

Your local *gas generation* partner



Gas Generators

For Thermo Fisher Scientific Instruments

ThermoFisher
SCIENTIFIC

Discover more at www.peakscientific.com/thermo

Our story

THE PEAK WAY



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, China and India.

With two decades of experience in pioneering reliable gas generator technology, Peak Scientific develops market-leading nitrogen, hydrogen and zero air systems mainly for the field 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.

Our story

PEAK AND THERMO FISHER SCIENTIFIC

Thermo Fisher Scientific is a global manufacturer and distributor of mass spectrometers and analytical tools headquartered in Waltham, Massachusetts. Thermo Fisher Scientific and Peak Scientific have been working in conjunction since the production of the NG10LA generator in 1998. Since then, Peak has produced several dedicated gas generator solutions for Thermo Fisher Scientific applications including the N418LA, Genius 1022, Genius 3022 and the Corona system.

DEDICATED GAS SOLUTION

Product Managers and Engineers from both organizations are in constant contact throughout the New Product Development process to ensure Peak's products meet and exceed the specific gas requirements of Thermo Fisher Scientific's range of LC-MS instruments.

There is a Peak Scientific gas generator solution to match the majority of Thermo Fisher-Scientific LC-MS instruments. Peak have engineered purposely built generators, to meet the most efficient operating standards of Thermo Fisher Scientific instruments, for the MSQ, LTQ, LCQ, TSQ and Exactive series of mass spectrometers as well as solutions for Orbitrap instruments and the ISQ EC Single Quad LC-MS.

Thermo Fisher
S C I E N T I F I C

Our story

MANUFACTURING EXCELLENCE



Our products are the result of our meticulous Research and Development culture developed over two decades at the forefront of the gas generator market. We pride ourselves in 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 improve product quality, responsiveness and efficiency – all resulting in a better value proposition for our customers.

Operating from our ISO 9001 accredited manufacturing center of excellence in the UK, every Peak Scientific generator is designed and independently tested to ensure compliance with all of the applicable safety standards.

Our story

PEAK PERFORMERS: OUR WORLD-CLASS PRODUCT PLATFORMS

Four distinct product series define our core offering to supply Thermo Fisher Scientific analytical laboratory instruments. Our best-selling Genius and Genius XE Series, designed mainly for LC-MS applications, is a self-contained system featuring integrated compressors, delivering laboratory-grade nitrogen at various pressures and flow rates. Specifically designated for Thermo Fisher Scientific instruments in the Genius Series are the N418LA, 3022 and 1022.

The Infinity, Infinity XE & Solaris Series of nitrogen gas generators are silent-running compressor-free systems for laboratories with an in-house supply of clean, dry air - delivering a wide range of flow rates including high-flow for applications such as sample evaporation or supplying multiple mass-spec instruments suited

Peak has also engineered a specialist solution for the Corona VEO Charged Aerosol Detector. The Corona 1010 delivers ultra-high purity nitrogen for this specific Thermo Fisher Scientific instrument.

For very high-flow, high demand needs, our innovative Pressure Swing Adsorption based i-FlowLab technology is designed to meet the full and total demand for nitrogen gas a facility has, all in one expandable installed solution.



Application Matrix

		Peak Solution	
Application		Single Instrument	Two Instruments
ION Trap LC-MS			
LCQ Fleet LTQ XL Velos Pro Dual	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius XE 35 Genius NM32LA	Genius XE 70 Genius 3020
ORBITRAP LC-MS			
Orbitrap Fusion Orbitrap Lumos Orbitrap Tribid Orbitrap Velos Orbitrap Velos Pro Hybrid Orbitrap Elite Maldit LTQ LTQ Orbitrap XL	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius XE 35 Genius NM32LA	Genius XE 70 Genius 3020
Exactive / Q- Exactive Q- Exactive Hybrid Quadrupole Q- Exactive Focus Q- Exactive Plus Q- Exactive Plus Orbitrap Q- Exactive Plus EMR Orbitrap	No compressor	Solaris XE	Infinity XE 5010 (116psi*)
	Built in compressor	Genius XE 35 Genius 1022	Genius XE 70 Genius 3022

		Peak Solution	
Application		Single Instrument	Two Instruments
TRIPLE QUADRUPOLE LC-MS			
TSQ Quantum TSQ Access Max TSQ Quantum Ultra TSQ Quantiva TSQ Endura TSQ Altis TSQ Quantis	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius XE 35 Genius NM32LA	Genius XE 70 Genius 3020

		Peak Solution	
Application		Single Instrument	Two Instruments
SINGLE QUADRUPOLE LC-MS			
ISQ EC	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius XE 35 Genius NM32LA	Genius XE 70 Genius 3020
MSQ Plus	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius N418LA	Genius XE 70 Genius 3020

CHARGED AEROSOL DETECTION			
Corona Veo	No compressor	Corona 1010	
	Built in compressor	Corona 1010 plus Corona Compressor	
Corona Veo RS	No compressor	Corona 1010	
	Built in compressor	Corona 1010 plus Corona Compressor	
Vanquish	No compressor	Corona 1010	
	Built in compressor	Corona 1010 plus Corona Compressor	

EXEMPTIONS			
LC-MS with HESI or HESI-II*	No compressor	Solaris XE	Infinity XE 5010
	Built in compressor	Genius XE 35 Genius NM32LA **	Genius XE 70 Genius 3020

* Factory set to 100psi, user adjustable to 135psi

** typical settings as recommended by Thermo Fisher Scientific do not exceed 30L/min, however at max gas settings with the HESI and HESI-II probe the gas demand can exceed the capacity limit of the Infinity NM32L and Genius NM32LA generators. In this instance the Infinity XE 5010 and Genius 3010 will meet the gas demands for a single instrument and the Infinity 5020 will meet the gas demands for two instruments. These settings are unlikely to be used for analysis as they are not optimum. The application flows must be verified before selecting the appropriate gas generator.

“It’s great knowing that I do not have to worry about cylinders running out and can leave samples on for extended periods of time.”

James Wedgbrow, Synthomer



SOLARIS

Product

Genius XE Series

DESCRIPTION

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.

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)



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Genius XE 35	up to 35 L/min	Nitrogen	116psi / 8 bar	640 x 570 x 710 mm 25.2 x 22.5 x 28"	LC-MS/MS
Genius XE 70	up to 70 L/min	Nitrogen	116psi / 8 bar	1000 x 570 x 710 mm 23.6 x 29.5 x 28 in39.4 x 22.5 x 28"	LC-MS/MS

* 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.



“It is a high quality instrument and it delivers very reproducible results.”

Emilio Merino, Virginia Tech, Virginia, USA

Product

Solaris XE

DESCRIPTION

Peak Scientific's Solaris XE generator has been engineered using membrane technology to meet the gas delivery requirements for labs using LC-MS or multiple lower flow nitrogen instruments such as ELSDs or Compact Mass Spectrometers. 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.

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	Pressure	Size (HxWxD)	Application
Solaris XE	35 L/min	Nitrogen	116psi / 8 bar	156 x 343 x 650 mm 6.2 x 13.5 x 25.6"	LC-MS, LC-MS/MS or Multiple ELSDs

Product

Infinity XE 5010

DESCRIPTION

Producing between 10-60 L/min of high purity nitrogen gas, the Infinity XE 5010 can comfortably supply multiple laboratory instruments. With a variable flow rate in relation to purity, set the flow rate you need to meet the total demands of the instruments in your lab.

Features

- Flow rate up to 60 L/min
- Variable flow rate
- 135 psi outlet pressure
- Purity from 95-99.5% (flow rate dependent)
- Tried and tested membrane technology for high purity gas
- Small laboratory footprint using minimal lab space
- Optional purity shutdown feature



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Infinity XE 5010	up to 60 L/min	Nitrogen	100 psi /6.9 bar	995 x 500 x 500 mm 39.2 x 19.7 x 19.7"	For multiple LC-MS/MS instruments

Product

Genius 1022

DESCRIPTION

Designed for Thermo Fisher LC-MS/MS applications, Genius 1022 provides a compact single source gas solution for Thermo Fisher Q-Exactive LC-MS/MS instruments.

Features

- Delivers up to 32L/min of nitrogen at 116psi
- 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
- High-specification latest generation compressors located in insulated chamber, reducing noise and vibration
- Service indication to allow planning of preventative maintenance
- Gas is supplied on demand so generator works to your schedule
- 12 month comprehensive on-site warranty



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Genius 1022	up to 32 L/min	Nitrogen N/A	116 psi / 8 bar 100 psi / 8 bar	713 x 600 x 750 mm 28.1 x 23.7 x 29.6"	Q Exactive LC-MS/MS

Product

Genius 3022

DESCRIPTION

Designed, engineered and built in conjunction with Thermo Fisher Scientific for the Q Exactive, the Genius 3022 has increased pressure capabilities compared to its parent generator, the Genius 3020. With two separate nitrogen outputs, this generator can supply two Q Exactive mass spectrometers.

Features

- Combines two Genius units into one with the same quality output
- Each gas supply is controlled manually and is independent of the other
- Higher flow 30 Series generator designed for hungrier LC-MS/MS applications
- 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 located in an insulated chamber reducing noise and vibration
- Service indication to allow planning of preventative maintenance
- Gas is supplied on demand so generator works to your schedule
- 12 month comprehensive on-site warranty



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Genius 3022	up to 32 L/min	Nitrogen Nitrogen	116 psi / 8 bar 100 psi / 8 bar	1322 x 600 x 850 mm 52.1 x 23.7 x 33.5"	2x Q Exactive LC-MS/MS

Product

Corona Nitrogen 1010

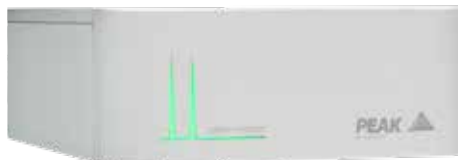
DESCRIPTION

Our Corona 1010 has been engineered to meet the specifications of the Thermo Fisher 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.

Features

- Suitable for applications requiring high purity nitrogen
- Available with or without an external compressor
- Dedicated solution for Thermo Fisher 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
- 12 month comprehensive on-site warranty



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Corona Nitrogen 1010	up to 5 L/min	Nitrogen N/A	80 psi / 5.5 bar 100 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

Peak Protected

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.



Premium Plan

Complete maintenance care with 24 hour rapid response breakdown cover



Complete Plan

Complete maintenance care with guaranteed response time breakdown cover



Fixed Price PM

Preventative maintenance carried out by an expert Peak engineer at a time that suits you



Supported Plan

Preventative maintenance support specifically for compressor-less generators



Paid Repairs

On-site repairs carried out by a certified Peak FSE in case of a breakdown



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



Support Hotline

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

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.

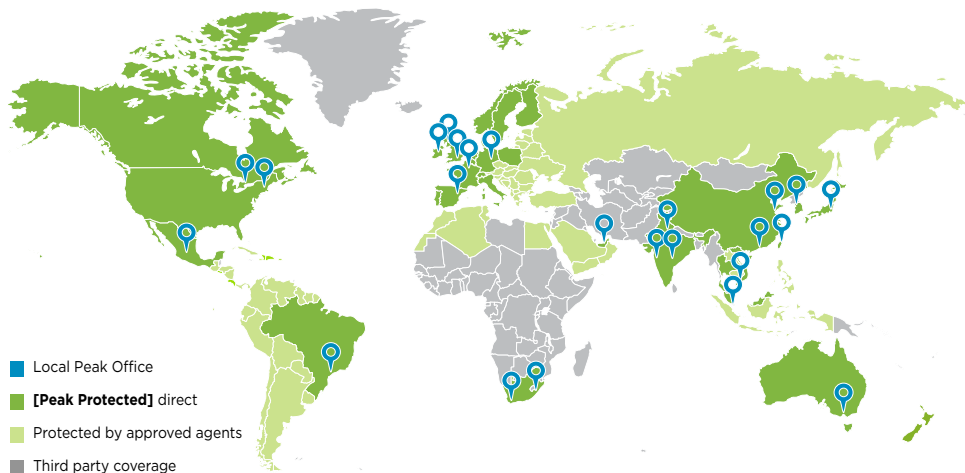
To find out more about our unique warranty, visit www.peakscientific.com/warranty

Our Promise

Our commitment is to provide laboratories 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 customer outcomes and strive to be a valued partner in their success by delivering **exceptional service** over the life of our product.

Your local **gas generation** partner



Peak Scientific has highly trained, fully certified Field Service Engineers located in over 20 countries across every continent around the world. This allows us to provide an industry-leading rapid response service to our customers. With **[Peak Protected]**, your laboratory's productivity becomes our top priority.

Contact us today to discover more!

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