

Your local **gas generation** partner



Product **catalogue**

A **PEAK** gas generation brand

Discover more at www.peakscientific.com

Our Promise

Our commitment is to provide your laboratory with a reliable gas generation solution that delivers long term value. We achieve this through **exceptional product** design, and direct global on-site support that is **unmatched** in our industry.

We take a vested interest in your outcomes and strive to be a valued partner in your success by delivering **exceptional service** over the life of the product.



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About Us

PEAK Scientific is a leading innovator in the design, manufacture and support of high performance gas generators for analytical laboratories. Established in the UK in 1997 near Glasgow (Scotland), where our corporate Headquarters and high-tech manufacturing and R&D facilities reside, PEAK Scientific boasts a significant local presence on every continent – including major operations in North America, Europe, China and India.

With over two decades of experience in pioneering reliable gas generator technology, PEAK Scientific develops market-leading nitrogen, hydrogen and zero air systems mainly for the fields of LC-MS (Liquid Chromatography-Mass Spectrometry) and GC (Gas Chromatography).

What differentiates us is our world-class technical support and on-going service care throughout the generator's lifespan, wherever you may be in the world.



The **PEAK** Way

PEAK Scientific is a family owned business and, as such, people are at the core of our unique product offering. Each generator is designed, assembled, tested, maintained and serviced by highly trained and dedicated professionals. The importance placed on people at PEAK Scientific is consistent throughout our organization. It is the reason why we are committed to ongoing staff training and a policy of continual improvement in our engineering, manufacturing and field service capabilities - delivered by over 650 employees worldwide.

Our values are structured around our colleagues, our customers and our service, and while our approach and atmosphere within the business is fun, friendly and informal, our priority is always on delivering successful outcomes for our customers.

Manufacturing **Excellence**

Our products are the result of our meticulous Research and Development culture developed over 25 years of being at the forefront of the gas generator market. We pride ourselves on the utmost care taken to assess specific application needs prior to designing and rigorously testing new products.

As we have expanded, so have our R&D capabilities, both technically and in terms of know-how, to the point where we are better equipped than ever to meet changing market demands. Implementing the latest manufacturing technologies and philosophies ensures that PEAK continues to set new standards for product quality, responsiveness and efficiency – all resulting in a better value for you.

Operating from our ISO 9001 accredited manufacturing center of excellence in the UK, every PEAK Scientific generator is designed and tested to ensure compliance with the most internationally recognized safety and Electromagnetic Compatibility Standards.

Why a **gas generator**?

PEAK Scientific offers you a practical and cost-effective alternative to pressurized gas cylinders, dewars or bulk storage of laboratory gas. Traditional sources of gas incur ongoing delivery, administrative and rental costs, all of which impact on business revenue or facility budgets.

A PEAK generator provides you with a dependable, easy to use, on-demand gas solution without the safety concerns and hassle that come with managing, stocking and restocking supplies when using gas cylinders or other methods of bulk gas supply. What's more, while the price of delivered gas is subject to volatility as well as delivery delays, a generator from PEAK Scientific represents a stable and dependable long-term investment.



Convenient

Gas on-demand, no cylinders to change or supply stocks to maintain



Consistent

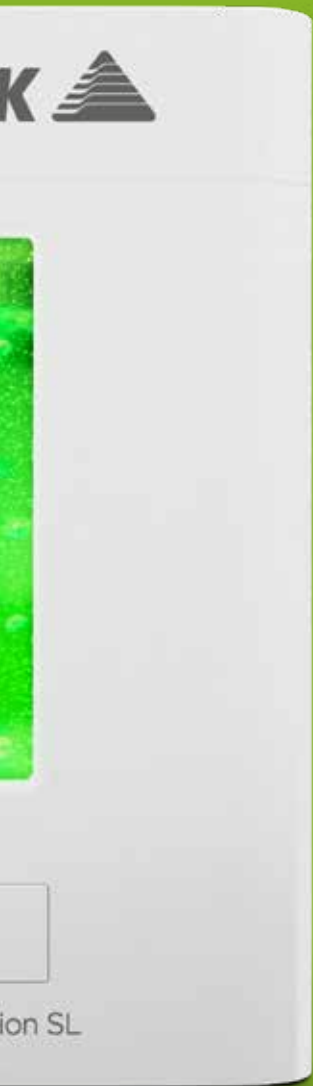
Consistent gas quality and supply, no impurities or running out of gas



Economical

Eliminate ongoing costs of cylinders, manage lifetime running costs





Green Solution

While the economic benefits of investing in a gas generator are easy to appreciate (especially from the point of view of the lab manager!), there is also a genuine environmental benefit.

Consider the carbon footprint of a pressurized cylinder of gas, delivered from depot to your laboratory then collected again for refilling before resuming the cycle. Depending on geography, that could be substantial transportation distances, not to mention the energy consumption involved in industrial gas manufacture and processing. Engineered with energy efficiency in mind, a PEAK Scientific gas generator offers a far more environmentally sustainable source of laboratory gas during its lifetime.



Safe

No pressurized compressed gas cylinders in your lab



Green

No repeated gas deliveries, energy efficient



Protected

Comprehensive on site warranty & service plans

2.0 Horizen

One small footprint. One giant leap.

The most advanced nitrogen generator on the market today, utilising new technologies to bring your single quad LC-MS the reliable, consistent and high purity nitrogen you need to perform routine and non-routine analyses, day after day

See the full range
www.peakscientific.com/horizen



PEAK
SCIENTIFIC
HORIZEN 24 NITROGEN

PEAK
SCIENTIFIC 
HORIZEN 24 NITROGEN

“The size is small and practical to keep in the lab without sophisticated installations.

The operation of the Horizen 24 does not require excessive energy consumption and neither does it require the use of air conditioning for its proper functioning.”

Nancy Lara Almazán

National Institute for Nuclear Research, Mexico
Horizen 24 user



One *small* footprint, one *giant* leap

Bringing best-in-class purity and unparalleled energy-efficiency together in an ultra-compact footprint, Horizen 24 heralds a giant leap forward in nitrogen generation for your lab. Giving you the perfect combination of performance and economy while helping to reduce your lab's carbon footprint.

- ▶ **Save space** with a 28% smaller footprint*
- ▶ **Save money** with reduced operating costs, lower heat output and minimal downtime
- ▶ **Save the planet** with an energy consumption reduction of up to 55%**



*compared to existing equivalent PEAK model

**benchmarked against equivalent competitor

Horizen 24

Bringing Single Quad LC-MS users the very latest in nitrogen gas generator technology, Horizen 24 is the culmination of over 25 years at the forefront of nitrogen gas generation for the lab from Peak Scientific.

Designed to provide a premium, yet cost-effective nitrogen solution, Horizen 24 has incorporated state of the art compressor technology to efficiently manage power consumption reducing energy costs and heat output without compromising on performance.

As a standalone solution delivering 24 liters per minute of high purity nitrogen, up to 99.9%, from a compact footprint, Horizen 24 provides labs peace of mind and confidence in their LC-MS results.

Features

The most energy-efficient nitrogen generator on the market

Up to 24LPM of ultra- dry, non-methane hydrocarbon free nitrogen at up to 99.9% purity and 116psi

55% less energy consumption, saving on cost of power*

>50% less heat, reducing your air conditioning cost*

The smallest nitrogen generator in its class, fitting easily under any lab bench

Minimized operational carbon footprint compared with cylinders and equivalent generator models

Convenient fixed annual service interval on all parts

Collision Gas Add-On is compatible with this generator



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Horizen 24	Up to 24 L/min	Nitrogen	100-116 psi / 6.8-8 bar	524 x 450 x 719 mm 20.6 x 17.7 x 28.3 "	LC-MS, ELSD, Small sample evaporators	CE, CSA, FCC

* Benchmarked against equivalent competitor

3.0 Genius

It's good to know you have a Genius in your lab

Our Genius series is the culmination of over a decade's work in perfecting nitrogen gas generators for LC-MS & LC-MS/MS applications. These generators deliver greater efficiency, superior reliability and improved performance than their predecessors.

See the full range
www.peakscientific.com/genius



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Genius SQ 24	Up to 24 L/min	Nitrogen >95%	Up to 116 psi / 8 bar	610 x 600 x 750 mm 24.1 x 23.7 x 29.6"	Single Quad LC-MS	CSA,CE, FCC
Genius XE 35	Up to 35 L/min	Nitrogen up to 99.5%	Up to 116 psi / 8 bar	650 x 570 x 710 mm 25.6 x 22.5 x 28"	LC-MS/MS	CSA, CE, FCC
Genius XE 70	Up to 70 L/min	Nitrogen up to 99.5%	Up to 116 psi / 8 bar	1000 x 570 x 710 mm 39.4 x 22.5 x 28"	LC-MS/MS	CSA, CE, FCC
Genius XE SCI 2	26 L/min 32 L/min 25 L/min	Nitrogen Dry Air Dry Air	60 psi / 4.1 bar 105 psi / 7.2 bar 70 psi / 4.8 bar	700 x 570 x 897 mm 28 x 23 x 36"	Echo® MS System SCIEX Triple Quad™ 7500 LC-MS/MS System ZenoTof 7600 LC-MS/MS system	CSA, CE, FCC
Genius XE SMZ	27 L/min 29 L/min	Nitrogen Air	100 psi / 6.9 bar 100 psi / 6.9 bar	700 x 570 x 897 mm 27.6 x 22.5 x 35.4"	LCMS-8060NX,9030 or LCMS-8045,8050,8060 in Standard or High Gas Delivery mode	CE, FCC
Genius XE QSD	16 L/min 67 L/min	Nitrogen Air	80 psi / 5.5 bar 110 psi / 7.6 bar	700 x 570 x 897 mm 27.6 x 22.5 x 35.4"	Dual and single source PerkinElmer QSight 100, 200 & 400 Series	CSA, CE, FCC
Genius 1053	Up to 20 L/min	Nitrogen up to 99.995%	100 psi / 6.9 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	Spectroscopy, i.e. CD Analyzers, ICP-OES	CSA, CE
Genius 1024	19 L/min 26 L/min 25 L/min	Nitrogen Dry Air Dry Air	65 psi / 4.5 bar 100 psi / 6.9 bar 60 psi / 4.1 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	SCIEX LC-MS/MS (excluding MD)	CSA, CE
Genius 1025	15 L/min 35 L/min	Nitrogen Dry Air	80 psi / 5.5 bar 110psi / 7.6 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	PerkinElmer QSight Triple Quad 110, 210 LCMS/MS Systems	CSA, CE, FCC
Genius 3045	32 L/min 50 L/min	Nitrogen Dry Air	80 psi / 5.5 bar 80 psi / 5.5 bar	1322 x 600 x 850 mm 52.1 x 23.7 x 33.5"	EVOQ QQQ	CSA, CE
Genius 1051 / Genius 1061	Up to 25L/min Combined	Nitrogen Dry Air	110psi / 7.6 bar 100 psi / 6.9 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	8045, 8050 and 8060 LC-MS/MS in Default Gas Mode	CSA, CE *

* 1061 is for Japanese market and only has CE & CB accreditation.

Genius XE Series

Inspired by the success of our best-selling Genius line of nitrogen gas generators for LC-MS/MS, Genius XE Nitrogen is a cutting-edge evolution combining advanced technology with refined and robust engineering. With two models - XE 35 (up to 35 L/min) and XE 70 (up to 70 L/min) - Genius XE Nitrogen provides a premium, standalone nitrogen solution for high performance LC-MS/MS and other mission-critical laboratory applications where performance and reliability are paramount.

Featuring Multi-Stage Purification™ and next-generation integrated compressors with Electronic Compressor Optimization™ (ECO) technology, Genius XE delivers factory certifiable purity up to 99.5% on-demand, 24/7 with a convenient fixed annual service interval.

Features

Variable flow up to 70 L/min

Variable pressure up to 116 psi

Multi-Stage Purification™ producing analytical grade nitrogen gas up to 99.5% purity

2 year comprehensive manufacturer's warranty*

Touch-screen full colour user interface for ease of operation

Additional compressor capacity (Genius XE 70 only)

Collision Gas Add-On is compatible with this generator



* Year 2 of warranty subject to generator being serviced at end of year 1 by a PEAK-approved agent in accordance with fixed annual maintenance schedule. For full terms and conditions visit www.peakscientific.com/warranty-statement

Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Genius XE 35	up to 35 L/min	Nitrogen up to 99.5%	116 psi / 8 bar	640 x 570 x 710 mm 25.2 x 22.5 x 28"	LC-MS/MS	CE, CSA, FCC
Genius XE 70	up to 70 L/min	Nitrogen up to 99.5%	116 psi / 8 bar	1000 x 570 x 710 mm 39.4 x 22.5 x 28"	LC-MS/MS	CE, CSA, FCC

Genius SQ 24

The Genius SQ 24 nitrogen gas generator provides a dedicated supply of laboratory-grade nitrogen for labs utilizing any Single Quad LC-MS systems. With a compact size to fit under most lab benches and flow rates of up to 24 L/min, exceeding the maximum flow rate required by any Single Quad LC-MS on the market today, your lab can enjoy hassle-free nitrogen gas which helps you deliver the best analytical results.

Features

Best value nitrogen generator on the market

Variable flow up to 24 L/min

Laboratory grade nitrogen supply for Single Quad LC-MS

Outlet pressure up to 116psi (at 22 L/min maximum)

Reduced height and compact size to fit under most lab benches

Integrated internal compressors for easy plug and play



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Genius SQ 24	Up to 24 L/min	Nitrogen >95%	Up to 116 psi / 8 bar	610 x 600 x 750 mm 24.1 x 23.7 x 29.6"	Single Quad LC-MS	CSA,CE, FCC

Genius 1053

Producing up to 20 L/min of high purity nitrogen (99.995%), the Genius 1053 is suitable for a range of Spectroscopy applications, such as Circular Dichroism. Developed using (Pressure Swing Adsorption) PSA technology, this generator produces variable purities depending on outlet flow.

Genius series gas generators offer a self-sufficient, continuous supply of laboratory-grade nitrogen to your lab, eliminating the need for gas cylinders and external sources of house air or compressors.

Features

Innovative CMS and PSA technology ensuring high purity nitrogen

Compressor based solution, no need for an external air supply

Minimal set-up required

Highly economical source of nitrogen gas with low lifetime running costs

Gas is supplied on demand so generator works to your schedule



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Genius 1053	up to 20 L/min	Nitrogen up to 99.995%	100 psi / 6.9 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	Spectroscopy including CD Analyzers and ICP-OES	CSA, CE

Genius XE SCI 2

A premium standalone nitrogen and air solution for the latest SCIEX LC-MS systems, Genius XE SCI 2 also supports the higher gas flow requirements of the Echo MS System and ZenoTof 7600 System.

Featuring Multi-Stage Purification™ and next-generation integrated compressors with Electronic Compressor Optimization™ (ECO) technology, Genius XE SCI 2 delivers a reliable and cost-efficient source of nitrogen (Curtain Gas™) and clean, dry, oil-free air for source and exhaust gas at flows and pressures configured to meet the latest SCIEX LC-MS system requirements.

Features

24/7 performance- next generation high performance premium compressors, ensuring maximum uptime of your LC-MS instrument

ECO (Electronic Compressor Optimisation™) technology for increased compressor durability and reduced carbon footprint

Repeatability- Multi-Stage Purification™ to reduce moisture and contaminants providing consistent quality of gas

Low impact on laboratory with low noise and heat emissions

Significantly reduced footprint, to fit under most standard lab benches

No external compressed air source required

Fixed Annual Service Interval- service downtime limited to once a year



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Genius XE SCI 2	26 L/min 32 L/min 25 L/min	Nitrogen Dry Air Dry Air	60 psi / 4.1 bar 105 psi / 7.2 bar 70 psi / 4.8 bar	700 x 570 x 897 mm 28 x 23 x 36"	Echo® MS System SCIEX Triple Quad™ 7500 LC-MS/ MS System ZenoTof 7600 LC-MS/MS system	CSA, CE, FCC

4.0 Solaris

See lab gas in a new light

With flow rates up to 35 L/min, Solaris generators are compact and economical nitrogen gas solutions for labs.

See the full range
www.peakscientific.com/solaris





SOLARIS

“It is small, looks nice and is very quiet. The shape makes it very easy to place underneath our desk.”

Maria Fedorova

Centre for Biotechnology and Biomedicine
at University of Leipzig, Germany

Solaris XE

PEAK Scientific's Solaris XE nitrogen generator has been engineered using membrane technology to meet the gas delivery requirements for labs using LC-MS/MS or multiple ELSDs. Solaris XE can operate with varying flow rates, purity and outlet pressure, offering a flexible solution for a variety of applications.

The Solaris XE has been engineered to provide nitrogen to laboratories that utilize an external source of compressed air, which meets a minimum quality grade of ISO 8573-1:2010 Class 1.4.1. Its compact, space-saving chassis allows it to be placed on a benchtop, mounted on a wall or beneath an instrument, taking up minimal space in the lab.

Features

Nitrogen up to 35L/min, up to 116 psi and up to 99.5% purity

Variable outlet flow, pressure and purity

Compact, stackable system maximizing the use of valuable laboratory floor or bench space

Colour indicative LED lighting for easy status awareness

Manufactured and tested to highest spec in UK, CE/FCC/CSA certified

Collision Gas Add-On is compatible with this generator



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Solaris XE	Up to 35 L/min	Nitrogen up to 99.5%	Up to 116 psi / 8 bar	156 x 343 x 650 mm 6.2 x 13.5 x 25.6"	LC-MS, LC-MS/MS or Multiple ELSDs	CE, CSA, FCC

Solaris 1010A

PEAK Scientific's Solaris 1010A nitrogen generator has been engineered using membrane technology to meet the nitrogen gas requirements for labs using ELSD with their High Performance Liquid Chromatography, Compact Mass Spectrometer or for TLD reader instruments. Solaris 1010A will deliver flow rates of up to 10L/ min and a gas purity of up to 99.5%. The outlet pressure is adjustable to 100psi max offering a flexible solution for labs.

Features

Nitrogen up to 10 L/min at up to 100 psi with a purity of up to 99.5% at 4L/min

Variable outlet flow, pressure and purity

Colour indicative LED lighting for easy status awareness

Manufactured and tested to highest spec in UK, CE/ FCC certified

Safer and more convenient than pressurized cylinders, dewars or bulk storage

12 month on-site comprehensive warranty



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Solaris 1010A	up to 10 L/min	Nitrogen up to 99.5%	100 psi / 6.9 bar	453 x 417 x 540 mm 17.8 x 16.4 x 21.3 "	ELSD, Compact Mass Spectrometers or TLD Readers	CE, CSA, FCC

5.0 Infinity

Compressor-free N₂ generators for your lab

Infinity generators are able to run uninterrupted 24 hours a day. Effectively silent in operation these generators can deliver up to 500 L/min of high purity nitrogen.



See the full range
www.peakscientific.com/infinity

Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Infinity XE 6010	up to 130 L/min up to 210 L/min	Nitrogen Dry Air	135 Psi (Depending on Inlet Pressure)	995 x 410 x 950 mm 339.2 x 16.1 x 37.4"	For multiple lab instruments requiring nitrogen or air	CE, CSA
Infinity XE 6020	up to 260 L/min up to 210 L/min	Nitrogen Dry Air	135 Psi (Depending on Inlet Pressure)	995 x 410 x 950 mm 339.2 x 16.1 x 37.4"	For multiple lab instruments requiring nitrogen or air	CE, CSA
Infinity XE 6030	up to 390 L/min up to 210 L/min	Nitrogen Dry Air	135 Psi (Depending on Inlet Pressure)	995 x 410 x 950 mm 339.2 x 16.1 x 37.4"	For multiple lab instruments requiring nitrogen or air	CE, CSA
Infinity XE 6040	up to 500 L/min up to 210 L/min	Nitrogen	135 Psi (Depending on Inlet Pressure)	995 x 410 x 950 mm 339.2 x 16.1 x 37.4"	For multiple lab instruments requiring nitrogen or air	CE, CSA
Infinity 1031	19 L/min 26 L/min 25 L/min	Nitrogen Dry Air Dry Air	65 psi / 4.5 bar 110 psi / 7.6 bar 60 psi / 4.1 bar	760 x 365 x 200 mm 30 x 14.4 x 7.9"	1 x SCIEX LC-MS/MS	CE
Infinity 1032	38 L/min 52 L/min 50 L/min	Nitrogen Dry Air Dry Air	65 psi / 4.5 bar 110 psi / 7.6 bar 60 psi / 4.1 bar	730 x 423 x 250 mm 28.8 x 16.7 x 9.9"	2 x SCIEX LC-MS/MS	CE
Infinity 1045	32 L/min 50 L/min	Nitrogen Dry Air	90 psi / 6.2 bar 110 psi / 7.6 bar	730 x 424 x 250 mm 28.8 x 16.7 x 9.9"	EVOQ QQQ	CE
Infinity 1046	20 L/min 70 L/min	Nitrogen Dry Air	80 psi / 5.5 bar 110 psi / 7.6 bar	730 x 421.6 x 250 mm 28.8 x 16.6 x 9.9"	Nitrogen & Air Generator for PerkinElmer QSight Triple Quad	CE
Infinity 1051	25 L/min (Combined total)	Nitrogen Dry Air	100 psi / 6.9 bar	730 x 424 x 250 mm 28.8 x 16.7 x 9.9"	LCMS-8045/ 8050/ 8060 instruments	CE

* Must be paired with a compressed air source which, as a minimum, meets ISO 8573-1:2010 Class 1.4.1

Infinity XE 60 Series

Producing between 10 and 500 L/min of high purity nitrogen gas, the Infinity XE 60 series nitrogen membrane gas generators can comfortably supply multiple laboratory instruments with instrument grade nitrogen.

To operate, the Infinity series of generators require an external source of compressed air, which meets a minimum quality grade of ISO 8573-1:2010 Class 1.4.1. Where required, PEAK can provide assistance on external compressors & pre/post filtration as part of delivering a complete solution for your needs.

Features

Flow rates ranging from 10-500 L/min*

N2 purity up to 99.5%

In-field expansion of nitrogen capacity to meet growing lab demands

Optional second outlet for Dry Air

IMM reduces overall compressor run time and energy consumption, reducing carbon footprint

Fully comprehensive 2-Year Warranty**

Collision Gas Add-On is compatible with this generator



* Dependent on inlet pressure, inlet/outlet flow & Nitrogen purity setting
 ** subject to meeting 2 year warranty conditions www.peakscientific.com/warranty-statement/

Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Infinity XE 60XX	up to 500 L/min up to 210 L/min	Nitrogen Air	135 Psi (Depending on Inlet Pressure)	995 x 410 x 950 mm 339.2 x 16.1 x 37.4"	For multiple lab instruments requiring nitrogen or air	CE, CSA

Infinity 1031

The Infinity 1031 delivers high purity nitrogen and dry air to support SCIEX LC-MS systems.

A compressor-free solution, the Infinity 1031 requires an air source to operate. With few moving parts this generator has minimal maintenance requirements and can operate 24 hours a day for hassle-free nitrogen.

Features

Capable of supplying most SCIEX LC-MS systems

Exhaust, curtain and source gases from a single generator

24/7 operation at optimum performance if required

Completely silent in operation



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Infinity 1031	19 L/min 26 L/min 25 L/min	Nitrogen Dry Air Dry Air	65 psi / 4.5 bar 110 psi / 7.6 bar 60 psi / 4.1 bar	760 x 365 x 200 mm 30 x 14.4 x 7.9"	1 x SCIEX LC-MS/MS	CE

6.0 Precision

Streamline your GC workflow with Precision

Combining convenience and reliability in a stackable and modular design, Precision is the safe and practical GC gas solution.

See the full range
www.peakscientific.com/precision



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Precision Hydrogen SL 100	100 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	250 x 160 x 355 mm 9.9 x 6.3 x 14"	GC flame detectors	CSA, CE
Precision Hydrogen SL 200	200 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	250 x 160 x 355 mm 9.9 x 6.3 x 14"	GC flame detectors	CSA, CE
Precision Hydrogen Trace 250	250 cc/min	UHP Hydrogen 99.999999%*	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas, ICP-MS Reaction gas	CSA, CE
Precision Hydrogen Trace 500	500 cc/min	UHP Hydrogen 99.999999%*	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen Trace 1200	1200 cc/min	UHP Hydrogen 99.999999%*	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen 100	100 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen 200	200 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen 300	300 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen 450	450 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Hydrogen 1200	1200 cc/min	Hydrogen 99.9995%	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas, ICP-MS Reaction Gas	CSA, CE
Precision Nitrogen Trace 250	250 cc/min	Zero Nitrogen 99.9995%	80 psi / 5.5 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas	CSA, CE
Precision Nitrogen Trace 600	600 cc/min	Zero Nitrogen 99.9995%	80 psi / 5.5 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas	CSA, CE
Precision Nitrogen Trace 1L	1000 cc/min	Zero Nitrogen 99.9995%	80 psi / 5.5 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC & GC-MS Carrier & Detector Gas	CSA, CE
Precision Nitrogen 250	250 cc/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	256 x 380 x 540 mm 10.1 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Nitrogen Headspace 250	250 cc/min	UHP Nitrogen 99.9995%	100 psi / 6.9 bar	256 x 380 x 540 mm 10.1 x 15 x 21.3"	GC Sample Preparation and Detector Gas	CE
Precision Nitrogen 600	600 cc/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	256 x 380 x 540 mm 10.1 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Nitrogen 1L	1000 cc/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Zero Air 1.5	1.5 L/min	Zero Air <0.05ppm	80 psi / 5.5 bar	156 x 380 x 540 mm 6.2 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Zero Air 3.5L	3.5 L/min	Zero Air <0.05ppm	80 psi / 5.5 bar	156 x 380 x 540 mm 6.2 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Zero Air 7	7 L/min	Zero Air <0.05ppm	80 psi / 5.5 bar	256 x 380 x 540 mm 10.1 x 15 x 21.3"	GC Detector Gas	CE
Precision Zero Air 18L	18 L/min	Zero Air <0.05ppm	80 psi / 5.5 bar	256 x 380 x 540 mm 10.1 x 15 x 21.3"	GC Detector Gas	CE
Precision Zero Air 30L	30 L/min	Zero Air <0.05ppm	100 psi / 6.9 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	GC Detector Gas	CSA, CE
Precision Air Compressor	-	Compressed Air	120 psi / 8.3 bar	406 x 380 x 540 mm 16 x 15 x 21.3"	Independent air supply for Precision modules	CSA, CE

* Based on O2 content independently verified by National Physical Laboratory, UK

The **smallest** and **easiest** to use **hydrogen generator** for GC-FID.

Precision Hydrogen SL is everything we know about hydrogen generation: streamlined to perfection for GC-FID. We've designed it to be smaller (less than a quarter of the size of its predecessor), child's play to operate and maintain and, above all, a safer alternative to having compressed cylinders in your lab for GC flame detector gas.



Small

Available in both 100 and 200cc models, Precision SL is the smallest laboratory hydrogen generator in its class, minimizing the laboratory space required for GC detector gas.



Simple

Produce hydrogen gas at the push of a button. With only simple user maintenance required (under 60 seconds), look forward to constant GC flame detector gas.



Safe

Uncompromised safety in your laboratory. Unlike pressurized cylinders, gas is generated on-demand with minimal gas stored plus advanced fail-safe technology.



{image almost to scale}

Available in **black** or **white** and with two models to choose from - **100cc** and **200cc**.

Precision SL

The smallest hydrogen generator for GC-FID, the Precision Hydrogen SL line has been developed to offer a streamlined laboratory-grade hydrogen gas solution for GC flame detectors at a purity of 99.9995%. Precision Hydrogen SL is safe, simple to use, easy to maintain and takes up minimal bench space.

With an impressive, streamlined form factor, Precision Hydrogen SL produces hydrogen at up to 200cc/min with no compromise on safety. A range of features ensure that Precision Hydrogen SL will produce hydrogen safely, storing a minimal volume of gas compared to cylinders.

This generator comes in 2 models delivering hydrogen at up to 100cc/min and 200cc/min, a choice of black or white and includes a 2 year warranty as standard.

Features

2 models - 100cc and 200cc

99.9995% purity @ 100 psi

One-button start-up and shutdown

Easy end-user managed servicing

Optional auto-water fill

Auto-shutdown fail-safe feature

CE, CSA compliant

2 year comprehensive warranty*

Available in black or white

* Conditional on replacement of DI cartridge after 12 months.



Need help calculating your GC gas flows?
Visit peakscientific.com/gasflow

Precision Hydrogen

The Precision Hydrogen generators are designed to provide high quality gas needed for GC detectors requiring hydrogen fuel gas, such as FID. The Precision Hydrogen Trace generators are also capable of supplying GC carrier gas as well as detector gases for GC and GC/MS. One generator is capable of supplying multiple GCs and GC detectors with various flow rates available to suit individual laboratory needs. These generators utilize a Proton Exchange Membrane (PEM) to create hydrogen gas from deionized water and are equipped with a dryer to provide high purity hydrogen. The Precision Hydrogen generators are also suitable for providing collision gas for ICP-MS, whilst Hydrogen Trace is also suitable for reaction gas.

Precision Hydrogen gas generators come with various safety features as standard, giving you complete peace of mind in the laboratory and are a far safer, dependable and convenient alternative to cylinders.

Features

99.9995% purity (standard) / 99.99999% purity (trace)

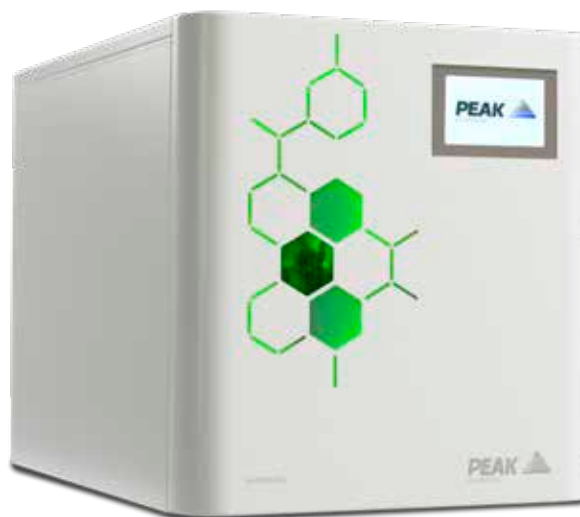
Suitable for GC detector gas (all) and carrier gas (trace model only)

Creates hydrogen on demand, minimal storage of hydrogen in the system

Low maintenance and minimal running costs over product lifetime

Internal leak detection with automatic shutdown

Automatic loading pump as standard



Need help calculating your GC gas flows?
Visit [peakscientific.com/gasflow](https://www.peakscientific.com/gasflow)

Precision Nitrogen

The Precision Nitrogen generators are available in both standard and trace models. The standard models come in three flow rate models (250cc, 600cc and 1000cc) which are able to provide make-up gas, reference gas and gas for nitrogen sample preparation (i.e. headspace). The Nitrogen Trace models are engineered to produce hydrocarbon-free zero nitrogen as carrier gas, make-up gas and reference gas for sample preparation available in 250cc, 600cc and 1000cc models.

These generators are capable of delivering high purity nitrogen, removing oxygen and moisture via Pressure Swing Adsorption and Carbon Molecular Sieve technology and a cat chamber is employed for Hydrocarbon removal (Hydrocarbon removed as methane - trace models only). As with all Precision Series generators, nitrogen models benefit from a compact and modular, stackable design, minimizing the total footprint required for GC gas supply and providing flexibility to add or remove modules as your laboratory requirements grow over time.

Features

All models offer 99.9995% purity

Nitrogen Trace model suitable as GC and GC/MS carrier and detector gas

Trace capable of delivering hydrocarbon-free nitrogen suitable for carrier gas, make-up gas and sample preparation

Highly economical source of nitrogen gas with low lifetime running costs

Ultra-fast start-up time, quick to reach standard operating purity



Need help calculating your GC gas flows?
Visit [peakscientific.com/gasflow](https://www.peakscientific.com/gasflow)

Precision Zero Air

The Precision Zero Air generators are designed specifically to supply clean, dry, hydrocarbon free air to be used as flame support gas for GC.

As with all Precision Series generators, Zero Air benefits from a compact and modular, stackable design, minimizing the total footprint required for GC gas supply, and providing flexibility to add or remove modules as your laboratory requirements evolve over time.

Features

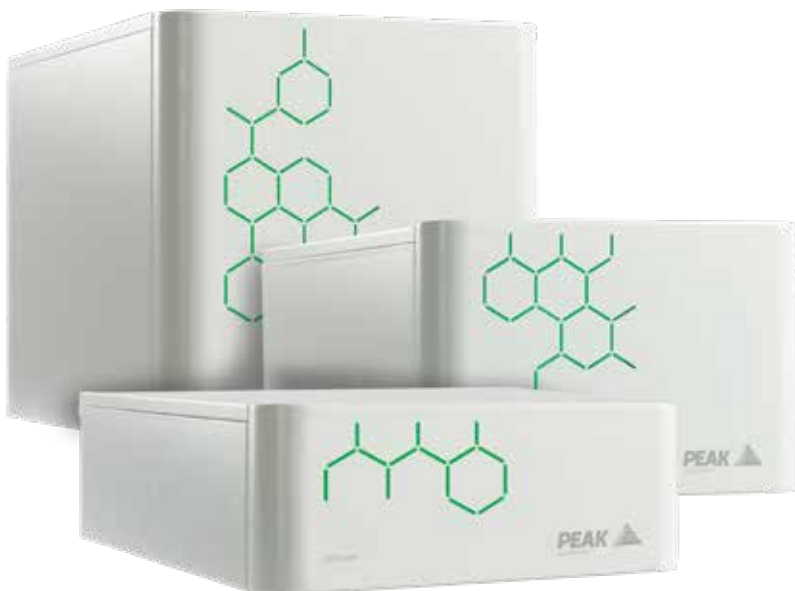
Hydrocarbon content <0.05ppm for market-leading purity

Integrates seamlessly with other Precision units

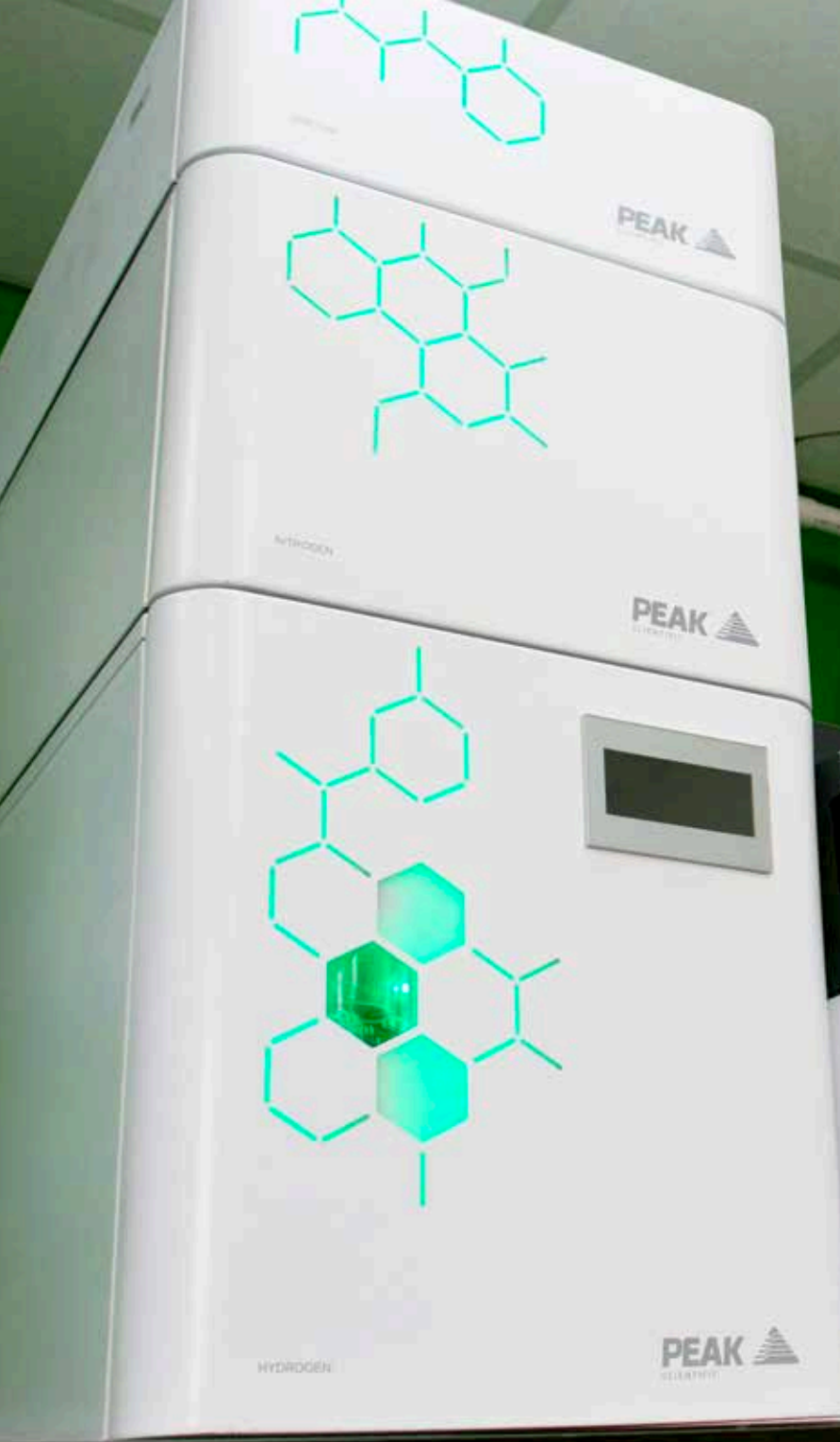
Minimum lifetime maintenance requirements, no expensive catalyst chamber replacements

Highly economical source of dry, hydrocarbon free air

Avoid risk of contaminants entering the system (when switching out empty cylinders)



Need help calculating your GC gas flows?
Visit [peakscientific.com/gasflow](https://www.peakscientific.com/gasflow)



“We decided to switch to hydrogen gas generators to reduce the costs of helium cylinder deliveries, and to save time by eliminating the need to change over cylinders.”

Federico Cozzi

Laboratory Manager, Copenhagen University
Department of Plant and Environmental Sciences,
Denmark

Modular configurations

GC flame detector gas

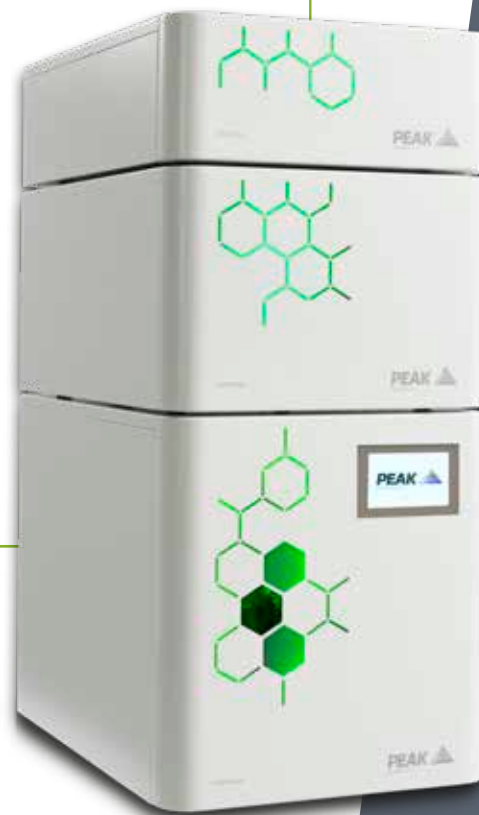
- Precision Zero Air
- Precision Nitrogen (option for make-up gas)
- Precision Hydrogen

GC H₂ carrier gas with FID

- Precision Zero Air
- Precision Nitrogen (option for make-up gas)
- Precision Hydrogen Trace

GC-MS carrier gas

- Precision Hydrogen Trace



The Precision Series can be stacked in multiple variations depending on your lab's particular GC requirement, whether it is to supply GC carrier gas on its own, delivering flame support gas to detectors or for other detectors like TCDs or ECDs.

The Precision Series can also be purchased with an optional, stackable air compressor module for labs without a suitable air supply for the nitrogen or zero air generators.

For a full method list visit: www.peakscientific.com/gc-methods/

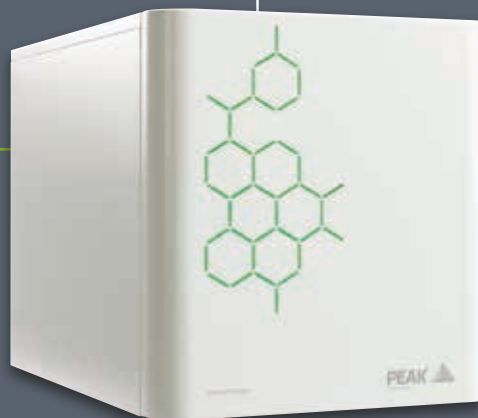


• **GC N₂ carrier gas with FID**

- Precision Zero Air
- Precision Nitrogen Trace
- Precision Hydrogen

• **GC-ECD or GC-TCD carrier & detector gas**

- Precision Nitrogen Trace



Every lab needs a specialist

Beyond our core ranges of laboratory gas generators, we have developed tailored solutions to meet the specific demands of many key analytical applications and instrument types.

See the full range
www.peakscientific.com/lab-solutions



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Corona Nitrogen 1010A	5 L/min	Nitrogen	80 psi / 5.5 bar	406x417x540 mm 16x16.4x21.3"	Thermo Fisher Scientific Corona Veo CAD, Dionex ERS/Vanquish CAD	CE, CSA, FCC
NG5000(A)*	Up to 5 L/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	1235x430x410mm 48.6x16.9x16.1"	GC, ICP, DSC, DMA, ICP-OES	CE
AD140L	140L/min	Dry Air	115psi/7.9bar	660 x 472.4 x 160 mm 26 x 18.6 x 6.3"	TC, TOC, IC, NPOC	CE, FCC, KC
PG14L	Up to 14 L/ min	Dry Air <1ppm CO ₂	Up to 100 psi / 6.9 bar	660 x 459 x 162 mm 26 x 18.1 x 6.4"	FT-IR microscopes Laboratory applications requiring CO ₂ free air	CE
PG28L	Up to 28 L/ min	Dry Air <1ppm CO ₂	Up to 100 psi / 6.9 bar	910 x 459 x 162 mm 35.9 x 18.1 x 6.4"	FT-IR microscopes Laboratory applications requiring CO ₂ free air	CE
TOC 1000	6L/min	Dry Air	100 psi / 6.9 bar 145 psi/10.0 bar	334 x 270 x 530mm 13.5 x 10.7 x 20.9"	TC, TOC, IC, NPOC	CE, FCC, KC
Collision Gas Add-On**	0.2L/min	UHP Nitrogen 99.999%	80 psi / 5.5 bar	165 x 360 x 425mm 6.5 x 14.2 x 16.7"	TC, TOC, IC, NPOC	CE, FCC, KC

*A models include air supply

** Nitrogen generator providing main gas source to an instrument. (Genius XE35/70, Infinity XE and Solaris XE systems)

8.0 i-FlowLab

Scalable high-flow, high purity N2 solution for labs

i-FlowLab is a modular & expandable on-site nitrogen generation system. It is capable of delivering a continuous & consistent supply, at a range of purities (up to 99.9995% N₂) and flow rates to meet the full & varying gas demands of your combined laboratory applications, such as LC-MS, gloveboxes, fume hoods, sample evaporators and more.

See the full range
www.peakscientific.com/iflowlab





Key Features

- ▶ **Consistent & Convenient** - Constant, reliable, stable, on-demand gas supply that eliminates the inconvenience of changing cylinders or dewars.
- ▶ **Economical & Sustainable** - A cost effective total laboratory nitrogen gas supply solution that eliminates the need for bulk delivery.
- ▶ **Expandable & Scalable** - i-FlowLab has the capacity to meet and exceed your current gas demands with the ability to expand as your laboratory grows.
- ▶ **Energy Efficient** - An innovative 'Eco-mode' ensures the lowest running costs by automatically managing production based on your daily demands.
- ▶ **Safe Supply** - Eliminate the handling of cylinders or storage of highly pressurized gases.
- ▶ **Verified Compliance** - Exceeds standards of EIGA, EC Food Grade, European Pharmacopoeia, JECFA and US Food & Drug Administration (CFR Title 21) . PEAK IQ/OQ certification also available.
- ▶ **High Quality Engineering** - PEAK is an ISO 9001 certified manufacturer and i-FlowLab is expertly engineered to ensure performance and reliability.

i-FlowLab

i-FlowLab from PEAK Scientific provides a total laboratory solution for on-site generation of nitrogen gas, delivering a continuous and consistent supply of high-purity nitrogen at the required pressure and flow rates to meet the full and varying demands of your laboratory or research facility.

Engineered around PSA technology, i-FlowLab is available in various pre-configured specifications to suit specific flow and purity demands. A single i-FlowLab generator installation can provide nitrogen at flow rates from 11-5590 L/min. Purities are specified at time of system design to meet the needs of the application up to 99.999%.

Thanks to the expandable design additional CMS columns can be added to each i-FlowLab generator after installation to increase the maximum flow rate.

Features

Consistent, constant, reliable, on-demand supply of on-site gas

No instrument or application downtime as a result of running out of stored gas

Bring control of your nitrogen supply in-house

No more administration costs

Scalable/expandable, increase nitrogen production

Economical, fast return on investment and low cost of ownership with predictable running cost



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
i-FlowLab 701X-710X	11-5590 L/min	95% - 99.9995% UHP Nitrogen	87- 145 psi / 6 - 10 bar	1738 x 500 x 760-2200 mm 68.5 x 19.7 x 30 - 86.7"	LC-MS, Fume Hoods, Glovebox, Sample Evaporators & more	CE
i-FlowLab Mini 701X-704X	13-584 L/min	95% - 99.9995% UHP Nitrogen	87- 145 psi / 6 - 10 bar	853 x 418 x 830 - 1316mm 16.5 x 33.6 x 32.7 - 51.8 "	LC-MS, Fume Hoods, Glovebox, Sample Evaporators & more	CE

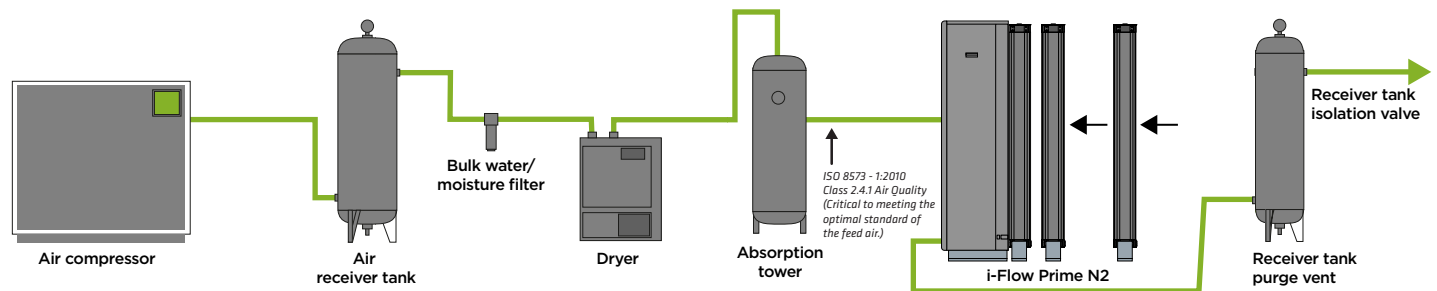
Scalable

Up to ten CMS column banks can be added to each single i-FlowLab unit in less than a day, increasing nitrogen production capacity with minimal downtime.

Modular

Multiple units can be synchronized to meet demands based on application flow-rates and purity requirements (more units = greater flow-rates at specified purity).
95 - 99.9995% N₂ purity, at 11-5590 L/min

Example System



Not all **warranties** are equal

What differentiates PEAK from other gas generator manufacturers is that a PEAK gas generator comes with a truly comprehensive on-site warranty. This means that in the unlikely event that your gas generator develops a problem, we will send a PEAK certified Field Service Engineer to your laboratory to try to resolve the issue on-site and get you back up and running with minimal fuss and disruption.

What's more, when we say fully-comprehensive, we mean it. Every part of your generator is covered during warranty. While other manufacturer warranties may only cover certain components or require the return of your generator to the factory for repair, leaving you without gas for weeks or even months, our warranty is designed to give you complete peace of mind.

Safeguard your laboratory workflow with **[PEAK Protected]**TM

Servicing any equipment in your lab should not be seen as just an option, it should be treated as a necessity. With many moving parts and wear & tear, especially where generators feature integrated compressors, as well as filters and other 'consumables', a gas generator needs to be maintained regularly to continue to perform at its best for many years.

Here at PEAK we see your gas generator as the beating heart of your laboratory, enabling your analytical instruments to perform and achieve the results you need. With this being the case it is extremely important you look after your 'beating heart' to ensure the best possible results.

We offer a range of **[PEAK Protected]** services to suit your particular needs.



Rapid Response

Complete maintenance care with 24 hour rapid response breakdown cover



Service Plans

Complete maintenance care with guaranteed response time breakdown cover



Replacement Parts

Genuine PEAK parts with express delivery, ensuring optimal performance and lifetime



Installation

Trained PEAK FSE will visit to install and commission your generator



IQ/OQ

Certified assurance for applications requiring documented qualification



Technical Support Hotline

Around the clock support by phone or online with our global technical helpdesk

Find out more about PEAK generator service plans at www.peakscientific.com/protected



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