

Your local **gas generation** partner

PEAK 
SCIENTIFIC



Precision Series

Configurable gas generation system
for GC and GC-MS

A **PEAK**  International Group Company

Discover more at www.peakscientific.com/precision

Streamline your GC workflow

Combining convenience and reliability in a stackable and modular design, Precision is the safe and practical GC gas solution for zero air, hydrogen and nitrogen gas in your lab.

Only Precision gives you all this:

- ▶ **Continuous** and **consistent** source of laboratory-grade gas for GC & GC-MS
- ▶ **Safer** and **more convenient** than pressurized cylinders, dewars or bulk storage
- ▶ **Compact, modular, stackable system** allowing maximum use of valuable laboratory floor or bench space
- ▶ High purity **hydrogen, nitrogen** and **zero air** gas at flow rates to suit any GC configuration
- ▶ **Complete gas solution** for carrier, detector, reference, flame support and sample preparation
- ▶ **Proven** and **robust safety systems** including internal leak detection on hydrogen models
- ▶ **12 month warranty** across the range, 3 year PEM cell warranty on Hydrogen models

Precision with convenience

Precision gas generators support thousands of GC applications throughout the world providing any combination of nitrogen, hydrogen or zero air to supply detector and/or carrier gas to support your specific GC setup.

Through our understanding of your priorities to have safer, more efficient, high purity gas in the lab, we have used our expertise to develop the Precision series; a total gas solution for GC and GC-MS.

Core to the Precision Series are the Hydrogen Trace and Nitrogen Trace models, cost-effective alternatives to helium - an increasingly expensive gas for laboratories worldwide as demand outstrips supply.

Complete GC gas solution

- **Enhance Workflow**

Produce gas on demand, minimize disruptions and run samples around the clock without any risk of supply loss or running out of gas mid-analysis streamlining your workflow.

- **Improve Safety**

Multiple integrated safety features within all models, including internal leak detection on hydrogen models with low stored volume and pressure of gas. Far safer than highly pressurized cylinders.

- **Future Proof**

Combine different generators into a single stack to suit your lab's GC configuration with multiple flow rate options to future proof your GC carrier and detector gas supply.

- **Save Space**

Modular design allows for a small laboratory footprint and if starting with one or two modules, additional units can be stacked on top, minimizing the impact on your lab's floor or bench space.



Modular configurations

The Precision Series can be stacked in multiple variations depending on your lab's particular GC requirement, whether it is to supply GC carrier gas on its own, delivering flame support gas to detectors or for other detectors like TCDs or ECDs.

The Precision Series can also be purchased with an optional, stackable air compressor module for labs without a suitable air supply for the nitrogen or zero air generators.

For a full method list **visit: www.peakscientific.com/gc-methods/**

GC flame detector gas

- Precision Zero Air
- Precision Nitrogen (option for make-up gas)
- Precision Hydrogen

GC H₂ carrier gas with FID

- Precision Zero Air
- Precision Nitrogen (option for make-up gas)
- Precision Hydrogen Trace

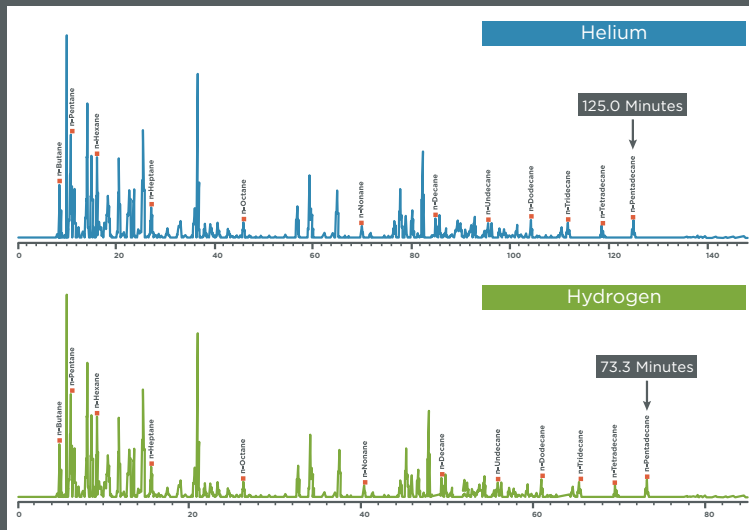
GC-MS carrier gas

- Precision Hydrogen Trace



Why switch carrier gas?

As helium costs increase and availability becomes more uncertain. A switch to hydrogen carrier gas allows you to take control of your gas supply, reduce costs and improve efficiency.



Carrier run time:
125 minutes

He

Carrier gas run times up to
40% faster with Hydrogen
when compared with Helium.

Carrier run time:
74 minutes

H₂



GC N₂ carrier gas with FID

- Precision Zero Air
- Precision Nitrogen Trace
- Precision Hydrogen

GC-ECD or GC-TCD carrier & detector gas

- Precision Nitrogen Trace



Performance

Increase your lab's productivity

Precision is designed and manufactured to enhance workflow for labs using GC. Removing the hassles and inconvenience of cylinders, such as running out of gas mid-analysis, managing supply stocks and placing orders. Replacing helium cylinders with a hydrogen generator can also bring faster run times, increasing the number of samples your lab can run daily.

Safety as standard

Precision gas generators greatly reduce risks in the laboratory. Manual handling of highly pressurized cylinders in the lab remains a significant potential hazard. With Precision, not only are highly pressurized and heavy cylinders removed from the lab environment, but multiple safety features are also included as standard such as auto-shutdown on leak detection, mechanical shutdown fail-safe, minimal volume of gas stored and gas generated on demand.

Quality assured performance

All PEAK gas generators are tested to comply with a number of internationally recognized standards including CE & CSA. Manufactured at PEAK's ISO 9001 accredited center of excellence and supported on-site by PEAK's global network of PEAK field service engineers, Precision delivers a consistently pure GC gas supply laboratories can rely on.



Peace of mind



“A key benefit for us has been the elimination of the safety hazards associated with compressed gas cylinder handling.”

**Kerri Heckrow, Corporate NPD Lab Manager,
Evergreen Packaging, North Carolina, USA**

“We have gas available on demand and we don’t have to worry about the purity or running out.”

There are also cost benefits in that we no longer have to order cylinders and pay monthly rental.”

Brian Cowan, Laboratory Manager, Council for Scientific and Industrial Research (CSIR), South Africa

“The PEAK generators were highly recommended by Shimadzu and were sold as a package with the GC-MS.”

Federico Cozzi, Laboratory Manager, University of Copenhagen, Denmark

World Class Customer Service

With all PEAK Scientific products comes industry leading support from **[PEAK Protected]**[™]. With PEAK certified engineers located across the globe you can be sure that on-site product support is never far away. With PEAK, gas is one less thing for your lab to worry about.



24 Hour Response

Rapid response service engineer network, guaranteed on-site within 72 hours globally, 48 or 24 hours available in some regions.



Manufacturer Approved Parts

All components in Precision are engineered and tested to ensure optimal performance in your generator.



95% First Time Fix

Having dedicated PEAK engineers around the world means most issues are resolved on first visit – 95% of the time in fact.



Installation

A dedicated PEAK engineer will visit your lab to install and setup your generator.



Certified Engineers

Over 100 dedicated, fully certified direct PEAK Service Engineers globally, with expert knowledge in troubleshooting and fixing any generator.



Global 24hr Technical Support

Around the clock support by phone or online with our global technical helpdesk.

Precision Series

Model Description	Gas Type	Flow Rate*	Purity	Max Pressure
Precision Nitrogen, 250cc	Nitrogen	250 cc/min	99.9995%	80psi
Precision Nitrogen Headspace 250cc		250 cc/min	99.9995%	100psi
Precision Nitrogen, 600cc		600 cc/min	99.9995%	80psi
Precision Nitrogen, 1L		1 L/min	99.9995%	80psi
Precision Nitrogen Trace, 250cc	Zero Nitrogen	250 cc/min	99.9995% / <0.05ppm NMHC	80psi
Precision Nitrogen Trace, 600cc		600 cc/min	99.9995% / <0.05ppm NMHC	80psi
Precision Nitrogen Trace, 1L		1 L/min	99.9995% / <0.05ppm NMHC	80psi
Precision Zero Air, 1.5L	Zero Air	1.5 L/min	<0.05ppm NMHC	80psi
Precision Zero Air, 3.5L		3.5 L/min	<0.05ppm NMHC	80psi
Precision Zero Air 7L		7 L/min	<0.05ppm NMHC	80psi
Precision Zero Air 18L		18 L/min	<0.05ppm NMHC	80 psi
Precision Zero Air, 30L		30 L/min	<0.05ppm NMHC	100psi
Precision Air Compressor	Compressed Air	Suitable for various Precision Combinations	N/A	145psi
Precision Hydrogen, 100cc	Hydrogen	100 cc/min	99.9995%	100psi
Precision Hydrogen, 200cc		200 cc/min	99.9995%	100psi
Precision Hydrogen, 300cc		300 cc/min	99.9995%	100psi
Precision Hydrogen, 450cc		450 cc/min	99.9995%	100psi
Precision Hydrogen 1.2L		1.2 L/min	99.9995%	100psi
Precision Hydrogen Trace, 250cc		250 cc/min	99.99999%**	100psi
Precision Hydrogen Trace, 500cc		500 cc/min	99.99999%**	100psi
Precision Hydrogen Trace 1.2L		1.2 L/min	99.99999%**	100psi

* All flow rates are stated in sccm at 273.15K and 1.01bar

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

Accessories	Water Bottle 4L	Water Bottle 8L	Hydrogen Leak Detector (GC in-oven)
Description	4L Water bottle for use with Precision Hydrogen & Hydrogen Trace	8L Water bottle for use with Precision Hydrogen & Hydrogen Trace	Hydrogen Gas Detector for use with Precision Hydrogen & Hydrogen Trace

Need help calculating your GC gas flows?
Visit: peakscientific.com/gasflow

Contact us today to discover more!

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