



Experts for your Laboratory –  
Gas Generators and Service





## Your Partner for Gas Generators

Chromalytic is an experienced provider of Gas Generators for laboratories, with extensive knowledge of designing, supplying and support gas supply systems.

Laboratories demand reliable, cost effective and high quality sources of Nitrogen, Hydrogen and Zero Air

### Why Gas Generators?

Gas Generators have decisive advantages over bottled gas and are the first choice in the laboratory when it comes to supplying high-purity gases.

### Why Chromalytic?

As part of the Dürr Technik Group, we are uniquely able to base our generators on the world-class Dürr Technik oil-free compressor technology, trusted in thousands of critical industrial applications.

For our customers this means proven reliability and the assurance of confidence in their gas supply, thanks to the exceptional quality and durability of the oil-free compressors at the heart of our products.



**Gas on-demand**  
Continuous, unlimited on-demand gas supply



**Consistent gas quality**  
Eliminate batch-to-batch gas variations for more consistent results



**Affordable and reliable**  
Long asset life and lowest-in-class cost of ownership



**Pure**  
High-purity gases to protect instruments and ensure sensitive analysis



**Safe**  
No more high-pressure gas cylinders in your laboratory – no risk of explosion or gas leaks



**Service**  
Flexible support options with fast response times from our expert engineers – we can support a wide range of brands and models



**Easy to use**  
Plug-and-Play installation and simple user interface



**Environmental**  
High energy efficiency, small carbon footprint

## What we offer

### Solutions for laboratory gases

Chromalytic can advise you on the hardware best suited to your needs and provide you with a complete solution for your instrument gas demands. This is achieved both by our innovative product range, but also our strong partnerships with leading technology manufacturers and extensive technical experience.

Our generators are specifically designed to meet the stringent gas requirements for all the leading analytical instrument manufacturers including Agilent, Thermo Fisher, Waters, Shimadzu, AB Sciex, Perkin Elmer and many others.

### Instrument support

Our instrumentation service team has been providing maintenance, repair and validation services to analytical laboratories since 1997. These 25 years of experience give our valued customers the confidence that they have the support and technical assistance required to maintain their instrument portfolio.

When instrument availability and data confidence are crucial to your business, you can trust Chromalytic to support you.

## Laboratory Gases

### NITROGEN

For LC-MS, sample evaporation and other applications requiring inert gas, our Nitrogen Generators deliver up to 99.5% purity. Available with or without integrated air source.

### ULTRA HIGH-PURITY NITROGEN

High-purity Nitrogen (up to 99.9995%) is required for Gas Chromatography (GC) applications.

### ZERO AIR

Our Zero Air Generators produce a continuous flow of air free of organic contaminants by removing hydrocarbons from the air supply or lab environment. Perfect for Gas Chromatography (GC).

### HYDROGEN

Hydrogen Generators produce Hydrogen gas from water by means of water electrolysis. Hydrogen gas is used in the laboratory for various applications such as Gas Chromatography (GC) as a fuel or carrier gas.

### COMPRESSED AIR

Oil-free compressors for critical applications where high reliability and low noise levels are important, such as instrument or Gas Chromatography air supplies.





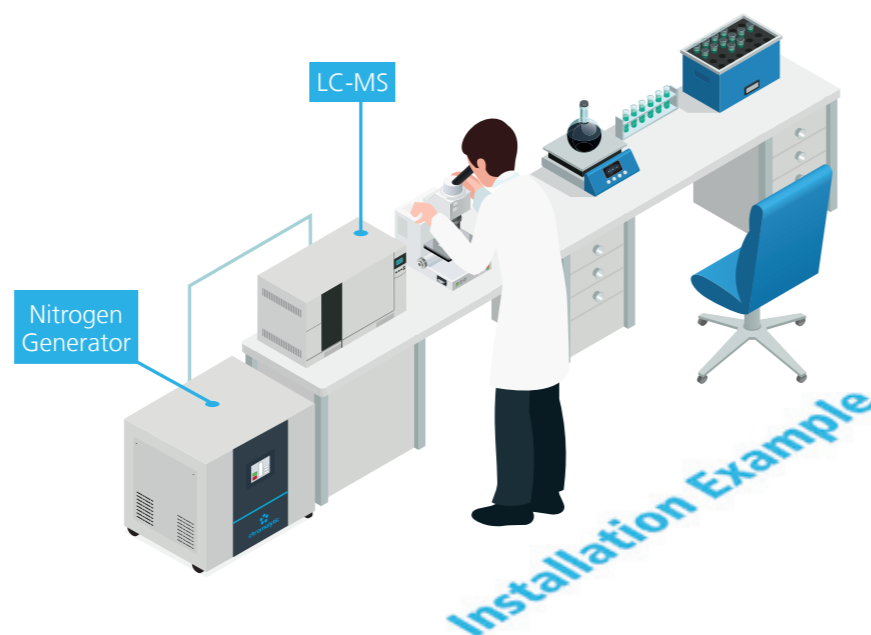
## Nitrogen for Liquid Chromatography Mass Spectrometry

LC-MS is a separation technique for the analysis of compounds in a mixture, which can identify and quantify compounds even in complex matrices.

High-purity Nitrogen is used in the collision cell (collision gas) in LC-MS instruments to further fragment the analyte ions. The more the sample is fragmented the more likely that the analyte ions can be identified with certainty.

Chromalytic Nitrogen Generators are suitable for:

- Single Quad LC-MS instruments
- Triple Quad, TOF & QTOF LC-MS instruments



## Nitrogen for Thermogravimeters

Thermogravimetry, also called ThermoGravimetric Analysis (TGA), is an analytical method that measures the change in mass of a sample as a function of temperature and time.

The change in weight and the temperature allow conclusions to be drawn about the composition of the sample and indications of reactions of the material under the influence of temperature. During the analysis, the sample chamber is flushed with gas – mostly pure Nitrogen – to avoid oxidation and thus falsification of the results.

## Nitrogen for Tri-Gas-CO<sub>2</sub>-Incubators

Incubators with variable oxygen control, so-called Tri-Gas-CO<sub>2</sub>-Incubators, enable the optimal cultivation of cells for a wide range of applications in pharmacy, medicine, food analysis and biochemistry. In many cases, cells cultivated in a low-oxygen environment grow faster, live longer and show less stress.

By introducing Nitrogen into the incubator with the help of a Nitrogen Generator, the oxygen concentration can be controlled specifically according to requirements.

## Zero Air for Gas Chromatography

Gas Chromatography (GC) is a widely-use and very sensitive chemical analysis technique, particularly suitable for samples that are volatile (easily turned into gases), and that are stable when heated.

The highest purity of air is essential to ensure low baseline noise and optimal signal-to-noise ratio for sensitive and reproducible analysis on your instrumentation.

Zero Air Generators provide a clean and stable source of hydrocarbon-free air for the supply of oxidant gas to detectors used in Gas Chromatography systems including:

- GC-FID: Gas Chromatography with Flame Ionisation Detector
- GC-NPD: Gas Chromatography with Nitrogen Phosphorus Detector
- GC-FPD: Gas Chromatography with Flame Photometric Detector
- GC-AES: Gas Chromatography with Atomic Emission Spectrometry





## HF30A

The all-in-one Nitrogen Generator for LC-MS with integrated compressor

Our HF30A Nitrogen Generator is ideal for use in laboratories, especially where a source of high-pressure clean air is not available at the place of use. N<sub>2</sub> supply up to 32 l/min @ 7 bar with purity up to 99.5%.

HF30A is lowest in class for cost of ownership and ensures 24/7 performance. It's an innovative Nitrogen Generator with a high-quality compressor and a PLC control system.

### Compatibility

Our Nitrogen Generators for LC-MS are compatible with current and legacy models, including the following equipment:

- **Agilent:** 6100 series single quad, 6200 series TOF, 6300 series ion trap, 6400 series QQQ, 6500 QTOF
- **Shimadzu:** LC/MS-2020, LC/MS-8030, LC/MS-8040, LC/MS-8050
- **Waters:** LCT, ZQ/EMD, Acquity, 3100 mass detector, Synapt, XEVO TQS, G2 QTOF, QTOF, Quattro series, QDA
- **Sciex:** Q-Trap, 4000 LC/MS/MS, 4500 LC/MS/MS & QTRAP, 5000 LC/MS/LC

Technical Data	HF30A
Flow rate	up to 32 l/min
Purity	up to 99.5%
Pressure	7 bar
Internal compressor	yes
Connectivity	Ethernet/Modbus
Dimensions (LxWxH)	800 x 605 x 695 mm
Noise	< 59 dB(A) at 1 m
Condensate management	yes

## HF30N / HF60N HF30N-MG / HF60N-MG

Compact Nitrogen Generators for LC-MS without integrated compressor

Ideal for use in laboratories where a dependable and affordable source of Nitrogen is essential and where an air supply is already installed or planned. N<sub>2</sub> supply up to 64 l/min @ 7 bar with purity up to 99.5%.

### Compatibility HF30N-MG & HF60N-MG

- **Sciex and Bruker LC-MS:** Instrument requiring Nitrogen and compressed air at the same time



### Compatibility HF30N & HF60N

Our Nitrogen Generators for LC-MS are compatible with current and legacy models, including the following equipment:

- **Agilent:** 6490 LC/MS QQQ iFunnel, 6550 iFunnel Q-TOF LC/MS
- **Shimadzu:** LC/MS-2020, LC/MS-8030, LC/MS-8040, LC/MS-8050
- **Waters:** LCT, ZQ/EMD, Acquity, 3100 mass detector, Synapt, XEVO TQS, G2 QTOF, QTOF, Quattro series, QDA
- **Sciex:** AB SCIEX API 3200 LC/MS/MS 3200 QTRAP, AB SCIEX API 3200MD LC/MS/MS, AB SCIEX API 5000 LC/MS/MS

Technical Data	HF30N	HF60N
Flow rate	up to 32 l/min	up to 64 l/min
Purity	up to 99.5%	up to 99.5%
Pressure	7 bar	7 bar
Internal compressor	no	no
Dimensions (LxWxH)	450 x 540 x 640 mm	450 x 540 x 640 mm
Noise	49 dB(A) at 1 m	49 dB(A) at 1 m
Condensate management	yes	yes

Technical Data	HF30N-MG	HF60N-MG
Dry instrument air	for one LC-MS device	for two LC-MS devices

Proven integrated 3 stage filtration

Visual service indicator

High quality membranes for long service life

Compact design suitable for on or under the bench

Internal N<sub>2</sub> storage tank

HF30N-MG / HF60N-MG with additional compressed air outlet

## UHP

Ultra High-Purity Nitrogen with integrated compressor coming soon.

**Oil free piston compressor**  
Powered by Dürr Technik

**3-stage filtration to protect your equipment**  
Removal of particulate down to 0.01 µm

**Internal Nitrogen storage**  
For immediate N<sub>2</sub> availability, worldwide vessel approval for safety and compliance

**Industry leading nitrogen membrane technology**  
Pure, dry Nitrogen supply and exceptional membrane life

**Simple user interface**  
With local language support and instrument configuration via HMI



## ZA Series

### Compact Zero Air Generators for Gas Chromatography

The highest purity of air is essential to ensure low baseline noise and optimal signal-to-noise ratio for sensitive and reproducible analysis on your instrumentation.

ZA models are optimally suited for GC-FID, GC-NPD, GC-FPD, GC-AES.

#### Compatibility

Our Nitrogen Generators for GC are compatible with current and legacy models, including the following equipment:

- **Agilent:** 6850, 6890, 7820, 7890, 8890 GC
- **Shimadzu:** GC 2010, 2014, 2030
- **Thermo Trace:** 1300, 1310 GC
- **Perkin Elmer Clarus:** 580, 680, 690 GC

Technical Data	ZA2A	ZA4
Flow rate	2,000 ml/min	4,000 ml/min
Hydrocarbon content	< 0.05 ppm	< 0.05 ppm
Pressure	6 bar	6 bar
Internal compressor	yes	no
Dimensions (LxWxH)	450 x 550 x 270 mm	450 x 550 x 270 mm

## ZA2A

### With integrated compressor

Provides a clean and stable source of hydrocarbon-free air for the supply of oxidant gas up to 2,000 ml/min @ 6 bar with hydrocarbon content less than 0.05 ppm.

### Without integrated compressor

Provides up to 4,000 ml/min @ 6 bar with hydrocarbon content less than 0.05 ppm. Ideal for use in laboratories where a dependable and affordable source of ultra-purified Zero Air is needed and where an air supply is already installed or planned.

## Compressed Air

### Suitable compressor station for external compressed air supply

Proven, high-quality compressor stations for your instrument and laboratory air supply needs. A wide range of models available, from intelligent central compressor systems, to the compact and ultra-quiet oil-free SICOLAB mini compressor.

#### Compatibility

The wide range of capacities and features of the models that we manufacture means that we will have the right solution, whatever your needs. We can match the best compressor station to the generator or instrument that you need to supply.

## HB304-MF

Dürr Technik compressor station HB304-MF with membrane dryer and 0.01 µm fine filter.

- **Dry and clean air**
- **Oil-free compressor**
- **Silent**

Technical Data	HB-304MF
Volume flow @ 5 bar	215 l/min
Nominal pressure	10 bar
Noise level	77 dB(A)
Dimensions (LxWxH)	746 x 536 x 759 mm

## SICOLAB mini

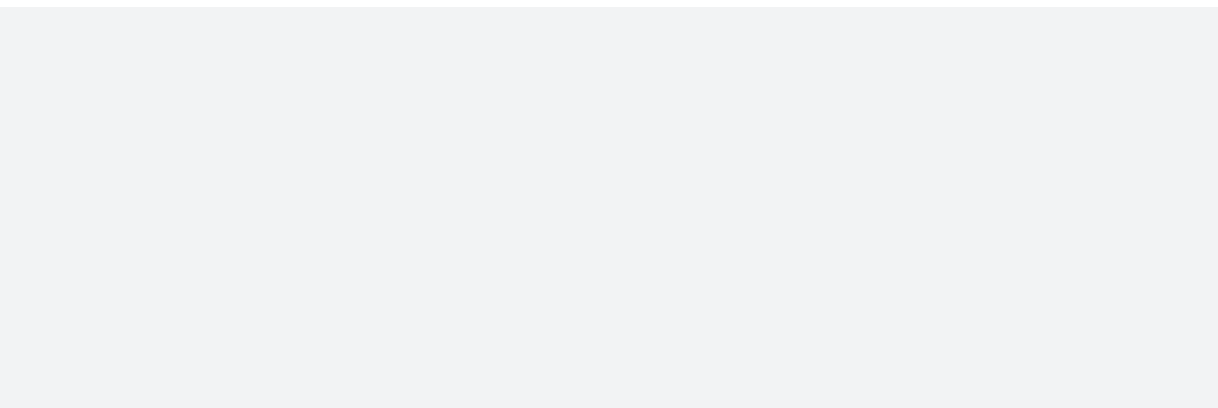
Our soundproofed compressor station SICOLAB mini can be easily connected to the ZA4.

- **Silent**
- **Mobile**
- **Compact**

Technical Data	SICOLAB 025 mini
Volume flow @ 5 bar	10 l/min
Nominal pressure	7 bar
Noise level	49 dB(A)
Dimensions (LxWxH)	396 x 321 x 295 mm

- Oil-free technology
- Proven, high-level quality
- Continuous running
- Long service life
- Versatile and individual customisable





## Service

Whether before or after your purchase – our expert service team will support you

### Consultation

We will ensure that you have all the information and advice that you need to find the perfect solution for your requirements.

### Tutorials / Manuals

Watch our videos to get more valuable insights in Chromalytic, our products and quality. User manuals, certificates and brochures are available on our website for your convenience.

### Customization

Your laboratory has special requirements? Together we will find a specific solution for your application.

### Support Service\*

Our instrument service team provide support services to laboratory users of laboratory instrumentation and gas generators. We service a wide range of instrument brands and models. You can choose from an annual planned maintenance service, up to full repair cover with service level agreements or one-off maintenance.

### Full Installation\*

We can provide a turnkey installation service. Our engineers can install compressors, tanks, generators, pipework – whatever is needed to install your equipment.

## Service for other Brands\*

After sales service and support for Gas Generators

All major brands supported, including: Chromalytic, Peak Scientific, Parker Hannifin, Parker Domnick Hunter, Proton, LNI Swissgas, F-DGSI.

- Our unrivalled experience of laboratory instrumentation means that we can support, troubleshoot and diagnose issues with the entire instrument system, not just the Gas Generator. This means faster repair times, better up-time and enhanced customer confidence.

Service for instruments in the laboratories

All major brands supported, including: Agilent, Thermo, Shimadzu, Perkin Elmer.

- Our service team provide a manufacturer-equivalent service at significant savings to the laboratory budget-holder.

- Flexible and affordable contract options to suit all maintenance budgets.
- Automated ticketing system and self-service portal. Customers can easily request and track support by emailing [support@chromalytic.com](mailto:support@chromalytic.com).
- Our telephones are answered by a real person, 24 hours a day, 365 days a year.

- We use only genuine parts and experienced multi-vendor engineers to ensure a premium level of technical service, confidence and instrument reliability.

## Rental Gas Generators

For a demand-oriented and reliable supply on site

You have a need for Nitrogen or Zero Air in the laboratory, but the demand varies or you only need the unit for a transitional period? Then our offer for a rental unit is just right for you.

\* Limited in some regions



**chromalytic**

A DÜRR TECHNIK COMPANY

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