

# Precision Hydrogen Trace 500 Hydrogen Generator

Application: GC & GC-MS Carrier & Detector  
Gas, ICP-MS Reaction Gas

Part number: 64-0500



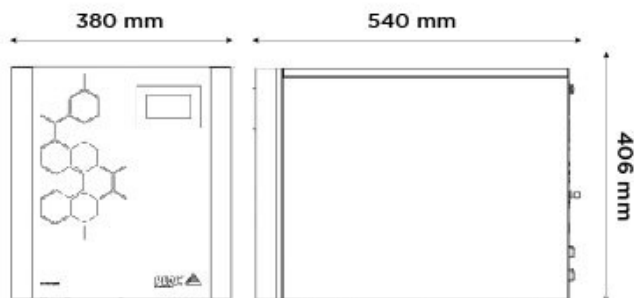
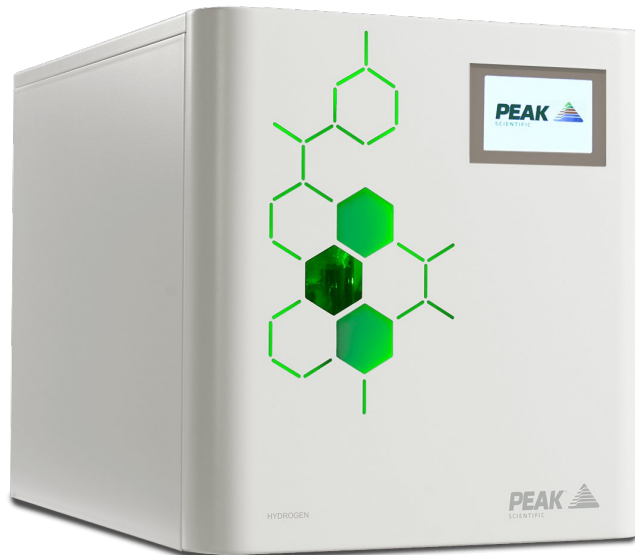
## Description

The Precision Hydrogen Trace 500 generator is designed primarily for GC carrier gas use, and can also be used for detectors requiring hydrogen fuel gas such as FID and FPD. One generator is capable of supplying multiple GC instruments.

This generator offers a safe, reliable and convenient solution for those using hydrogen for GC carrier gas, producing the highest purity of hydrogen from the Precision Series by utilizing a Proton Exchange Membrane to create the hydrogen gas from deionized water, as well as Pressure Swing Absorption and molecular sieve technology to remove moisture content down to trace levels. The Precision Hydrogen Trace generators are also suitable for providing collision gas for ICP-MS.

The Precision Hydrogen Trace 500 generator also comes with many highly robust safety features as standard, allowing for peace of mind in the laboratory and a far safer, dependable and more convenient alternative to cylinder gas.

- **Gas types** Hydrogen
- **Integrated compressor:** No
- **Application Types:**  
GC & GC-MS Carrier & Detector Gas, ICP-MS Reaction Gas



## 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.

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

## Technical Specifications

### Precision Hydrogen Trace 500 Hydrogen Generator

Gas Type	Hydrogen
Max Gas Flow:	500 *cc/min
Max Output Pressure:	100psi/6.9bar
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Max Purity:	99.99999% *
Gas Outlets Fitting:	1 x 1/8" Swagelok compression fitting
Water Purity Requirements:	ASTM Type II (<1 µS/cm / >1 MΩ-cm)
Water Consumption:	0.4-1.2 L/Day
Power Consumption:	787 Watts
Voltage:	110 / 230
Frequency:	50 / 60
Current:	6 Amps
Heat output:	1000
Max Operating Temp:	35°C / 95°F
Accreditations:	CSA, CE, FCC
Size (HxWxD) mm	406 x 380 x 540 mm
Size (HxWxD) Inches	16 x 15 x 21.3 inches
Generator Weight	29kg / 63.8lbs

\* All flow rates are stated in sccm at 273.15K and 1.01bar \*\* Based on O2 content independently verified by National Physical Laboratory, UK

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