Your local gas generation partner





## **Gas Generators**

For Agilent Instruments



Discover more at www.peakscientific.com/agilent

### Our story

#### PEAK PERFORMERS: OUR WORLD-CLASS PRODUCT PLATFORMS



Four distinct product series define our core offering to supply Agilent Technologies analytical laboratory instruments. Our bestselling 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. We also have a specific solution for Agilent MP-AES instruments, the Halo air & nitrogen generator launched in 2018.

The Infinity, Infinity XE 60 & 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.

#### 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.



#### 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 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 over two decades of experience pioneering reliable gas generator technology, PEAK Scientific develops market-leading nitrogen, hydrogen and zero air systems mainly for the field of LC-MS and GC.

Our strength lies 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 are in the world.

#### MANUFACTURING EXCELLENCE



Our products are the result of our meticulous Research and Development culture, built over more than 20 years at the forefront of the gas generator market. We pride ourselves on the greatest care taken to assess specific application needs before designing and rigorously testing new products. As we have expanded, our R&D capabilities have advanced to the point where we are better equipped than ever to meet changing market demands. By implementing the latest manufacturing technologies and philosophies, PEAK continues to improve product quality, responsiveness and efficiency – resulting in a better value proposition for our customers. Every PEAK Scientific generator is designed from our ISO 9001:2015 accredited manufacturing center of excellence in the UK and independently tested to ensure compliance with all applicable safety standards.

## **Application Matrix**

		PEAK Solution		
Application		Single Instrument	Two Instruments	
	No compressor	Solaris 10	Solaris 10	
1200 Series Infinity ELSD	Built in compressor	Solaris 1010A	Solaris 1010A	
	No compressor	Solaris 10	Solaris 10	
385 ELSD	Built in compressor	Solaris 1010A	Solaris 1010A	
	No compressor	Solaris XE	Solaris XE	
InfinityLab MSD-iQ	Built in compressor	Horizen 24 (Genius SQ24)	• Genius XE 70	
LC-MS with ESI	No compressor	Solaris XE	Solaris XE	
LL-MS WITH ESI	Built in compressor	Horizen 24 (Genius SQ24)	• Genius XE 70	
LC-MS with APCI	No compressor	Solaris XE	Solaris XE	
	Built in compressor	• Genius XE 35	• Genius XE 70	
	No compressor	Infinity XE 6010	-	
LC-MS with iFunnel	Built in compressor	• Genius XE 70	-	
LC-MS with ExD cell	No compressor	Solaris XE	Solaris XE	
LC-MS WITH EXD Cell	Built in compressor	• Genius XE 35	• Genius XE 70	
4100/4200/4210 MP-AES	Built in compressor	Contact Peak Scientific	-	
ICP-OES 700 Series	No Compressor	<ul> <li>Precision Nitrogen NG Range</li> </ul>	<ul> <li>Precision Nitrogen NG Range</li> </ul>	
ICP-MS 7500cs/7500cx/7700x/7900	No Compressor	Precision Hydrogen Trace     250cc	Precision Hydrogen Trace     250cc	
Cary Eclipse Fluorescence Spectrophotometer	No Compressor	i-Flow Mini	i-Flow Mini	
Cary 600/610/620 Series FTIR Microscope	No Compressor	PG14L	PG28L	
8700 LDIR	No Compressor	PG14L	PG28L	

PEAK Gas Generator Recommendations For Agilent GC						
	Carrie	er Gas	Detector Gas			
Detector	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	

Included on Agilent Corporate Price List

# 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	650 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.

# Horizen 24

#### DESCRIPTION

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

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

#### Features

The most energy-efficient nitrogen generator on the market

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

55% less energy, saving power consumption\* >50% less heat, reducing your air conditioning cost\*

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

Minimized operational carbon footprint compared with cylinders and equivalent generator models

Convenient fixed annual service interval on all parts

\* Benchmarked against equivalent competitor



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Horizen 24	324 L/pm	Nitrogen	116psi /8bar	524 x 450 x 719 mm 20.6 x 17.7 x 28.3 "	LC-MS, ELSD, Small sample evaporators

# Genius SQ 24

#### DESCRIPTION

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

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

# Solaris XE 35

#### DESCRIPTION

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

# Infinity XE 6010

#### DESCRIPTION

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

#### Features

- Flow rates ranging from 10-500 L/min\*
- N2 purity up to 99.5%
- Versatile solution with varying Nitrogen flow, pressure & purity capabilities
- In-field expansion of nitrogen capacity to meet growing lab demands
- Optional second outlet for Dry Air
- Intelligent Membrane Management (IMM) optimizes compressed air requirement based on gas consumption



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Infinity XE 6010	up to 500 L/min up to 210L/min	Nitrogen Dry Air	135 psi / 8 bar 145psi / 10 bar	995 x 410 x 950 mm 39.2 x 16.1 x 37.4"	For multiple LC-MS/MS instruments

# Product Precision Hydrogen

#### DESCRIPTION

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) / 99.99999%\* 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

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



## Product Precision Nitrogen

#### DESCRIPTION

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



# Precision Zero Air

#### DESCRIPTION

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 marketleading 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)

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



# Safeguard your workflow

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.

## 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 warran ty, visit www.peakscientific.com/warranty

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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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