

Your local **gas generation** partner



Product catalogue

A **PEAK**  gas generation brand

Discover more at www.peakscientific.com

Our Promise

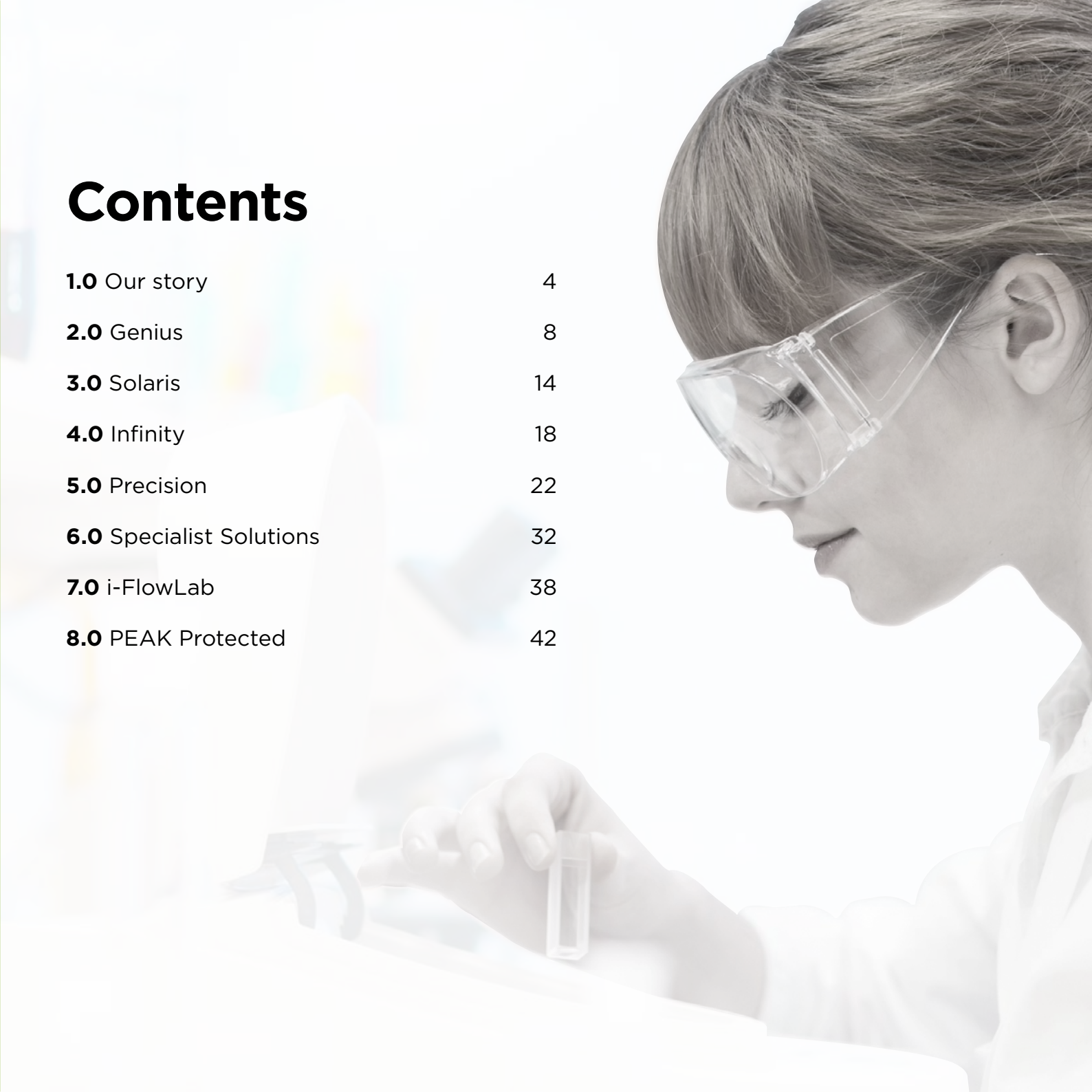
Our commitment is to provide your laboratory with a reliable gas generation solution that delivers long term value. We achieve this through **exceptional product** design, and direct global on-site support that is **unmatched** in our industry.

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.



Contents

1.0 Our story	4
2.0 Genius	8
3.0 Solaris	14
4.0 Infinity	18
5.0 Precision	22
6.0 Specialist Solutions	32
7.0 i-FlowLab	38
8.0 PEAK Protected	42



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 500 employees worldwide.

Our Mission, Values and Vision are structured around our Colleagues, our Customers and our Service and while our approach and atmosphere within the business is fun, friendly and informal, we also maintain a high degree of professionalism. The personable relationship PEAK has with our customers is just one of the many reasons why people enjoy and continue doing business with us.

Manufacturing **Excellence**

Our products are the result of our meticulous Research and Development culture developed over 20 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 all of the applicable 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 on-going 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 of managing stocking and restocking supplies with frequent deliveries when using gas cylinders or other methods of bulk gas supply such as dewars. 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

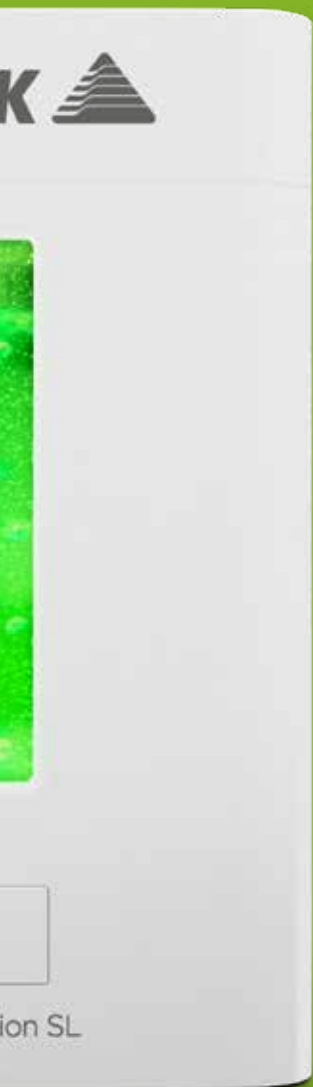
Consistent gas quality and supply, no impurities or running out of gas



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 over 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 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	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 N118LA	18 L/min	Nitrogen	100 psi / 6.9 bar	711 x 400 x 700 mm 28 x 15.8 x 27.6"	LC-MS	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 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 25 L/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 *
Genius 3051	27 L/min 29 L/min	Nitrogen Dry Air	100 psi / 6.9 bar 100 psi / 6.9 bar	1322 x 600 x 850 mm 52.1 x 23.7 x 33.5"	LC-MS/MS 8045, 8050, 8060 in High Gas Delivery mode or Shimadzu 9030	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)



* 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

For labs using any Single Quad LC-MS systems, the Genius SQ 24 nitrogen gas generator delivers laboratory grade nitrogen supply dedicated for these instruments. With a compact size to fit under most lab benches and flow rates of up to 24 L/min, meeting and 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 (99.998%), the Genius 1053 is suitable for a range of Spectroscopy applications, such as Circular Dichroism. Developed using PSA (Pressure Swing Adsorption) technology, this generator produces variable purities depending on outlet flow.

Reducing the need for gas cylinders and with no requirement for an external source of house air or compressor, Genius series gas generators provide your laboratory with a standalone, uninterrupted supply of laboratory grade nitrogen.

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

The latest generation of compressors reducing noise and vibration

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 99.998%	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 new SCIEX Triple Quad™ 7500 LC-MS/MS System – QTRAP® Ready, Genius XE SCI 2 also supports the higher gas flow requirements of the recently released Echo® MS 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 both nitrogen (Curtain Gas™) and clean, dry oil-free air for source and exhaust gas at flows and pressures configured to meet the SCIEX Triple Quad™ 7500 LC-MS/MS System and Echo® 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	CSA, CE, FCC

3.0 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 and 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 (up to 35L/min of high purity nitrogen), purity (up to 99.5%) and outlet pressure can be adjusted down from 116psi, 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, and 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



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Solaris XE	Up to 35 L/min	Nitrogen 95%	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 10

PEAK Scientific's Solaris 10 nitrogen generator has been developed to provide an optimal gas generation solution for ELSD or Compact Mass Spectrometers, with the goal of reducing instrument downtime and improving workflow efficiencies.

Engineered with a space-saving design, Solaris 10 can be placed on a benchtop and paired with an additional optional Solaris air compressor unit to provide air supply for labs without an in-house air supply or for those who wish to contain their gas supply in a single system.

Features

High purity nitrogen for ELSD or Compact Mass Spectrometers

Flows up to 10 L/min at 100 psi and up to 99.5% purity

Compact benchtop form factor

Colour indicative LED lighting for easy status awareness

Optional Solaris Air Compressor stackable module

Manufactured and tested to highest specifications in UK; CE and FCC certified



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Solaris 10	up to 10 L/min	Nitrogen up to 99.5%	100 psi / 6.9 bar	156 x 416 x 540 mm 6.2 x 16.4 x 21.3"	ELSD, Compact Mass Spectrometers or TLD Readers	CE, CSA, FCC

4.0 Infinity

Compressorless N2 generators for your lab

Compressor-free nitrogen generators for laboratories, Infinity generators are able to run uninterrupted 24 hours a day. Effectively silent in operation these generators can deliver up to 520 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 520 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 1033	57 L/min 78 L/min 75 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"	3 x SCIEX LC-MS/MS	CE
Infinity 1034	76 L/min 104 L/min 100 L/min	Nitrogen Dry Air Dry Air	65 psi / 4.5 bar 110 psi / 7.6 bar 60 psi / 4.1 bar	960 x 365 x 250 mm 37.8 x 14.4 x 9.9"	4 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 26 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 520 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 10-520 L/min*

N₂ purity up to 99.5%

In-field expansion of nitrogen capacity, for models without dry air outlet, 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**



* 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 520 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

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	Up to 19 L/min	Nitrogen	Up to 65 psi / 4.5 bar	760 x 365 x 200 mm 30 x 14.4 x 7.9"	1 x SCIEX LC-MS/MS	CE

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 respectively, 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 or pressurized 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, whilst the Precision Hydrogen Trace generators are 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, and there are 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)

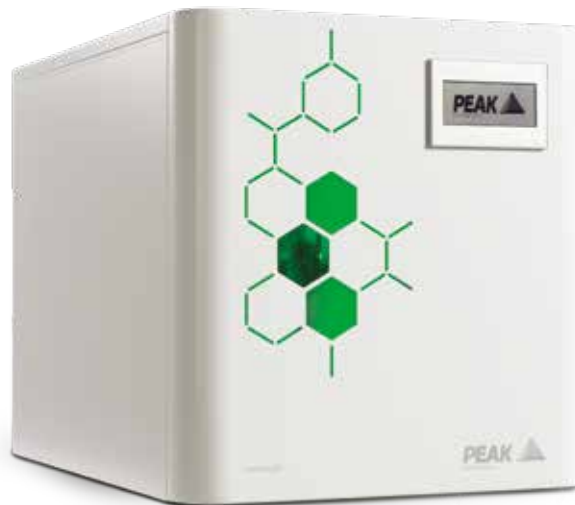
Suitable for GC detector gas (all) and carrier gas (trace model only)

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

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 1L) 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 1L 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 (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

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

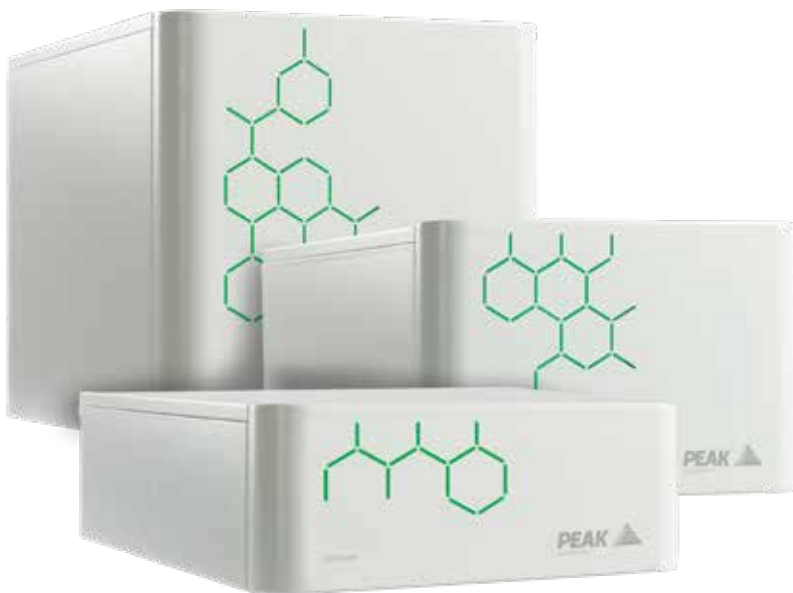
Hydrocarbon content <0.05ppm for market-leading purity

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



“We decided to make the switch from cylinders to hydrogen gas generators as we wanted to reduce the costs associated with helium such as regular cylinder deliveries and saving time by not needing to change over cylinders.”

Federico Cozzi

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

Modular configurations

GC flame detector gas

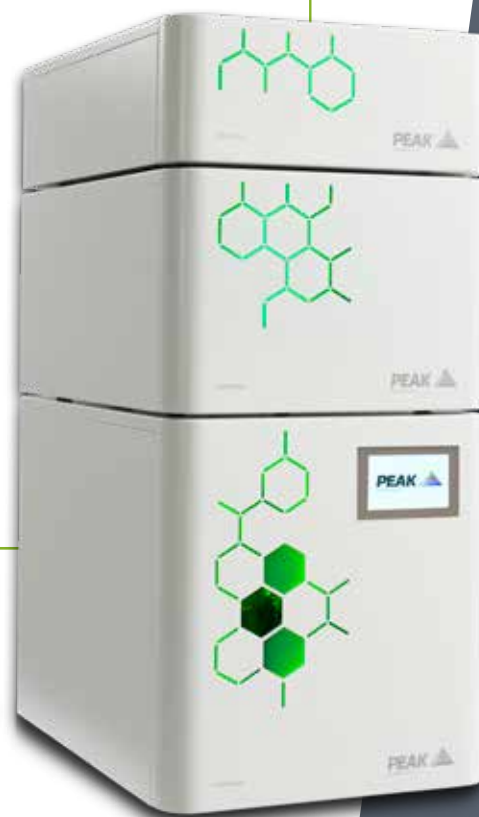
- Precision Zero Air
- Precision Nitrogen (option for make-up gas)
- Precision Hydrogen

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/

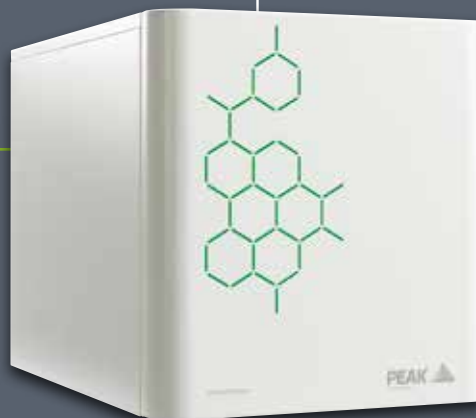


• **GC N₂ carrier gas with FID**

- 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/solutions





**“It’s a very compact model
and easy to use.”**

Sandeep Supal

Umedica Laboratories Pvt. Ltd, India

Corona Nitrogen 1010

Our Corona 1010 has been engineered to meet the specifications of the Thermo Scientific Corona Veo Charged Aerosol Detector.

This system can be purchased as a single nitrogen unit for laboratories with an external air supply or with a stackable air compressor for laboratories without an external air supply.

The Corona system is also suitable for a variety of other applications, requiring up to 5 L/min nitrogen for LC, HPLC or UHPLC.

Features

Suitable for applications requiring high purity nitrogen

Available with or without an external compressor

Dedicated solution for Thermo Scientific's Corona and Vanquish instruments

Tried and tested membrane technology delivers laboratory-grade nitrogen

Gas is supplied on demand so generator works to your schedule



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
Corona Nitrogen 1010	5 L/min	Nitrogen	80 psi / 5.5 bar	156 x 351 x 650 mm 6.2 x 13.9 x 25.6"	Thermo Fisher Scientific Corona Veo CAD, Dionex ERS/Vanquish CAD	CE, CSA, FCC

NG Series

The NG Series delivers ultra high purity nitrogen at flows of up to 5 L/min for GC, DSC and DMA applications, as well as other laboratory applications requiring up to 5 L/min of ultra high purity nitrogen. The NG series can be supported by in-house air or supplied with an integrated compressor.

To reach their ultra high purity nitrogen output these generators use Pressure Swing Adsorption and a Carbon Molecular Sieve. These separation technologies remove oxygen and other impurities in air, delivering hassle-free, ultra high purity nitrogen, on-demand for the lab.

Features

Suitable for applications such as GC, DSC, DMA

Available with or without an external compressor

Contains self-regenerating Carbon Molecular Sieve technology

Available in either 3 L/min or 5 L/min model



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
NG3000(A)*	Up to 3 L/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	1222 x 432 x 406 mm 48.2 x 17.1 x 16"	GC, ICP, DSC, DMA, ICP-OES	CE
NG5000(A)*	Up to 5 L/min	UHP Nitrogen 99.9995%	80 psi / 5.5 bar	1222 x 432 x 406 mm 48.2 x 17.1 x 16"	GC, ICP, DSC, DMA, ICP-OES	CE

* A models include air supply

TOC 1000

The TOC 1000 has been engineered using the latest in PSA and air catalyst technology to supply clean, dry, CO₂ and hydrocarbon-free air for Total Organic Carbon analyzers using combustion catalytic oxidation.

The TOC 1000 provides a consistent and continuous supply of carrier and combustion air for TC, IC, TOC and NPOC analysis from a compact, bench-top system. Meeting the purity requirements of all combustion-type TOC analyzers, PEAK Scientific's TOC 1000 can support up to 5 TOC instruments with a maximum output of 1000cc/min.

With no internal compressor, the TOC is effectively silent in operation, requiring an air supply from either an in-house air source or an external air compressor.

Features

1000cc TOC-grade air @ 50psi outlet pressure

<1ppm CO₂, <0.05ppm CH₄, <0.1ppm NO_x/Sox

Tested and validated on leading TOC instrument manufacturers' equipment

Plug and play supply for TOC instruments with minimal set-up required

Can operate 24/7 with no compromise on performance

NPL (National Physical Laboratory) validated performance of catalytic chamber

Space-saving small bench-top form factor



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
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

PG Series

The PG14L and PG28L gas generators from PEAK Scientific are suitable for laboratory instruments requiring CO2 free gas such as FT-IR.

Using Pressure Swing Adsorption technology to remove CO2 contaminants and moisture from air, these generators provide a consistent flow of air to ensure little background noise in laboratory analysis.

Requiring minimal maintenance, the PG14L and PG28L do require an external source of air to operate, PEAK Scientific will be able to help with recommending a suitable air source if your laboratory does not have one.

Features

Purge Gas (PG) generators from PEAK Scientific offer gas which is free of contaminants

Ideal for commercial labs with a high throughput rate of samples

High performance filters and PSA ensure maximum reduction of moisture (< -70°C dew point).

Position generator where required, wall mountable for small labs

More cost effective than any other gas supply as the FT-IR detector needs a constant flow of gas



Product	Flow Rate	Gas Output	Output Pressure	Size (HxWxD)	Applications	Accreditations
PG14L	Up to 14 L/min	Dry Air <1ppm CO2	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 CO2 free air	CE
PG28L	Up to 28 L/min	Dry Air <1ppm CO2	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 CO2 free air	CE

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 21 - 4253 L/min. Purities are specified at time of system design to meet the needs of the application up to 99.999%.

Thanks to 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 601X-610X	21 - 4253 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	CSA, CE

Scalable

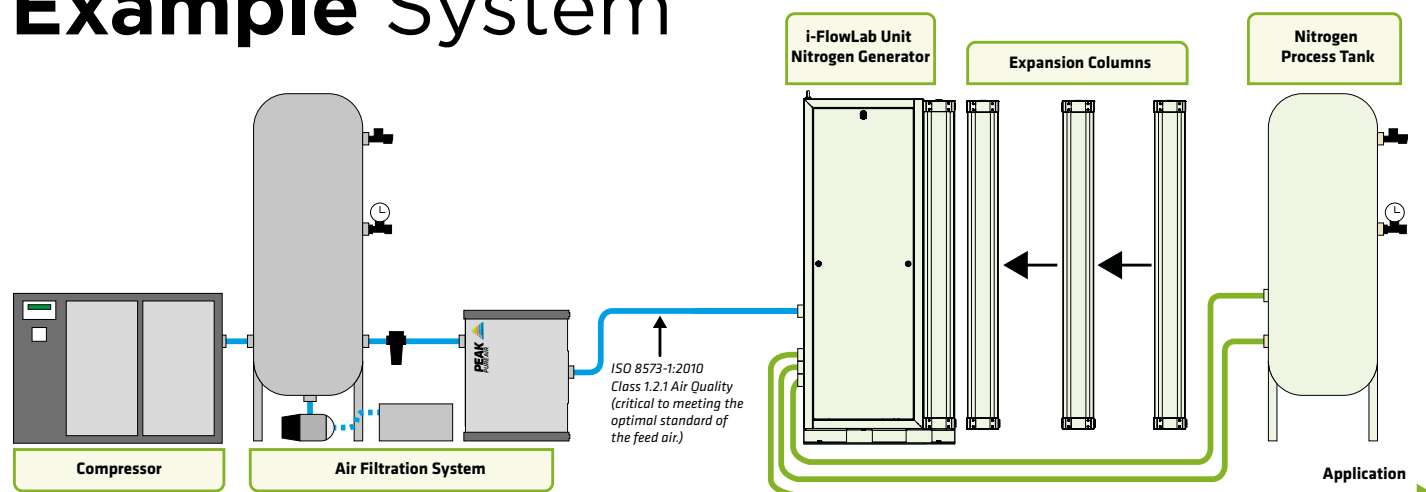
Up to ten CMS column banks can be added to each single i-FlowLab unit in less than a day, increasing nitrogen production capacity with minimal downtime.

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 21 - 4253 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



Contact us today to discover more!

North America

Tel: +1 866 647 1649

China

Tel: +86 21 5079 1190

Web: www.peakscientific.com/products

Europe

Tel: +44 141 812 8100

India

Tel: 1800 2700 946

Email: discover@peakscientific.com