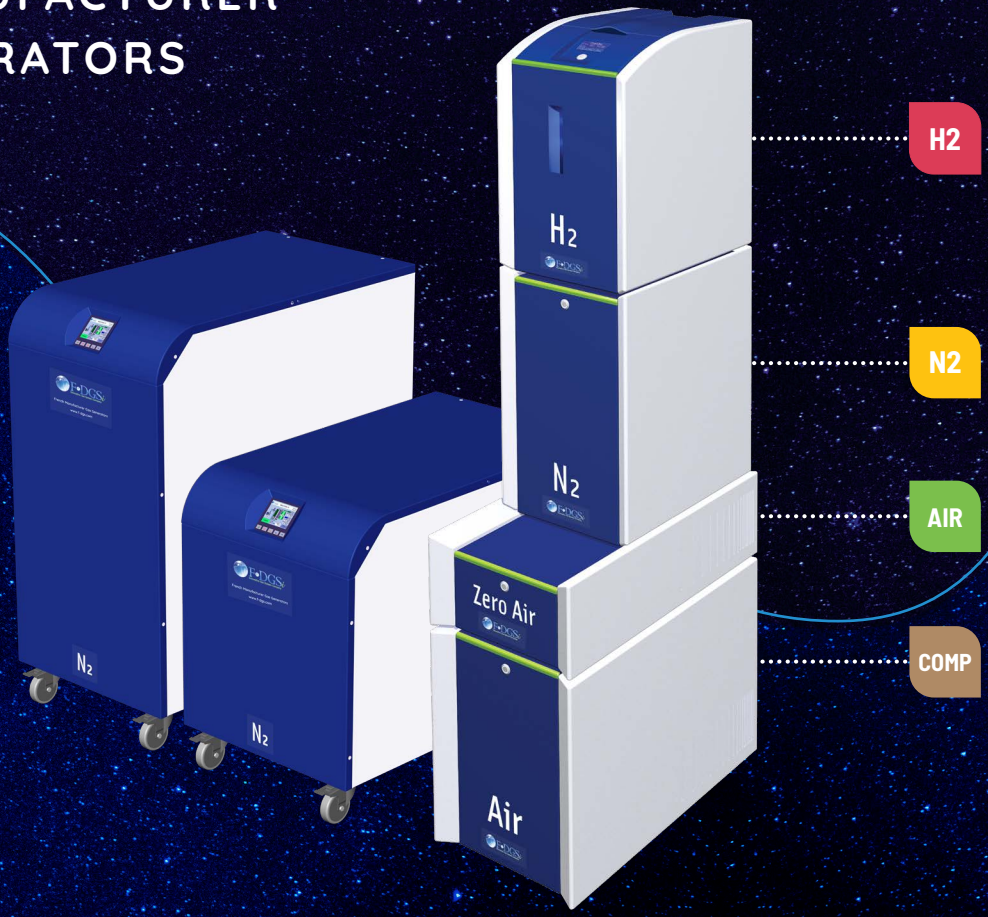
PRODUCT CATALOGUE

FRENCH MANUFACTURER OF GAS GENERATORS



DON'T BUY YOUR GAS, MAKE IT!

DISCOVER MORE AT

WWW.F-DGS.COM

F-DGSi

Innovative Gas System Company

WHO WE ARE

Established in 2006, F-DGSi is a **French family-owned** company, dynamic and innovative in the field of gas generators, as we have proven experience in design, manufacturing and technical assistance in gas generators for many years.

Our commitment is to provide your laboratory with a complete gas production solution that is reliable and durable for years. We achieve this through our expertise and **100% French design**. Our credo is: ***«always one step ahead of the competition»***.

Service is at the heart of our business. With an in-depth knowledge of laboratories and their applications, our mission is to satisfy our customers by offering them **high quality products** and a **unique customer service**. Efficiency and reactivity is always our priority. **Customer satisfaction** is our top priority which we promise to achieve through our technical expertise and by sustaining plus enhancing the quality of our products time to time. We always tend to offer our customers the best possible solution as per their current requirements, we ensure this by having our technical engineering team readily available to support you from our HQ plus we have a large network of regional distributors trained by F-DGSi. Hence you are in safe hands.

The values of F-DGSi

Know-how

The passion we share

Customer satisfaction

Is our top priority

Innovation

Is part of our DNA

Quality

A commitment that continues

Design

Because performance is not enough

Security

More intelligent. More Secure.

WHAT WE DO

At F-DGSi, we innovate, design and manufacture high performance gas generators. Our Headquarters is located near Paris (France), where all our products are **designed and manufactured 100% in-house** by our own Research & Development center. This ensures reliability on our products as we totally control our manufacturing protocols.

With the know-how of our French engineering teams, we provide laboratories around the world with a **unique and efficient gas production solution (Hydrogen, Zero Air, Nitrogen)** offering a safer, more convenient and cost effective alternative to cylinders. F-DGSi has a wide range of gas generators products and also related to your gas needs, to meet your complete needs of all your analytical instruments. Our high quality products, combined with French technology and design, provides you with absolute peace of mind and helps to reduce your operating costs, environmental impact and eliminates inconvenience of cylinder supply.

F-DGSi criteria is to provide the customer with the best advanced gas generator solution, which will meet the customer's expectations and quality is not compromised.

We ensure the availability of our services throughout the life time of the gas generator, where optimal maintenance of the gas generator is the utmost importance, that we provide through maintenance contracts **[F-DGSi Care]**.

Discover more on our website

www.f-dgs.com

WHY A **GAS GENERATOR**?

F-DGSi gas generator is an **economical solution** to your laboratory gas needs. Laboratories have been facing numerous challenges by using pressurized gas cylinders, dewars or bulk laboratory gas storage. These traditional sources of gas procurements also comes with extra expenses like transportation, refilling, rentals or storage, accidents etc. all of which impacts business revenue or facility budgets.

Hence, a practical solution will be to buy a F-DGSi gas generator. It does not add on any extra costs unlike the traditional sources of gas procurements. Plus, our gas generators are compliant with all International protocols, are safe to use within your lab environment which is why globally laboratories are switching to F-DGSi gas generators.

In addition, as the price of traditional method of gas supply increases and by taking in concern of delivery delays, a F-DGSi generator represents a **more economical** long-term investment than pressurized gas cylinders, dewars or bulk laboratory gas storage.

With F-DGSi gas generators, **gas is produced on demand** according to your application, gas storage is minimum, gas pressure is as per application requirement only and the generator has leak detection interlocks with automatic generator shutdown procedure.

DON'T BUY YOUR GAS, **MAKE IT!**

Convenient

No cylinder changes

Purity

The gas purity is constant - no need to add extra gas filters

Economical

No gas contract administration, low and stable ongoing gas costs

Safety

Removes the risk of leaks, no need for long gas lines from cylinders

Efficient

Can be located either on the bench or on the floor next to your GC instrument

Green

No repeated gas deliveries, energy efficient

CALYPSO SERIES
GENERATORS FOR LC-MS(MS)

The first gas generator manufactured by F-DGSi was a nitrogen generator for LC-MS (Liquid Chromatography Mass Spectrometry). With more than 15 years of experience, our **CALYPSO** range has become the benchmark. Thanks to our close collaborations with the various manufacturers of LC-MS instrumentation, we have received multiple feedbacks for our CALYPSO where F-DGSi has currently the largest range of Nitrogen generators for LC-MS application.

Depending on the purity and sensitivity as per market requirements and different laboratory applications, **two technologies** are available to generate nitrogen: **PSA**[1] (Pressure swing Adsorption) or **Membrane**[2].

The most advanced LC-MS **CALYPSO gas generator** on the market

- **Intelligent Color Touch Screen**

All the parameters are accessible using an intelligent and intuitive touch screen. Start/stop the unit, check the outlet gas flow as well as its pressure, check running hours and service hours, schedule the production during the week.

- **Remote PC monitoring and diagnostic analysis via USB**

The remote connection allows you to check internal parameters and system performance in real time without opening the device. The goal is to quickly diagnose critical points to make service maintenance faster and more precise. As a result, downtime and travel costs are reduced, this has proven to come as a very useful tool during the COVID phase.

- **Soundproofed compressor box**

The generator compressor is soundproofed, ensuring a minimum level of noise and vibrations. The generator can therefore be installed as close as possible to your analytical instrument.

- **Energy Saving Technology (EST)**

Our generator has Energy Saving Technology (EST) which allows the compressor to stop according to the gas demand. There is therefore a reduction in energy consumption and an increase in the performance/longevity of the compressor.

- **Data events logging over 30 days**

All generator events are stored on a SD card for 30 days to back up your data.

See the full range: www.f-dgs.com/calypso-generators

LC-MS manufacturers like Agilent, Sciex, Shimadzu, Thermofisher, etc., and their customers use our Calypso PSA generator. Most of them found the results were significantly improved while the purity remained constant for years. This is the benefit of working with a manufacturer who believes in R&D and improvements!

1. PSA technology: uses pressure swing adsorption technology; with a molecular sieve bed.
2. Membrane technology: consists of polymeric hollow fibers contained in a sealed metal tube.

COSMOS / COSMOS RACK SERIES

STACKABLE AND MODULAR SOLUTIONS FOR GC & GC-MS

Specially designed for GC & GC-MS applications, the COSMOS range represents the cutting edge of F-DGSi innovation. Combining convenience and reliability, the COSMOS range is the stackable and modular solution that combines H2, N2 and Zero Air. An air compressor module can be stacked for laboratories without an air network to supply nitrogen and zero air generators with clean air.

The success of this range is the **flexibility**, as we offer you the right model following the limit of detection you are looking for in your GC results **(standard or high purity gas)** and the **safety** over traditional sources of laboratory gases such as cylinders.

H2 HYDROGEN

For most GC detectors, generators of standard purity are sufficient to supply combustible gas to FID. For GC & GC-MS carrier gas, only high purity generators are recommended to achieve the desired detection limit.

N2 NITROGEN

For most GC detectors, the standard purity generator is sufficient to supply make-up gas, while the high purity generator is recommended to supply the GC carrier gas.

AIR ZERO AIR

The zero air generator is used to supply GC FID detectors by providing hydrocarbon-free air. The Total Zero Air Generator is recommended to reduce other air contaminants such as humidity, CO2, CO, NOx, SO2 and hydrocarbons.

COMP AIR COMPRESSOR

The silent air compressor can be stacked with other COSMOS generators users do not have an internal air network to supply nitrogen and zero air generators.

See the full range: www.f-dgs.com/cosmos-generators

“The Remote Connectivity tool by F-DGSi had helped us all to make a check on the generators remotely especially during the COVID phase. Not just it helps to make the process fast and easy but most importantly it is safe also for the customer and for our team also to maintain social distancing.
No doubt F-DGSi has the most advanced gas generators on a global level.”

Deepak Kumar
Director, Nucleibio, India

Why COSMOS Gas Generators are the complete solutions for GC & GC-MS labs?

High Purity Gas for Hydrogen, Nitrogen, Zero Air

COSMOS generators ensure constant gas purity (generators operate 24H/24, 7days/7) and better gas quality by avoiding the entry of any possible contaminants that remain when changing cylinders.

Compact and stackable system

COSMOS generators are stackable in design, thus minimizing the total footprint required for GC & GC-MS gas supply. They provide the flexibility to add or remove modules as your lab needs change over time.

LED light status indicator

COSMOS generators show you its operating status via colors in order to work in complete safety.


RUNNING


STAND-BY


ALARM


OFF

Remote PC monitoring and diagnostic analysis via USB

The remote connection allows you to examine internal parameters and system performance in real time without opening the device, making service maintenance faster and more precise. As a result, downtime and travel costs are reduced.

N2

NITROGEN GENERATORS

High purity nitrogen generators to get the best from your analytical instruments

A quality nitrogen supply is the key to ensure reliable GC and LC-MS analytical results. Our first manufactured gas generator was a nitrogen generator that supplied an LC-MS instrument. Our CALYPSO line has become the benchmark for the world's leading analytical instrument manufacturers. F-DGSi offers the most extensive range of nitrogen generators for laboratories, with flow rates from a few liters/min to several M3/H and purities from 95% to 99.9995%.

If you are interested in improving your laboratory nitrogen supply, contact us today or check out our wide range of nitrogen generators.

See the full range

www.f-dgs.com/nitrogen-generators

	Description	Flow rate	Pressure	Purity	Compressor
LC-MS/MS					
CALYPSO	PSA	15 to 70 L/min	8 bar / 116 psi	> 99%	With / Without
CALYPSO DS	Double Step PSA	20 to 55 L/min	8 bar / 116 psi	> 99%	With
CALYPSO DUO	Two Nitrogen outlet	2 x 32 L/min	8 bar / 116 psi	> 99%	With
CALYPSO M	Membrane	35 L/min	8 bar / 116 psi	97% - 99.5%	With
TETHYS	Membrane	Up to 20 L/min	7 bar / 101 psi	97%	With
CALYPSO DP.TH	**Thermo** - Double Purities	35 & 70 L/min 100 & 200 ml/min	7 bar / 101 psi 6 bar / 87 psi	> 99% > 99.999%	With
CALYPSO DP.WA	**Waters** - Double Purities	35 & 70 L/min 400 & 800 ml/min	7 bar / 101 psi	> 99% > 99.999%	With
CALYPSO DP.AG	**Agilent** - Double Purities	35 & 70 L/min 400 & 800 ml/min	3 bar / 43 psi	> 99% > 99.999%	With
STREAM	Membrane	40 to 260 L/min	7 bar / 101 psi	97% - 99%	Without
TORNADO LITE	High Flow	Up to 255 NL/min	6 bar / 87 psi	97 to 99,999%	Without
TORNADO	High Flow	Up to 148 NM3/H	6 bar / 87 psI	97 to 99,999%	Without
GC, GC-MS, TOC, ICP & FT-IR					
NESO	High Purity	1 to 5 L/min	6 bar / 87 psi	99.9995%	With / Without
COSMOS N2	High Purity	0.4 to 1 L/min 0.8 to 1.8 L/min	5.5 bar / 80 psi	> 99.9995% > 99.99%	Without
COSMOS ZN2	High Purity HCs free	0.4 to 1 L/min 0.8 to 1.8 L/min	5.5 bar / 80 psi	> 99.9995% > 99.99% ; HCs < 0.05 ppm	Without
Z.NESO	High Purity HCs free	1 to 5 L/min	6 bar / 87 psi	99.9995% ; HCs < 0.05 ppm	With / Without
ZEPHYR	High Purity	10 to 70 L/min	6 bar / 87 psi	98 to 99,9995%	With / Without
CAD & ELSD					
TELESTO	PSA	4 to 15 L/min	6 bar / 87 psi	99.5%	With / Without
ERIS	Membrane	35 L/min	7 bar / 101 psi	99.5%	Without
OTHERS APPLICATIONS (ASE, MP-AES)					
CALYPSO DS.HP	Double Step High Pressure	40 L/min	11 bar / 159 psi	> 99%	With
THEMISTO N2.MP	PSA	27 L/min	6 bar / 87 psi	> 99.5%	With

H2

HYDROGEN GENERATORS

The safest and most convenient alternative to helium GC Carrier Gas

To ensure reliable GC and GC-MS analytical results, a high quality hydrogen supply is essential. F-DGSi offers the widest range of hydrogen generators, benchtop and rack design, with different purities depending on the sensitivity required for your analyses.

If you want to improve your laboratory hydrogen supply, contact us today or check out our wide range of hydrogen generators.

See the full range

www.f-dgs.com/hydrogen-generators

	Description	Flow rate	Delivery Pressure	Purity
COSMOS SERIES				
COSMOS MF.H2	High Purity - Dynamic regeneration dryer	110 to 1500 cc/min	1 - 11 bar (14 - 160 psi)	> 99.99999% (O2 < 0.1 ppm, dew point H2O < -75°C (-103°F)
COSMOS MD.H2	Standard Purity - Using a desiccant cartridge	110 to 600 cc/min	1 - 7 bar (14 - 101.5 psi)	> 99.9996% (O2 < 1 ppm, dew point H2O < -55°C (-67°F)
COSMOS MB.H2	Standard Purity - Static membrane dryer	110 to 600 cc/min	1 - 11 bar (14 - 160 psi)	> 99.9996% (O2 < 1 ppm, dew point H2O < -30°C (-22°F)
RACK SERIES				
RACK.MB.H2	Rack Standard Purity - Static membrane dryer	100 to 600 cc/min	0.1 - 11 bar (1 - 160 psi)	> 99.9996% (O2 < 1 ppm, dew point H2O < -30°C (-22°F)
RACK.MF.H2	Rack High Purity - Dynamic regeneration dryer	100 to 1350 cc/min	0.1 - 11 bar (1 - 160 psi)	> 99.99999% (O2 < 0.1 ppm, dew point H2O < -75°C (-103°F)

Why users are shifting from gas cylinders to F-DGSi Hydrogen generator?

Hydrogen generators are more and more used by scientists because they are less bulky and safer than gas cylinders. By simple electrolysis of water, hydrogen generators deliver, on demand, high gas purity to supply to the detectors and GC carrier gas. Once installed, a hydrogen generator will provide hydrogen with constant purity 24 hours a day.

A hydrogen generator avoids any breakdown of analyses compared to gas cylinders, which will have to be ordered and replaced. It eliminates also the risk of gas quality variation. In fact, when changing cylinders, contaminants can enter the gas lines, affecting the analysis results.

Hydrogen generator is completely safe:
- it produces gas on demand, which means gas is produced as required for your GC at a regulated flow rate and under controlled pressure only.
- it is equipped with internal and external leak checks as well as an automatic shut-off function to stop the production of hydrogen.
- the volume of internal hydrogen stored is small (< 50 ml), compared to cylinders that store up to 9000 L at extremely high pressure (2000 - 3000 psi).
- it has capability of detection of various faults (water quality, water level and electrolytic cell information).
- real-time monitoring of gas pressure, to prevent overpressure and the hydrogen flow produced.
- it can be connected to a hydrogen sensor to detect the presence of hydrogen in the GC oven.

AIR

AIR GENERATORS

Supply your analytical instruments with a high purity air generator

If your laboratory needs high air quality, F-DGSi offers the widest range of zero air, ultra zero air and CO2-free air generators for applications such as GC, TOC and FT-IR analysis. We can offer these generators with or without compressor.

If you are interested in improving your laboratory air supply, contact us today or check out our wide range of air generators.

See the full range

www.f-dgs.com/air-generators

	Description	Flow rate	Polluant	Pressure outlet
GC				
COSMOS ZA	HCs free	1.0 to 30 L/min	Total HCs/CO outlet < 0.05 ppm	6.5 bar (94 psi)
COSMOS ZA.TOTAL	HCs, CO2 and NO free	1.0 to 30 L/min	Total HCs/CO outlet < 0.05 ppm CO2, NOx, SO2 < 0.05 ppm	6.5 bar (94 psi)
DEIMOS UZA	H2O, HCs free	1.5 to 50 L/min	Total HCs/CO outlet < 0.05 ppm dew point H2O < -50°C (-58°F)	6 bar (87 psi)
DEIMOS UZA.TOTAL	H2O, CO2, NO, HCs free	1.5 to 50 L/min	Total HCs/CO/NOx/SO2 outlet < 0.05 ppm Total CO2 outlet < 5 ppm dew point H2O < -50°C (-58°F)	6 bar (87 psi)
RACK.ZA	Rack HCs free	1.8 to 15 L/min	Total HCs/CO outlet < 0.05 ppm	6.5 bar (94 psi)
TOC				
DEIMOS TOC	H2O, CO2, HCs free	1.5 to 6 L/min	Total HCs/CO outlet < 0.05 ppm Total CO2 outlet < 1 ppm dew point H2O < -70°C (-94°F)	6 bar (87 psi)
FT-IR				
DEIMOS CO2.FREE	H2O, CO2 free	1 to 30 L/min	CO2 outlet < 1 ppm dew point H2O < -70°C (-94°F)	6 bar (87 psi)

The differents Air Purification Technology available

Zero Air

Uses high-temperature platinum catalyst that oxidizes hydrocarbons and carbon monoxide to < 0.05 ppm. (Option*)

Ultra Zero Air

Uses alumina bed adsorption technology (PSA) to remove moisture and a palladium catalyst that oxidizes hydrocarbons and carbon monoxide to < 0.05 ppm. (Option*)

TOC

Uses high-temperature platinum catalyst which, through oxidation, removes hydrocarbons and carbon monoxide to < 0.05 ppm. CO2 and moisture are removed via a CO2-free air dryer, producing a clean, dry, high-purity TOC gas stream.

CO2 Removal

The gas generator is designed to take pre-filtered compressed air at 8 bar from the existing laboratory supply or via the built-in oil-free compressor. The pre-filtered air enters an air dryer to remove CO2 and moisture, producing a clean, dry, CO2-free air stream.

*Option: The generator allows in addition to remove other polluants such as NOx and SO2. The NOx is reduced with a Purafil filter and the other components are removed with an activated carbon filter.

COMBINED GENERATORS

Multi-gases solutions!

Nitrogen/Air or Hydrogen/Air in one box

F-DGSi offers 2-in-1 gas solutions.
Economical and safe, multi gases generators allow you to produce either nitrogen and pure air for GC, GC-2D, MP-AES & LC-MS applications, or hydrogen and zero air for GC applications.

This allows you to save space in your lab, eliminating your high pressure gas cylinders.

H2/Zero Air	Description	Flow rate	H2/Zero Air Pressure	Purity
GC				
RACK.FID.MB.H2	Rack Standard Purity Static membrane dryer - HCs free	H2: 100 to 600 cc/min Zero Air: 1800 to 5000 cc/min	H2: 11 bar (160 psi) Zero Air: 6 bar (87 psi)	H2: > 99.9996 % (O2 < 1 ppm, dew point H2O < -30°C (-22°F) Zero Air: HCs < 0.05 ppm
RACK.FID.MF.H2	Rack High Purity Dynamic regeneration dryer - HCs free	H2: 100 to 1000 cc/min Zero Air: 1800 to 5000 cc/min	H2: 11 bar (160 psi) Zero Air: 6 bar (87 psi)	H2: > 99.99999% (O2 < 0.1 ppm, dew point H2O < -75°C (-103°F) Zero Air: HCs < 0.05 ppm

See the full range: www.f-dgs.com/nitrogen-air or .../hydrogen-air

N2/Air	Description	Flow rate	N2/Air Pressure	Purity
GC				
PROSPERO	High Purity	N2: 1 & 3 L/min Air: 1.5 & 3 L/min	6 bar (87 psi)	N2: > 99.9995% Air: HCs < 0.1 ppm ; Air Dew point < -55°C (-67°F)
Z.PROSPERO	High Purity HCs Free	N2: 1 to 3 L/min Air: 1.5 to 5 L/min	6 bar (87 psi)	N2: > 99.9995% ; HCs < 0.05 ppm Air: HCs < 0.1 ppm; Air Dew point < -55°C (-67°F)
GC-2D				
THEMISTO PEGA	**Leco**	N2: 20 L/min Air: 12 to 40 L/min	6 bar (87 psi)	N2 Dew point: < -60°C (-76°F) Air Dew point: 3°C (37.4°F)
MP-AES				
THEMISTO MP	**Agilent**	N2: 10 & 25 L/min Air: 36.5 L/min	6 bar (87 psi)	N2: > 99.95% & 99.5% Air Dew point: < -20°C (-4°F)
LC-MS				
CALYPSO M 3G.SC	**Sciex**	N2: 12 & 18 L/min Dry air source gas: 24 & 26 L/min Dry air exhaust gas: 8 & 25 L/min	5.5 bar (80 psi) 7.6 bar (110 psi) 4.1 bar (61 psi)	N2: > 99% Air: HCs < 0.1 ppm ; Air Dew point -20°C (-4°F)
CALYPSO 3G.SC	**Sciex**	N2: 12 & 18 L/min Dry air source gas: 24 & 26 L/min Dry air exhaust gas: 8 & 25 L/min		
CALYPSO 2G.SH	**Shimadzu**	Air/N2 combined: Up to 25 L/min N2: Up to 27 L/min Air: 29 L/min	6.9 bar (100 psi)	N2: > 98% Air Dew point: -20°C (-4°F)
CALYPSO 2G.PE	**Perkin Elmer**	N2: 15 L/min Air: 34 & 68 L/min	7 bar (101 psi)	N2: > 99% Air: HCs < 0.1 ppm ; Air Dew point -20°C (-4°F)
CALYPSO 2G.BR	**Bruker**	N2: 32 L/min Air: 50 L/min	5.5 bar (80 psi)	N2: > 99% Air Dew point: -20°C (-4°F)
STREAM 2G	**Shimadzu**	N2: 27 L/min Air: 29 L/min	6.9 bar (100 psi)	N2: > 99.5% Air Dew point: -20°C (-4°F)
STREAM 3G	**Sciex**	N2: 12 to 85 L/min Dry air source gas: 26 to 85 L/min Dry air exhaust gas: 16 to 60 L/min	4.5 bar (65 psi) 7.6 bar (110 psi) 4.1 bar (61 psi)	N2: > 99.5% Air Dew point: -20°C (-4°F)

LN2

LIQUID NITROGEN GENERATORS

Liquid Nitrogen for laboratories and medical

The CRYOGEN system allows you to produce on demand your own liquid nitrogen gas.
It is a refrigerated liquefied gas with a boiling point of -196°C (-321°F).

It is used for many applications where very low temperatures or large temperature reduction is required. CRYOGEN eliminates the cost of buying liquid nitrogen and the hassle of waiting for deliveries.

Some Applications

- Cryopreservation
- Cryotherapy
- Gastronomy
- Cells
- NMR
- GC-2D
- Dermatology
- Metal treatment
- In-Vitro Fertilization

See the full range: www.f-dgs.com/cryogen-generators

8 good reasons to choose F-DGSi Liquid Nitrogen Generator

High Purity Liquid Nitrogen
Routinely, CryoGen units supply LN2 at 99% purity (02 < 1%) checked automatically by an O2 sensor with alarm detection.

Remote PC monitoring and diagnostic analysis via USB or internet connection
CryoGen units are remotely controllable via USB using a laptop connected to the internet. It allows us and users to check all the parameters and store the data events.

External Liquid Nitrogen hose to fill into the canisters
As soon as the internal tank is full, the user just has to use a valve connected to a hose to fill external dewars. The valve and hose could be inside the cabinet or outside (option).

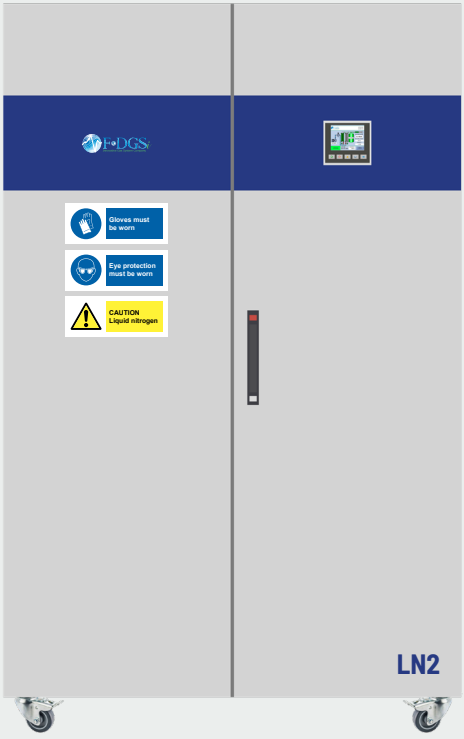
Intelligent Color Touch Screen
All the parameters are accessible using an intelligent and intuitive touch screen. Start/stop the unit, check LN2 level in the internal tank, check running hours and service hours, schedule the production during the week... And a log book is available to check all the events.

Liquid Nitrogen on demand
Having such units on board allow users to get access to LN2 when they want and use what they really need for their applications.
Flow rate: 10 to 240 L/day

Energy Saving Technology (EST)
When the system is not producing, we use our Energy Saving Mode technology to put the system in economy mode to save consumption, save running hours and extend preventive maintenance.

No need to monitor LN2 level
Low and high LN2 levels in the internal tank are set up by the user and automatically controlled.

Eliminates inconveniences, improves safety and being eco-friendly
Getting a CryoGen unit allows you to be independent from gas suppliers, from truck deliveries and be more secure as you can install the unit much closer to your needs.



OTHERS SOLUTIONS AND ACCESSORIES

GAS FILTRATIONS | COMPRESSORS | SECURITY | GAS STORAGE

Air Dryers & Air/Gas Filters

Particles, water and oil that may be present in the compressed air cause rapid wear and tear on the equipment and affect the performance and life of the analytical equipment. The provision of clean, dry, contaminant-free compressed air is therefore important in a laboratory.

We offer several types of air dryers depending on the air quality required for your analytical instruments.

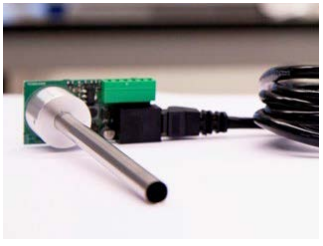
- **NDL (Absorption Air Dryers):** GC-FID | GC-ATD | NMR | Rheometer | Atomic absorption
- **NDC (CO2 Free Air Dryers):** FT-IR | Purge microscope | TOC | Laser

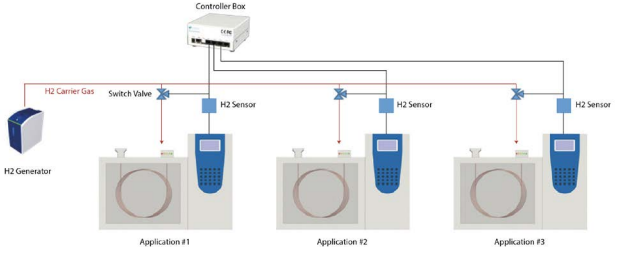
As well, a wide range of compressed air filters and gas filters in order to protect your gas generators and your analytical instruments.

See the full range on www.f-dgs.com/air-dryers-air-gas-filters

Safety Gas Detection

The hydrogen sensor is one more safety device available that allows you to secure the use of hydrogen in your GCs. It continuously checks potential leak of hydrogen in the GC oven. This sensor has been designed to automatically stop the generator when the amount of hydrogen is higher than the safety threshold.





See the product on www.f-dgs.com/safety-gas-detection

Air Production

In order to supply our generators with compressed air, we offer a range of silent, oil-free air compressors suitable for your laboratory applications.

See the full range on www.f-dgs.com/air-production

Ultrapure Water Production

From your tap water network, you can produce ultra pure water. We offer a very compact system that can be wall mounted or placed on the bench. It will allow you to supply ultra pure water to your hydrogen generator or any other application requiring this quality of water.

Accessories

Gas Tanks

We offer a wide range of painted or galvanized tanks for storing gas or compressed air.

Buffer vessel are recommended for:

- Gas supply for the instrumentation with sensitive pressure
- The storage of incoming nitrogen from a nitrogen generator
- Any other instrument requiring occasionally high flow of compressed gas which exceeds the normal gas capacity of the generator

Pressure Regulators

In order to have a turnkey solution, we propose a whole range of dual stage cylinder pressure regulators and points of use pressure regulators.

Fittings and tubing

To connect your generators to your analytical instruments, various fittings, isolation valves and tubing are available.

See the full range on www.f-dgs.com/accessories

ALL BENEFITS

WORLD-CLASS BENEFITS IN ORDER TO MAINTAIN YOUR GAS SUPPLY

With F-DGSi generators, it is a new partnership that begins. Whether it is for an installation, an unforeseen breakdown or any other service, our teams of engineers and technical assistants are at your disposal to answer your questions related to our generators, wherever you are in the world.

F-DGSi expertise: What do we cover?

In order to be as close as possible to our customers, we have a wide range of services and benefits to meet your expectations. Installation, maintenance and qualification of your products, we strive to help and advise you in the implementation of your F-DGSi products. For special requests other than the one below, please contact us, we will be happy to find solutions.

Installation
Installing the products to meet your needs

Re-location
Relocation service for your products

Advice
Your expert in gas supply by your side

Rent or lease sale
Rental of a wide range of equipment

Parts Service / Consumables
A hotline to guarantee you a 48h deadline

Maintenance
Service plans and maintenance contracts

Repairs
Repair on customer site or F-DGSi office

4Q Qualifications
CQ / IQ / OQ / PQ Qualifications

Customized training
Training by our technical experts F-DGSi

Learn more on www.f-dgs.com/benefits

[F-DGSi Care]

GET PEACE OF MIND WITH OUR WORLD-CLASS GAS GENERATOR SERVICE PLANS

When you invest in an F-DGSi gas generator, you're buying more than just a generator, you're starting a longterm partnership. The after sales service department not only keeps your generators in good working conditions, but also guarantees outstanding performance throughout their life cycle.

5 types of service plans for your gas generator

With on-site repairs and regularly scheduled maintenance, our various contracts will help you to reduce disruptions to your laboratory operations and to improve efficiency and productivity, with no hidden or unexpected costs.

Hotline Contract Do the maintenance yourself	**Day Ticket Contract** Peace of mind for your maintenance budget	**Basic Preventive Contract** Includes travel and labor without parts
Silver Preventive Contract Includes preventative maintenance parts	**Gold Contract** Contract Premium: Total peace of mind	

The benefits to take one of our FrenchCare Contracts

Cost Control

Preventive maintenance by experienced professionals of F-DGSi will reveal any wear and tear at an early stage. This avoids unexpected expenses and allows you to better control the costs of using the device.

Priority

With a Service Contract, you are our priority. We guarantee a quick maintenance response in case of emergency.

Reduced downtime

Reduce your risk of breakdowns and unscheduled downtime! Remote access to your equipment allows to analyze critical equipment parameters and identify pending failures before they affect your lab operations.

Flexibility

At the point of equipment sale, different payment options are available (Annual, Bi-annual, Quarterly, ...)

Get more details for contracts on www.f-dgs.com/service-plans

F-DGSi
Innovative Gas System Company

LAB GAS GENERATORS

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Keep up to date with F-DGSi product developments and service offerings by following our LinkedIn

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CONCEPTION: MARINE SOYEZ
IMPRESSION: DEFICOM