SOLO LCMS

High Flow Nitrogen Generator for LC-MS

Leman Instruments

DESCRIPTION:

LEMAN Instruments designed the SOLO LCMS product line of Nitrogen Generator, to fit almost any LC-MS system which needs a high flow of dry and pure Nitrogen close to the consumer in a laboratory environment.

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 carbon molecular sieve. 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).

N2 is available 24/7 with constant purity 99% at a -45°C dew point — the grade LC-MS actually calls for, delivered without variation. Models with outflows of 20, 35 and 60 NL/min N2 are available.

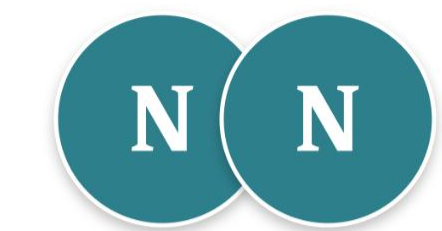
Each instrument is equipped with high performance communication interfaces Ethernet as standard to create a very flexible gas network with local or central control.

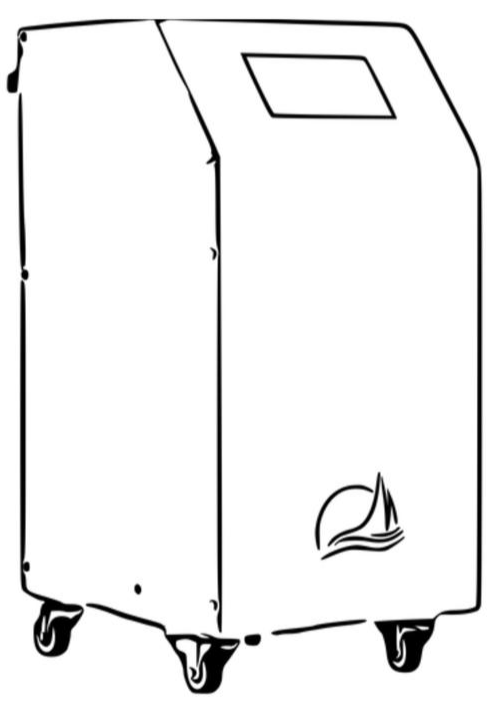
Due to the software being focused on safety, automatic regulation, and reliable communications, the SOLO LCMS is easy to install, reliable, safe, and pleasant to operate. Internally maintenance free.



APPLICATION TYPES:

- Nebulising, desolvation and curtain gas for LC-MS/MS
- Sheath, auxiliary and sweep gas for triple quad and single quad LC-MS
- Thermo Scientific, Agilent, Waters, SCIEX and Shimadzu systems (full list on page 2)





FEATURES:

- Reduces operation costs. Return on investment within 12 months maximum (exact estimate with our ROI calculator).
- The same purity and the same pressure every day — no variation from cylinder to cylinder.
- N2 available 24/7 at constant purity. No contamination.
- Independent source of N2. Does not require complex piping. It can be easily moved around the laboratory.
- No handling, no storage, no cylinder rental fee.



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MODELS	SOLO LCMS-20 SOLO LCMS-35 SOLO LCMS-60
N2 Outflow @1013 / 20°C	LCMS-20: 20 NL/min LCMS-35: 35 NL/min LCMS-60: 60 NL/min
N2 purity	99% N2
Dew point	-45°C
Outlet Pressure	From 0.5 to 8 bar, adjustable directly on touchscreen (7 to 116 psig)
Dimensions	W: 40.5cm / D: 32.5cm / H: 69cm
Net weight (kg/lbs)	40–60kg / 88–132lb

Input AIR quality	Oil-free, dried compressed Air; DIN ISO 8573-1 class 3, pre-filtered to 5µm at the inlet
Separation process	Pressure Swing Adsorption (PSA)
Manual control	Through a 7″ TFT-LCD color display with touch screen on the front panel. Display of major parameters, functioning status and alarms. Intuitive navigation to functions by menus and sub-menus.
Remote control, Communications	Through Ethernet 10/100 network
Input & Output fittings	Inlet G3/8″ · outlet stainless steel 1/4″ compression
Power supply	Automatic switching from 90VAC to 260VAC, 47 to 63 Hz
Power consumption	Maximum 750W
Ambient temperature	+10 to +35°C
Certification	CE, UL and CSA

COMPATIBLE LC-MS SYSTEMS:

Thermo Scientific TSQ

- TSQ Altis Plus
- TSQ Quantis Plus
- TSQ Fortis Plus
- TSQ Certis (2026)

Legacy: TSQ Quantiva, TSQ Quantum Ultra / Access Max

N2 99%, sheath/aux/sweep up to ~20 L/min, 100 ± 20 psig

Agilent 6400 Series

- 6420
- 6460 (Jet Stream)
- 6470
- 6495B (iFunnel)

N2 sheath + drying gas (Jet Stream), typically ~10–11 L/min each

Waters Xevo TQ

- Xevo TQ Absolute / Absolute XR
- Xevo TQ-XS
- Xevo TQ-S micro / TQ-S cronos

Legacy: Xevo TQD, Xevo TQ-S

N2 for desolvation and cone gas

SCIEX Triple Quad / QTRAP

- Triple Quad 7500+ (+ QTRAP)
- Triple Quad 6500+ (+ QTRAP)
- Triple Quad 5500+ (QTRAP Ready)

Single-gas configurations: nebulizer + curtain gas only, no simultaneous zero air for heater gas

Shimadzu

- LCMS-2050 (single quad)

N2 max 15.0 L/min, purity ≥90% (well below the 99% delivered)

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