

Your local *gas generation* partner



# Gas Generators

For Agilent Instruments



Discover more at [www.peakscientific.com/agilent](http://www.peakscientific.com/agilent)

## Our story

# The Peak way

### DESCRIPTION

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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 its 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 nearly 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).

Our forte is in providing our customers with high quality, dependable gas generation solutions tailored to meet their specific laboratory demands. 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.

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## Our story

### PEAK AND AGILENT

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A leader in life sciences, diagnostics and applied chemical markets, Agilent provides laboratories worldwide with analytical instruments, services, consumables and expertise. Widely recognised as a major and influential driver in the field of GC and GC-MS instrumentation, Agilent is at the forefront of technological solutions for those working in separation science. Peak Scientific has been supplying validated and approved gas generator solutions to Agilent since the development of the NM32LA in 2009.

In 2013 Peak launched the Precision Series which delivers nitrogen, hydrogen and zero air at various flow rates for GC. With many Agilent GCs performing with Precision across the globe, Peak's Precision series is a trusted and convenient gas generation solution for labs.

### DEDICATED GAS SOLUTION

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Product Managers and Engineers from both organizations are in regular contact to ensure Peak's products meet and exceed the specific gas requirements of Agilent's range of LC-MS & GC instruments. In most cases, there is a dedicated Peak Scientific gas generator for the Agilent instrument you may have. Peak have developed purpose built generators, matching the required operating standards of Agilent's instruments, such as Peak's Solaris 10 generator for ELSD, the Halo nitrogen generator for MP-AES and modular Precision series generators for GC instruments as well as the full range of LC-MS instruments.



# Agilent Technologies

## Our story

### MANUFACTURING EXCELLENCE

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Our products are the result of our meticulous Research and Development culture developed over nearly two decades of being 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

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Four distinct product series define our core offering to supply Agilent Technologies analytical laboratory instruments. Our best-selling Genius and Genius XE Series, designed mainly for LC-MS/MS applications, is a self-contained system featuring integrated compressors, delivering laboratory-grade nitrogen at various pressures and flow rates. Our Genius NM32LA is at the core of our offering for Agilent customers, but we also have specific solution for Agilent MP-AES instruments, the Halo air & nitrogen generator launched in 2018.

The Infinity, Infinity XE 50 & 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 nitrogen in a wide range of flow rates.

Engineered specifically to meet the needs of Gas Chromatography our cutting-edge Precision Series is a modular system consisting of high-purity nitrogen, hydrogen and zero air generators that can be combined into a compact stack tailored to your needs. New Precision Series models featuring custom blue LED lighting have been introduced exclusively for Agilent.

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 may have, all in one expandable installed solution.



# Application Matrix

		Peak Solution	
Application		Single Instrument	Two Instruments
1200 Series Infinity ELSD	No compressor	Solaris 10	Solaris 10
	Built in compressor	Solaris 10 with Solaris Air Compressor	Solaris 10 with Solaris Air Compressor
385 ELSD	No compressor	Solaris 10	Solaris 10
	Built in compressor	Solaris 10 with Solaris Air Compressor	Solaris 10 with Solaris Air Compressor
InfinityLab MSD-iQ	No compressor	Solaris XE 35	Solaris XE 35
	Built in compressor	• Genius SQ 24	• Genius XE 70
LC-MS with ESI	No compressor	Solaris XE 35	Solaris XE 35
	Built in compressor	• Genius SQ 24	• Genius XE 70
LC-MS with APCI	No compressor	Solaris XE 35	Solaris XE 35
	Built in compressor	• Genius XE 35	• Genius XE 70
All LC-MS systems / sources except 6490/95, 6550	No compressor	Solaris XE 35	Infinity XE 5010
	Built in compressor	• Genius XE 35	• Genius XE 70
LC-MS 6490/95, 6550	No compressor	Infinity XE 5010/1	-
	Built in compressor	• Genius XE 70	-
4100 MP-AES	Built in compressor	Halo	-
4200 MP-AES	Built in compressor	Halo	-
4210 MP-AES	Built in compressor	Halo	-
ICP-OES 700 Series	No Compressor	• Precision Nitrogen NG Range	• Precision Nitrogen NG Range
ICP-MS 7500cs/ 7500cx	No Compressor	• Precision Hydrogen Trace 250cc	• Precision Hydrogen Trace 250cc
ICP-MS 7700x	No Compressor	• Precision Hydrogen Trace 250cc	• Precision Hydrogen Trace 250cc
ICP-MS 7900	No Compressor	• Precision Hydrogen Trace 250cc	• Precision Hydrogen Trace 250cc
Cary Eclipse Fluorescence Spectrophotometer	No Compressor	i-FlowLab 601X	i-FlowLab 601X
Cary 600 Series FTIR Spectrometer	No Compressor	PG14L	PG28L
Cary 610/20 Series FTIR Microscope	No Compressor	PG14L	PG28L
• Included on Agilent Corporate Price List			

Peak Gas Generator Recommendations For Agilent GC

Detector	Carrier Gas		Detector Gas		
	Hydrogen	Nitrogen	Hydrogen	Air	Nitrogen
MS	Precision Hydrogen Trace	Precision Nitrogen Trace	Not Applicable		
FID	Precision Hydrogen Trace	Precision Nitrogen Trace	Precision Hydrogen	Precision Zero Air	Precision Nitrogen
TCD	Precision Hydrogen Trace	Precision Nitrogen Trace	-	-	Precision Nitrogen
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	-
FTD	Precision Hydrogen Trace	Precision Nitrogen Trace	Precision Hydrogen	Precision Zero Air	Precision Nitrogen

## 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	35 L/min	Nitrogen	116psi /8bar	640 x 570 x 710 mm 25.2 x 22.4 x 28.0"	LC-MS-MS or ELSD
Genius XE 70	70 L/min	Nitrogen	116psi /8bar	1000 x 570 x 710 mm 39.4 x 22.4 x 28.0"	LC-MS-MS or ELSD

\* 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.

## Product

# Genius SQ 24

### DESCRIPTION

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For labs using any Single Quad LC-MS systems, the Genius SQ 24 nitrogen gas generator delivers a analytical grade nitrogen supply dedicated for this instrument. 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

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Best value nitrogen generator on the market

Variable flow up to 24 l/min

Analytical 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	Pressure	Size (HxWxD)	Application
Genius SQ 24	24 L/min	Nitrogen	116psi /8bar	610 x 600 x 750 mm 24.0 x 23.6 x 29.5"	Single Quad LC-MS

## Product

# Solaris XE 35

### DESCRIPTION

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Peak Scientific's Solaris XE 35 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

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

Variable outlet flow, pressure and purity

Compact, stackable system maximising 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	35 L/min	Nitrogen	116psi /8bar	156 x 343 x 650 mm 6.1 x 13.5 x 25.6"	LC-MS, 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 N/A	psi / 0 bar 100 psi / 0 bar	995 x 500 x 500 mm 39.2 x 19.7 x 19.7"	For multiple LC-MS/MS instruments

## Product

# Halo

### DESCRIPTION

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Designed as a dedicated solution for MP-AES instruments supplying the high purity nitrogen for plasma support gas or monochromator purge and air supply for POP gas or monochromator air purge, Halo produces 25 L/min of 99.5% or 10L/min of 99.95% pure nitrogen with a supporting air supply of up to 36.5 L/min. Fitted with an oxygen analyzer, Halo will alert when operating purity has been reached through a purity status indicating LED light.

### Features

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Nitrogen at 25 L/min at 99.5% purity or 10 L/min at 99.95%

Air supply at 36.5 L/min at -20°C ADP

O2 analyzer with LED light to indicate when operating purity is reached

Compact, mobile, space-saving solution

Latest generation, high specification compressor located in insulated chamber to minimize noise and vibration

Capable of operating in high altitude environments (up to 4,000m) without performance loss



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Halo	Up to 25 L/min Up to 36.5 L/min	Nitrogen > 99.5% Air @ -20°C ADP	87 psi / 6 bar 87 psi / 6 bar	765 x 570 x 880 mm 30.2 x 22.5 x 34.7"	MP-AES

## Product

# Precision Hydrogen

### DESCRIPTION

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The Precision Hydrogen generators come in two variants, standard and trace. The standard models are designed to provide detector gas for applications such as FID available in 100cc, 200cc, 300cc, 450cc and 1200cc/min. The trace model can deliver 250cc, 500cc or 1200cc/min of UHP hydrogen for both carrier and detector gas. One generator is capable of supplying multiple detectors and GC or GC-MS units.

### Features

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99.9995% purity (standard) / 99.9999% purity (trace model)

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



## Product

# Precision Nitrogen

### DESCRIPTION

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The Precision Nitrogen generators are available in both standard and trace models. The standard models come in 250cc, 600cc and 1 liter and are able to provide make-up gas, reference gas and for sample preparation (i.e. headspace). The Nitrogen Trace models are engineered to offer zero nitrogen as carrier gas, make-up gas and reference gas for sample preparation available in 250cc, 600cc and 1L models.

### Features

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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 (as Methane) 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



## Product

# Precision Zero Air

### DESCRIPTION

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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

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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)



# Peak Protected

## Safeguard your laboratory workflow with [**PEAK** Protected]<sup>TM</sup>

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.

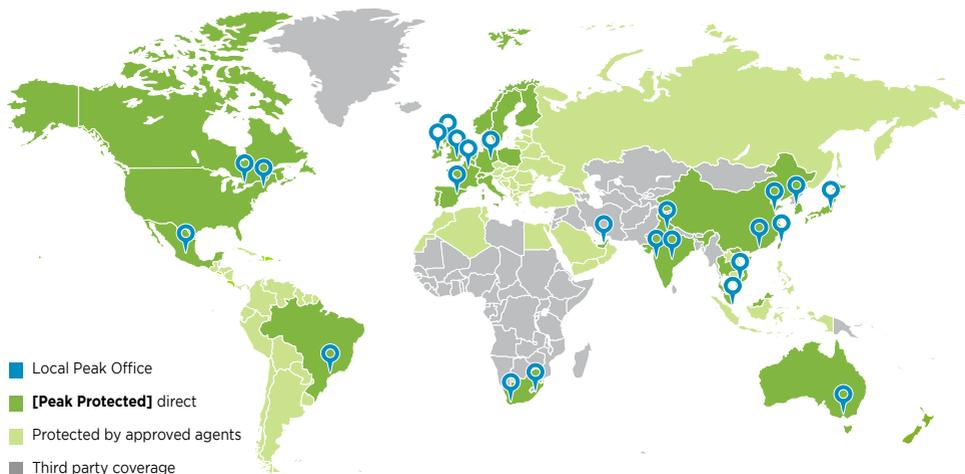
To find out more about our unique warranty, visit [www.peakscientific.com/warranty](http://www.peakscientific.com/warranty)

# 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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