

**PEAK** 

SCIENTIFIC

Your local *gas generation* partner



**H O R I Z E N**

One small footprint. **One giant leap**

**Horizen 24**

Nitrogen generator for single quad LC-MS

# One small footprint. One giant leap.

Introducing the most advanced nitrogen generator on the market today, utilising new technologies to bring your single quad LC-MS the reliable, consistent and high purity nitrogen you need to perform routine and non-routine analyses, day after day.

## With Horizen 24, look forward to:

- › The most **energy efficient** nitrogen generator on the market
- › Ultra-dry, non-methane hydrocarbon-free nitrogen at up to **99.9% purity** and up to 116 psi
- › Up to **55% less energy**, saving power consumption\*
- › **>50% less heat**, reducing your air conditioning costs
- › The **smallest nitrogen generator** in its class, fitting easily under any lab bench
- › **Minimized operational carbon footprint** compared with cylinders and equivalent generator models
- › State-of-the-art patented **AirMax™ technology**
- › **Easy to plan** annual maintenance

\* Benchmarked against equivalent competitor

# The very latest in gas generation technology

As the world leader in LC-MS nitrogen generator design, production and service, we know that as demands on your lab increase, you need a generator you can rely on.

By removing the inconveniences of bulky gas cylinders and dewars, your lab can count on a consistent, high quality, high-purity nitrogen supply from one small, energy efficient unit.

## **1** Save money

With Horizen 24's innovative energy management systems, coupled with patent pending moisture removing, Horizen 24 will reduce not only your lab's electricity bills but also the demands on your site's air conditioning.

## **2** Save space

It's simple. Smaller footprint, better nitrogen. Designed by our team of world renowned nitrogen generation experts, Horizen 24 provides a space-saving solution without compromising on quality, reliability or purity.

## **3** Save the planet

With lower energy consumption than any other gas generator on the market, Horizen 24 offers a sustainable solution that helps to reduce your lab's carbon footprint.

# One giant leap in performance

## Dedicated internal compressor

PEAK designed compressor technology, reducing power consumption up to 60% in comparison to the equivalent PEAK generator, optimizing gas delivery and also reducing heat output in your lab.

## Space-saving chassis & innovative design

By taking an innovative approach to gas generation technology, our expert team of gas generation engineers have managed to reduce Horizen's footprint by 28%\*, giving you more space in your lab than ever before, especially when compared with bulky nitrogen cylinders.

This innovative approach also brings additional benefits as it is the careful, yet purposeful, positioning of internal components which, together with the highest grade components, brings reliable purity, reduced heat output and greatly reduced power consumption.

\*Compared with previous comparable PEAK model







## Heat Optimization Technology

Protecting the membrane from water droplets and enhancing performance and reliability in the gas stream, the Heat Optimization Technology in Horizen 24 is a space saving and cost effective unique component designed by PEAK Scientific (patent pending). The result? Ultra-dry Nitrogen for your LC-MS analysis, -70C at full flow.



## Advanced Multi-Stage Purification

### **Innovative AirMax™ Intake Filter**

Combining 1st stage particulate filtration with optimized air distribution, the AirMax intake filter reduces generator noise and improves the gas quality prior to entering the membrane.

### **Hollow fibre membrane**

The membrane technology utilized in Horizen 24 ensures high purity N2 for your single quad application, working together with the Heat Optimization Technology, compressor and as part of our Advanced Multi-Stage Purification, setting the standard for nitrogen generation for the lab.

### **NMHC adsorption trap**

Proprietary non-methane hydrocarbon (NMHC) filtration stage designed to remove ambient long-chain hydrocarbons (down to <1ppm), reducing risk of spectral interference in some analytical results. The innovative design of the NMHC trap has been optimized for efficiency, performance, and service life, the final stage of our Advanced Multi-Stage Purification.

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# Always running

The importance of 24/7 operation and having a dependable nitrogen supply whenever required is paramount to any lab. We've built Horizen 24 with this in mind and together with PEAK's unrivalled worldwide service teams and technologies, Horizen 24 is the reliable solution your lab needs to support your single quad's outcomes.

With a two year warranty as standard including all components and labour\*, coupled with PEAK's 48 hour on site response time, faster in some regions, our mission is to keep your downtime to a minimum.

## Visual Support

Enhancing our 48 hour on-site response time is a lab gas generator first, augmented reality support. Providing real time diagnostics and fault-finding, Visual Support is only available from PEAK Scientific and can have your generator up and running in a matter of minutes in the unlikely event of an issue.



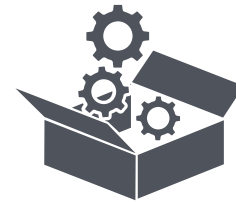
### Rapid Response

Complete maintenance care with 48 hour rapid response breakdown cover



### Service Plans

Complete maintenance care with guaranteed response time breakdown cover



### Replacement Parts

Genuine PEAK parts with express delivery, ensuring optimal performance and lifetime

\* 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. For full terms and conditions visit [www.peakscientific.com/warranty-statement](http://www.peakscientific.com/warranty-statement)

# Horizen 24

## Technical Specifications

|  | Horizen 24  |
|--|---|
| Gas Type                                 | Nitrogen  |
| Max Flow Rate                            | up to 24 L/min  |
| Max Pressure                             | 100-116 psi (6.8-8 bar)                                   |
| Gas Outlets                              | 1 x 1/4" BSPP   |
| Purity**                                 | up to 99.9% (95% at 24LPM)                                |
| THC                                      | <1ppm   |
| Max Relative Humidity                    | 80% RH  |
| Max Altitude                             | 3000m   |
| Particles                                | < 0.01 µm   |
| Phthalates & BHT                         | Phthalate & BHT Free                                      |
| Suspended Liquids                        | None  |
| Dewpoint^                                | -70°C   |
| Non-Methane Hydrocarbon Content          | < 1 ppm NMHC  |
| Operating Temperature                    | 5°C (41°F) to 35°C (95°F)                                 |
| Electrical Requirements                  | 100 - 240V ±10%, 50/60Hz, 6.4 - 2.9A                      |
| Power Consumption (Max measured @100psi) | 230V - max 559W / 120V - max 625W / 100V- max 636W        |
| Input Voltage & Frequency                | 115-230V +/- 10% 50/60Hz                                  |
| Current                                  | 2.5A  |
| Heat Output (Max measured @100psi)       | 230V - 1907 BTU/hr / 120V 2132 BTU/hr / 100V- 2172 BTU/hr |
| Noise Level†                             | 59 dB(A) @ 1m   |
| Generator Dimensions (H x W x D)         | 574 x 450 x 719 mm ( 22.5 x 17.7 x 28.3 ")                |
| Generator Weight                         | 59 kg / 130 lbs   |
| Shipping Weight                          | 81 kg / 179 lbs   |

## Ordering Information

|                           |  |
|---------------------------|--|
| Part Number               | 3304532  |
| Annual Service            |  |
| Complete Maintenance Plan | <b>visit:</b> <a href="http://www.peakscientific.com/ordering">www.peakscientific.com/ordering</a> |

\*\* Factory certified purity with respect to O2 content. Actual purity varies in relation to flow (min. 95% at maximum flow output)

† Noise level expressed as SPL (Sound Pressure Level) measured at 1m from frontal source in a reverberant chamber

^ Note: Dewpoint of -70C will achieved within 24hours average (depending on environmental conditions and typical gas flow)

**Take a leap** *and discover more!*

[peakscientific.com/horizen](http://peakscientific.com/horizen)

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