



## **Gas Generators**

For Waters 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 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.

#### PEAK AND WATERS

Waters is a global manufacturer and distributor of mass spectrometers and analytical instrumentation headquartered in Milford, Massachusetts. Waters and PEAK Scientific have been working in conjunction since the production of the NM30LA generator in 1997, the predecessor to our best-selling NM32LA generator.

This was the first example of a PEAK Scientific nitrogen generator being formally approved specifically for use with a mass spectrometer, underlining the unique relationship between PEAK and Waters. Since then, PEAK has produced several dedicated gas generator solutions for Waters applications including the Genius NM32LA, Genius XE 35 and Solaris XE.

#### 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 Waters' range of LC-MS instruments.

In most cases, there is a dedicated PEAK Scientific gas generator for Waters' range of LC-MS instruments. PEAK have engineered purpose built generators, matching the most efficient operating standards of Waters' LC-MS, AP-GC and FLSD instruments



### **Our Brand Promise**

# Our priority is your complete satisfaction

Our commitment is to provide you with a reliable gas generation solution that adds value to your workflow. We achieve this through robust product engineering, our unique comprehensive 'repair or replace' warranty, and a global on-site maintenance service that is unmatched in our industry.

Our priority is your complete satisfaction. By taking due care of your gas flow, we give you peace of mind and enable you to focus on your workflow. This is the PEAK Promise.

Our core gas generator offering to support Waters analytical instruments can be divided into two categories. Our best-selling Genius XE and value Genius SQ series, designed mainly for LC-MS applications, are self-contained systems featuring integrated compressors, delivering laboratory-grade nitrogen at various pressures and flow rates required by a wide variety of Waters instruments.

The Infinity XE 60 & Solaris 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 including high-flow for more gas hungry applications such as sample evaporation or supplying multiple mass-spec instruments.

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**

		PEARS	olution	
Mass Detection	Air Requirement	Single Instrument	Two Instruments	
Acquity Qda	No compressor	Solaris XE for Waters	Infinity XE 6010	
Acquity Rda	Built in compressor	Genius SQ 24	Genius XE 70	
Single Quads	Air Requirement			
SQD 2	No compressor	Solaris XE for Waters	Infinity XE 6010	
SQ Detector ZQ	Built in compressor	Genius SQ 24	Genius XE 70	
	No compressor	Solaris XE for Waters	Infinity XE 6010	
3100 Mass Detector	Built in compressor	Genius SQ 24 Genius XE 7		
	No compressor	Solaris XE for Waters	Infinity XE 6010	
RADIAN ASAP	Built in compressor	Genius SQ 24	Genius XE 70	
Tandem Quads	Air Requirement			
Xevo TQD-S Xevo TQD-XS	No compressor	Solaris XE for Waters	Infinity XE 6010	
Xevo TQ-MS Xevo TQ Absolute	Built in compressor	Genius XE 35	Genius XE 70	
Xevo TQD	No compressor	Solaris XE for Waters	Infinity XE 6010	
Xevo TQD-S Micro Quattro Micro API Quattro Micro GC	Built in compressor	Genius SQ 24 Genius XE		
	Air Requirement			
Xevo G2-XS Tof	No compressor	Solaris XE for Waters Infinity XE 6		
Xevo G2-S Tof Xevo G2 Tof Xevo Tof	Built in compressor	Genius XE 35 Genius XE 70		
QTof	Air Requirement			
Xevo G2-XS QTof Xevo G2-S QTof	No compressor	Solaris XE for Waters	Infinity XE 6010	
Xevo GZ QTof Xevo QTof	Built in compressor	Genius XE 35	Genius XE 70	
lon Mobility	Air Requirement			
Vion G2-XS QTof SYNAPT G2-Si * Select Series Cyclic MS*	No compressor	Solaris XE for Waters	Infinity XE 6010	
SYNAPT G2-S * SYNAPT G2 * SYNAPT *	Built in compressor	Genius XE 35	Genius XE 70	
Ion Sources	Air Requirement			
APGC	No compressor	Precision Nitrogen Trace 1L	2 x Precision Nitrogen Trace 1L	
	Built in compressor	Precision Nitrogen Trace 1L with	optional Precision Air Compressor	
LC Detectors	Air Requirement			
2424 ELSD	No compressor	Solaris 10		
ACQUITY ELSD	Built in compressor	Solaris 10 With optional Solaris Air Compressor		
2420 ELSD	to the nitrogen requirement for API gas for		Sours - Complessor	



# 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.

Variable flow up to 70 L/min & pressure up to 116psi

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

ECO (Electronic Compressor Optimisation™) technology for low energy consumption and compressor durability

Next-generation high performance premium compressors, engineered exclusively for Genius XE

Smaller & quieter than previous generation of Genius

On-board service scheduling and system diagnostics

Additional compressor capacity (Genius XE 70 only)



Product	Flow Rate	Gas Output		Size (HxWxD)	Application
Genius XE 35	35 L/min	Nitrogen	116 psi/8 bar	650 x 570 x 710 mm25.2 x 22.5 x 28"	LC-MS/MS
Genius XE 70	70 L/min	Nitrogen	116 psi/8 bar	1000 x 570 x 710 mm39.4 x 22.5 x 28"	LC-MS/MS

<sup>\*</sup> 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.

# 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 I/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 10

#### DESCRIPTION

PEAK Scientific's Solaris 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**

Variable outlet flow, pressure and purity
UHP nitrogen for ELSD at up to 10 L/min, 100 psi
and up to 99.5% purity
Compact benchtop form factor, discrete

aesthetic styling
Colour indicative LED lighting for easy status

awareness
Optional Solaris Air Compressor stackable

module

Engineered on reliable and proven existing

technology

Manufactured and tested to highest spec in UK,

CE/FCC certified

12 month comprehensive on-site warranty



Product	Flow Rate	Gas Output			Application
Solaris 10	10 L/min	Nitrogen	100 psi / 6.9 bar	156 x 416 x 540 mm 6.1 x 16.4 x 21.3"	ELSD, Compact Mass Spectrometers TLD Readers



# Solaris XE for Waters

#### DESCRIPTION

PEAK Scientific's Solaris XE nitrogen generator offers a reliable, compressor-free gas solution that can comfortably meet the demands of most mass spectrometers within Waters' portfolio of instruments. Using our tried and tested membrane technology, 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.

#### **Features**

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

Tested and approved by Waters

Compact, wall-mountable and stackable\* with Waters ACQUITY QDa, maximizing the use of valuable laboratory floor or bench space

Variable outlet flow, pressure and purity

Colour indicative LED lighting for easy system status awareness

Manufactured and tested to highest spec in UK, CE/ FCC/CSA certified

Safer and more convenient than pressurized cylinders, dewars or bulk storage

12 month on-site comprehensive warranty

Backed by [PEAK Protected] global on premise servicing and technical support



\*Please ask your local sales representative for advice on supported stacking configurations.

Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Solaris XE for Waters	35 L/min	Nitrogen	116 psi/8 bar	156 x 343 x 650 mm6.2 x 13.5 x 25.6"	Waters ACQUITY QDa Detector  A list of instruments that are compatible with Solaris XE can be found on our Waters application list.

"It is small and looks nice and is very quiet. The shape makes it very easy to place underneath our desk. Everything was good. The delivery was very fast. We were always well informed about the timing of the delivery."

#### Maria Fedorova

Research Group Leader Centre for Biotechnology and BiomedicineUniversity of Leipzig Germany

# Infinity XE 6010

Producing between 10-500 L/min of high purity nitrogen gas, the Infinity XE 6010 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.

- Flow rates up to 500 L/min\*
- N2 purity up to 99.5%
- Versatile solution with varying Nitrogen fl ow, pressure & purity capabilities
- In-field expansion of nitrogen capacity to meet growing lab demands
- · Optional second outlet for Dry Air



Product	Flow Rate	Gas Output	Pressure	Size (HxWxD)	Application
Infinity XE 6010	up to 130 L/min	Nitrogen	135 psi	405 x 940 x 995 mm 15.9 x 37 x 39.2"	N2 supply for multiple LC-MS instruments

## **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.

# 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!

North America Tel: +1 866 647 1649

China Tel: +86 21 5079 1190 Europe

Tel: +44 (0)141 812 8100

India

Tel: 1800 2700 946

For contact details of all PEAK local offices around the world, visit: www.peakscientific.com/offices