## Precision Hydrogen Trace Hydrogen Generator for GC



Your local **gas generation** partner

#### Description

The Precision Hydrogen generators are designed to provide the hydrogen gas required for carrier gas and detectors requiring Hydrogen fuel gas, such as FID and FPD. One generator is capable of supplying multiple GCs, and can be suited to individual customers' needs, depending on the flow requirement.

These generators utilize a Proton Exchange Membrane (PEM) to generate Hydrogen gas from deionized water, with a pressure swing adsorption (PSA) dryer used to remove residual moisture from the gas.

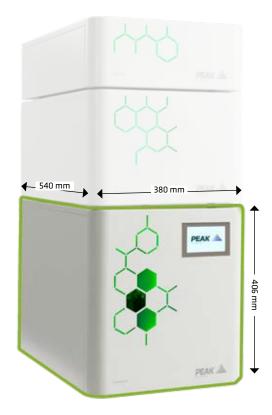
Precision Hydrogen gas generators come with various safety features as standard, giving you complete peace of mind in the laboratory and a far safer, dependable and more convenient alternative to cylinder gas.



#### **Applications**

- **Carrier Gas** 
  - GC-MS
  - GC

**Detector Gas** Fuel Gas



Precision Hydrogen Trace shown in a typical Precision stack.

### **Key Features**

- Suitable for flame gas and carrier gas at trace detection limits
- 99.99999% Purity
- Internal leak detection with automatic shutdown features
- Proven PEM technology to generate hydrogen safely and reliably
- Regenerative PSA dryers to ensure highest level of purity
- Automatic loading pump as standard
- Maintenance limited to replacing de-ionizer cartridge
- Compact, space-saving modular design
- Creates hydrogen on demand, minimal storage of hydrogen in the system
- Combine multiple units for higher flow requirements
- GC in-oven hydrogen leak detector available as an optional extra
- Peak offers a 3 year cell warranty with this generator as standard.



Technical Specifications	Hydrogen Trace, 250cc	Hydrogen Trace, 500cc	Hydrogen Trace , 1200cc
Max Flow Rate*	250 cc/min	500 cc/min	1200 cc/min
Max Pressure	100 psi / 6.9 bar		
Purity	99.99999%**		
Dew Point	-75 °C / -103 °F		
Gas Outlets	1x1/8" Swagelok compression fitting		
Water Purity Requirement	<1.0µ Siemens/cm OR >1 Mohm-cm		
Water Consumption	0.17 - 0.46 L/day	0.4 - 1.2 L/day	up to 2.1 L/day
Operating Temperature	10°C - 35°C / 50°F - 95°F		
Electrical Requirements	110 / 230 V 50 / 60 HZ max 6 A		110 / 230 V 50 / 60 HZ 10 A max
Power Consumption	477 Watts	787 Watts	787 Watts
Heat Output	up to 1000 BTU/ hr		
Generator Dimensions (WxDxH)	380 x 540 x 406mm / 14.9 x 21.2 x 15.9"		
Generator Weight	29 Kg (64 lbs)		31.5 Kg (69.5 lbs)
Noise Level	Silent in operation		

<sup>\*</sup> All flow rates are stated in sccm at 273.15K and 1.01bar

<sup>\*\*</sup> Based on O2 content independently verified by National Physical Laboratory, UK

Ordering Information			
Part Number	64-0250	64-0500	3301768 (110v/230v)
Annual Service			
Standard Maintenance Plan	www.peakscientific.com/ordering		
Complete Maintenance Plan			

Accessories	Water Bottle 4L	Water Bottle 8L	Hydrogen Leak Detector (GC in-oven)
Part Number	10-9016	10-9017	10-9010

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Peak Scientific gas generators define the benchmark in reliability, convenience and performance in laboratories around the world, and come backed by a 12 month warranty. Beyond this period however you can ensure that your investment continues to be **[Protected]** by our comprehensive generator care cover.

Our world-class aftercare support packages deliver a program of scheduled preventative maintenance whilst giving you the reassurance of instant access to worldwide technical support and priority on-site response in the untimely event of a breakdown.

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