



Gas Generators

For Thermo Fisher Scientific Instruments



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.

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 the Corona system and most recently our Genius XE products.

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 and other instruments.

There is a Peak Scientific gas generator solution to match any of the 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

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.

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 XE Series, designed mainly for LC-MS applications, is a self-contained system featuring integrated compressors, delivering analytical-grade nitrogen at various pressures and flow rates.

The Infinity XE & Solaris XE 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 multiple mass-spec instruments.

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	No compressor	Solaris XE	Infinity XE 5010		
Velos Pro Dual	Built in compressor	Genius XE 35	Genius XE 70		
ORBITRAP LC-MS					
Orbitrap Fusion Orbitrap Lumos Orbitrap Tribid Orbitrap Velos Orbitrap Velos Pro Hybrid Orbitrap Elite Maldi LTQ LTQ Orbitrap XL	No compressor	Solaris XE	Infinity XE 5010		
	Built in compressor	Genius XE 35	Genius XE 70		
Exactive / Q- Exactive Q- Exactive Hybrid Quadrupole Q- Exactive Focus	No compressor	Solaris XE	Infinity XE 5010		
Q- Exactive Plus Q- Exactive Plus Orbitrap Q- Exactive Plus EMR Orbitrap	Built in compressor	Genius XE 35	Genius XE 70		
TRIPLE QUADRUPOLE LC-MS					
TSQ Quantum TSQ Access Max TSQ Quantum Ultra	No compressor	Solaris XE	Infinity XE 5010		
TSQ Quantiva TSQ Endura TSQ Altis TSQ Quantis	Built in compressor	Genius XE 35	Genius XE 70		
SINGLE QUADRUPOLE LC-MS					
ISO EC	No compressor	Solaris XE	Infinity XE 5010		
150 FC	Built in compressor	Genius XE 35	Genius XE 70		

		Peak Solution			
Application		Single Instrument	Two Instruments		
CHARGED AEROSOL DET	ECTION				
Corona Veo No compressor		Coron	a 1010		
Corona Veo RS Vanquish	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 XE 70		
Altis/ Quantiva and Lumos with FAIMS in ESI mode	No compressor	Infinity XE 5010	Infinity XE 5020		
	Built in compressor	Genius XE 70			

^{*} Typical settings as recommended by Thermo Fisher 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 Solaris XE and Genius XE 35 generators. In this instance the Infinity XE 5010 and Genius XE 70 will meet the gas demands for a single instrument and the Infinity XE 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.

Peak Gas Generator Recommendations For Thermo GC						
	Carrier Gas		Detector Gas			
Detector	Hydrogen Nitrogen		Hydrogen	Air	Nitrogen	
MS	Precision Hydrogen Trace	-	Not Applicable			
FID	Precision Hydrogen Trace	Precision Nitrogen Trace	Precision Hydrogen	Precision Zero Air	Precision Nitrogen	
TCD	Precision Hydrogen Trace	Precision Nitrogen Trace	Same as carrier gas			
ECD	Precision Hydrogen Trace	Precision Nitrogen Trace	-	-	Precision Nitrogen Trace	
ECD Sensitivity	Precision Hydrogen Trace	Precision Nitrogen Trace	-	-	Precision Nitrogen Trace	
FPD	Precision Hydrogen Trace	Precision Nitrogen Trace	Precision Hydrogen Trace	Precision Zero Air	Precision Nitrogen	
FTD	Precision Hydrogen Trace	Precision Nitrogen Trace	Precision Hydrogen	Precision Zero Air	Precision Nitrogen	

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.

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

99.5% purity

- Nitrogen up to 35L/min, up to 116 psi and up to
- 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

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

Corona 1010

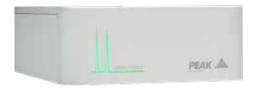
DESCRIPTION

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.

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 1010	up to 5 L/min	Nitrogen	80 psi / 5.5 bar 100 psi / 5.5 bar	156 x 417 x 540 mm 6.2 x 16.5 x 21.3"	Thermo Fisher Scientific Corona Veo CAD, Dionex ERS/Vanquish CAD

Peak Protected

Safeguard your laboratory workflow with [PEAK Protected]™

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/QQ

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.

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 or customers. With **[Peak Protected]**, your laboratory's productivity becomes our top priority.

Contact us today to discover more!

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