NITRO50RC

Ultra-High-Purity Nitrogen for CEM & AQMS

Leman Instruments

DESCRIPTION:

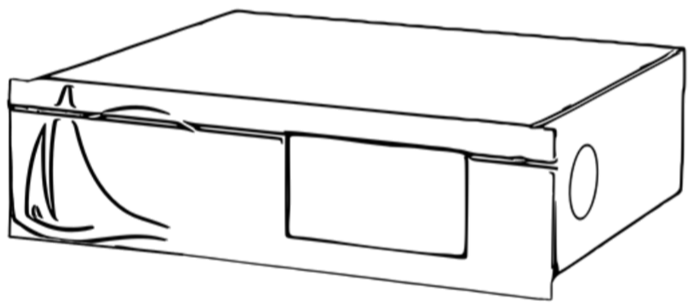
LEMAN Instruments designed the NITRO50R product line of Ultra-High-Purity Nitrogen generators to supply an independent, continuous source of N2 directly at the point of use in Continuous Emission Monitoring (CEM) and Air Quality Monitoring System (AQMS) installations, in an elegant 19″ casing with a full-colour display and touchpad.

An integrated, internal oil-free compressor feeds the generator's Pressure Swing Adsorption (PSA) module: air is filtered from particulates down to 5µm and dried, then Nitrogen is extracted from a set of CMS-filled filters. After extraction, N2 is buffered and filtered down to 0.01µm; the output pressure is then regulated electronically to the set value.

The NITRO50 R-250 delivers a fixed outflow of 250 Nml/min N2, available 24/7 at constant purity, with USB and Ethernet interfaces to build a flexible gas network with local or central control.







APPLICATION TYPES:

- Purge / protective gas for AQMS analyzer shelters
- Carrier gas for CEM extractive sampling systems
- Zero / reference gas for NOx & SO_2 CEMS analyzers
- Inert blanketing gas for sample-conditioning systems

FEATURES:

- Reduces operating costs — return on investment within 15 months.
- N2 available 24/7 at constant purity for continuous CEM/AQMS monitoring. No contamination.
- Integrated internal compressor — no external compressed-air supply required.
- Independent N2 source; no complex piping; easily integrated into CEM/AQMS shelters.
- Remote control and monitoring via Ethernet.
- Long-life compressor with power economy function.
- No handling, no storage, no cylinder rental fee.



NITRO50RC

Ultra-High-Purity Nitrogen for CEM & AQMS

Leman Instruments

MODELS	NITRO50 R-250
N2 Outflow @1013 HPA / 20°C	0.250 LPM
N2 purity	>99.9995% N2 · particulates <0.01µm
Dew Point	-50°C
Outlet Pressure	From 0.5 to 7 bar (7 to 102 psig)
Dimensions cm / in	L: 55cm / l: 41.5cm / H: 12cm (3U) L: 21.6in / l: 16.1in / H: 4.7in (3U)
Net weight (kg/lbs)	12kg / 26lbs

Compressed Air	Internal, oil-free compressor — included
Manual control	Through a 7″ TFT-LCD colour touchscreen on the front panel. Menu-driven navigation to functions and sub-menus.
Remote control, Communications	Through Ethernet 10/100 network
Output fitting	Stainless steel 1/8″ compression
Power supply	Automatic switching from 90 to 260 VAC, 47 to 63 Hz
Power consumption (max at full flow)	Maximum 750W*
Ambient temperature	+10 to +35°C