DUO LCMS-35/50

Nitrogen & Zero Air Generator

Designed for the Bruker EVOQ Triple Quad LC-MS/MS

Leman Instruments

DESCRIPTION:

LEMAN Instruments designed this DUO LCMS variant specifically to match the gas demand of the Bruker EVOQ Triple Quadrupole LC-MS/MS series, delivering nitrogen and zero air simultaneously at the flow and pressure the instrument actually draws.

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 up with high efficiency CMS. After the extracting process, N2 is filtered of remaining particulates down to 0.01 µm and pressure is regulated electronically to the set value, between 0.5 and 8 bar (7 to 116 psig). Same process for the Zero Air.

Model with outflow of up to 35 NL/min N2 and up to 50 NL/min ZA simultaneously is available, matched to the Bruker EVOQ gas requirement of 32 L/min N2 and 50 L/min dry air, with headroom on the nitrogen side.

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

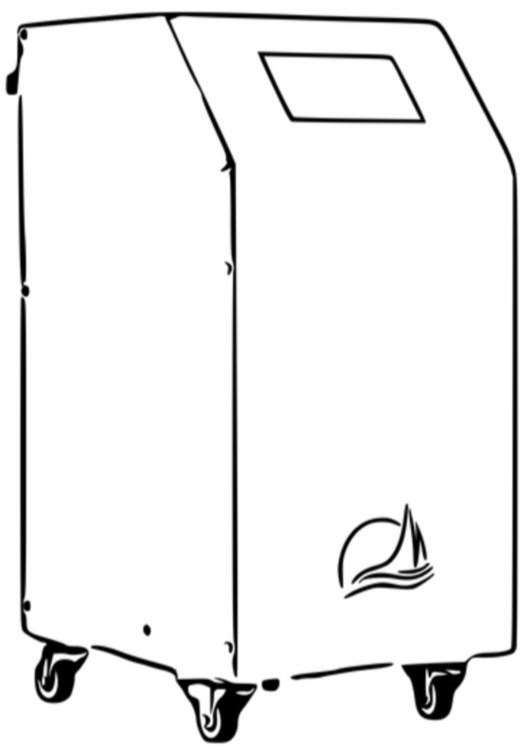
Due to the software being focused on safety, automatic regulation, and reliable communications, the DUO LCMS-35/50 is easy to install, reliable, safe and pleasant to operate.



APPLICATION TYPES:

- Bruker EVOQ Triple Quadrupole LC-MS/MS
- Nitrogen and dry air, matched to EVOQ gas specification





FEATURES:

- Reduces operation costs. Return on investment within 12 months maximum (exact estimate with our ROI calculator).
- N2 and ZA available 24/7 at constant purity. No contamination.
- Independent source of dry N2 and ZA. Needs only dry oil-free compressed air supply and electricity. Can be easily moved around the laboratory.
- Low functioning noise.
- Local remote-control via Ethernet.
- Very safe operation, internal leak-test, automatic shut-down.
- No handling, no storage, no cylinder rental fee.
- No compressor, no consumables. Internal maintenance free.



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MODELS	DUO LCMS-35/50
Max Outflow @1013 / 20°C	Up to 35 NL/min N2 and 50 NL/min ZA simultaneously
Output N2 purity	99% N2 -45°C dew point Particulates <0.01µm
Output ZA purity	-50°C dew point CO2, THC CH4 max. 10ppm each
Output Pressure	0.5 to 8 bar, adjustable directly on touchscreen for both gases independently (7 to 116 psig)
Input AIR quality	Oil free, dried compressed Air; DIN ISO 8573-1 class 3
Dimensions	W=480mm, H=690mm, D=700mm
Net weight	95 Kg / 209 Lbs

Input AIR Pressure	12 bar (145 psig) Maximum. Attention: the inlet pressure needs to be always 2 bar (30 psi) higher than the output pressure. If not, purity cannot be guaranteed.
AIR consumption	Maximum ratio of 3: Air flow consumption / N2 flow generated. Same for ZA.
Manual control	Through a 7" TFT-LCD color display with touchscreen, located 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 (other on request)
Power supply	Automatic switching from 90VAC to 260VAC, 47 to 63 Hz
Power consumption	Max 450W
Certification	CE, UL and CSA