li><li>▪ &lt;0.05ppm HC-CH4 (option)</li></ul>
Output N2 Pressure	From 0.5 to 5 bar, adjustable by software. (7 to 72psig)
Compressed AIR	Oil free, dried compressed Air; according to DIN ISO 8573-1 class3
Manual control	Through a 4.3" 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	<ul style="list-style-type: none"><li>■ Through 2 potential free relay contacts (I/O),</li><li>■ USB. RS485 (Mod-Bus) or Display</li><li>■ Trough Ethernet 10/100 network</li><li>■ Log book download by USB.</li></ul>
Sound pressure	< 55 dB(A), measured at 1m
Ambient Temperature	+10 to +35°C
Output fitting	Stainless steel 1/8" compression
Power supply	From 90VAC to 260VAC, 47 to 63 Hz
Power consumption	NITRO50R-x : maximum 500W
Dimensions	W=483mm/19ins, H=132mm/5.2ins (3U), D=520mm/21ins
Weight (net)	NITRO50R-200 : 20Kg; NITRO50R-500 & -1000 : 25Kg
Certification	CE

## ORDERING NUMBERS

Model	Article #
NITRO50R-200	725413
NITRO50R-500	725415

Model	Article #
NITRO50R-1000	725418
METHAN (CH4) SCRUBBER 1	715091

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