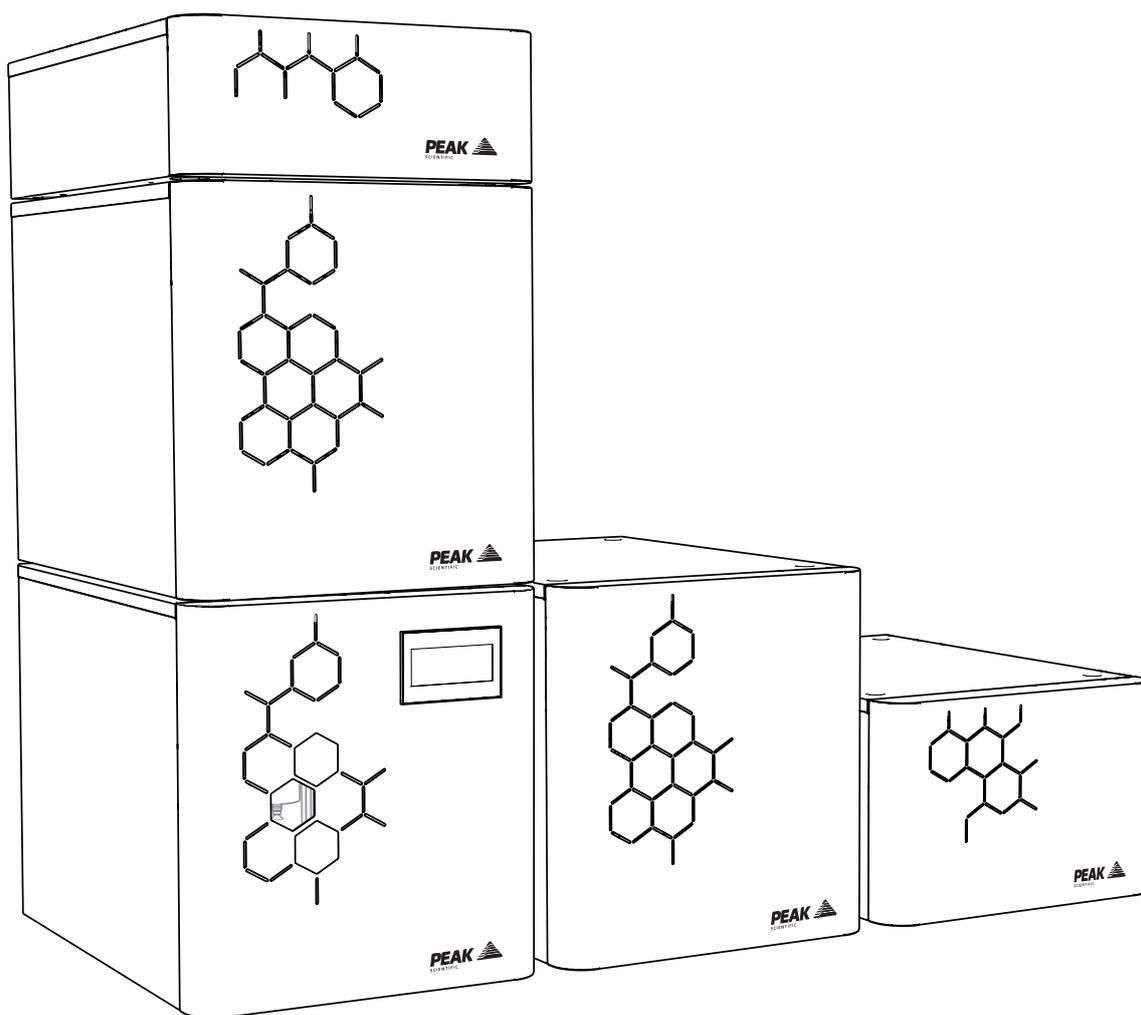


Precision Range (All Models)

Site Preparation Guide



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Change History

Rev	Comment	Name	Date
2	Text Update	CD	08/02/2023

How to use this Manual

This manual is intended for end users and has been written so that it can either be read as a step by step guide to site preparation or as a reference document where you can skip to the relevant information.

Users can refer to the contents page to find the relevant information.

Please review each of the following sections carefully.

Thank you for selecting Peak Scientific to meet your Gas Generation needs, and should you require any further assistance or support please do not hesitate to contact Peak Scientific or Peak Partner from which you purchased your Generator.

Customer Responsibilities

To ensure a successful and timely installation of our Peak generator, please refer to this set of requirements.

Correct site preparation is the first key step in ensuring that your generator and systems operate reliably over an extended lifetime.

This document is an information guide and checklist that outline the requirements for your site.

It is essential that your site meets the following specification prior to the installation date:

- The necessary spatial requirements are met.
- The correct environment is provided for the generator.
- Electrical outlet locations and quantities are planned.
- Adequate exhaust ventilation is provided.
- The correct tubing lengths and diameters are used in relation to the distance from the instrument.
- A supply of ASTM Type II de-ionised water ($<1\mu\text{S} / >1\text{M}\Omega$) is available for Precision H2 generators.
- Nitrogen and Zero Air generators not being supported by the Precision Air Compressor are supplied with compressed air meeting ISO8573-1:2010 Class 1.4.1 at the required pressure.

More detailed information is available in the User Manual for each Precision generator model.

Failure to meet the site requirements of your Peak generator as stated above and detailed in this document could result in the unit underperforming and **possible loss of warranty.**

Safety Notices

Peak Scientific Instruments cannot anticipate every possible circumstance which may represent a potential hazard. The warnings detailed within this manual detail the most known potential hazards, but by definition cannot be all inclusive. If the user employs an operating procedure, item of equipment or a method of working which is not specifically recommended by Peak Scientific, the user must ensure that the equipment will not be damaged or become hazardous to persons or property.

Symbols

This manual uses the following symbols to highlight specific areas important to the safe and proper use of the Generator

 WARNING	A WARNING notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause personal injury or in the worst case death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood or met.
 CAUTION	A CAUTION notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause damage to the Generator or the Application. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood or met.
	Caution, risk of electric shock. Ensure power to the Generator has been removed before proceeding.

Safety Notice to Users



These instructions must be read thoroughly and understood before installation and operation of your Peak Precision Hydrogen Generator. Use of the Generator in a manner not specified by Peak Scientific MAY impair the SAFETY provided by the equipment.



When handling, operating or carrying out any maintenance, personnel must employ safe engineering practices and observe all relevant local health and safety requirements and regulations. The attention of UK users is drawn to the Health and Safety at Work Act 1974, and the Institute of Electrical Engineers regulations.

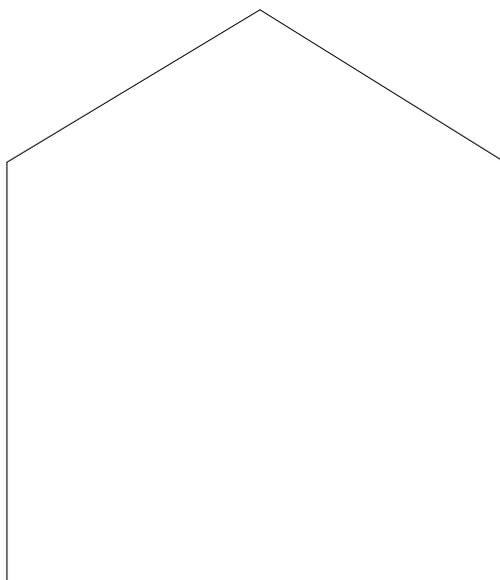
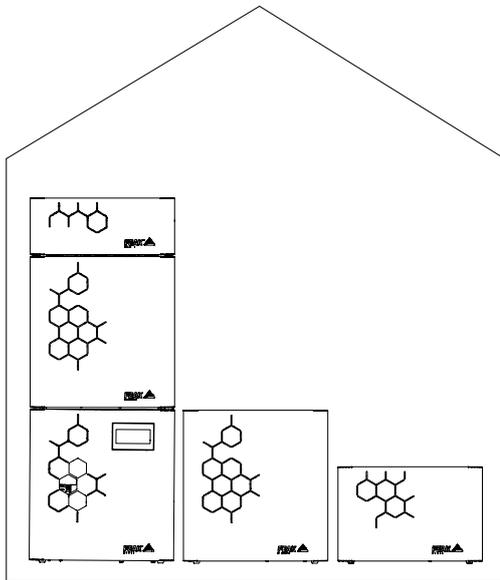


If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment maybe impaired.

Site Preparation

Environmental Control

If the generator is stored in an enclosed space the environment must be controlled via an air conditioner or extraction fan. The generator should be located indoors on a flat surface and should be, within reason, protected from direct sunlight, moisture and dust.



Generator **MUST NOT** be stored or installed outside.



Do not position the generator in a way that is difficult to operate and disconnect safely.

Space Provision

The minimum space should be provided as follows:

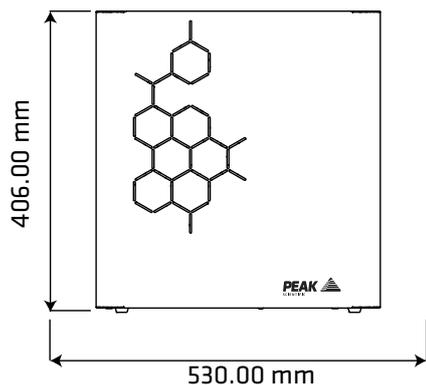
Air Compressor

Hydrogen

Hydrogen Trace

Nitrogen Trace

Zero Air 30L

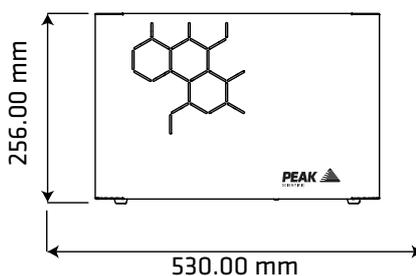


Headspace

Nitrogen

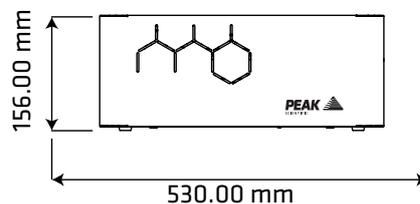
Zero Air 7L

Zero Air 18L

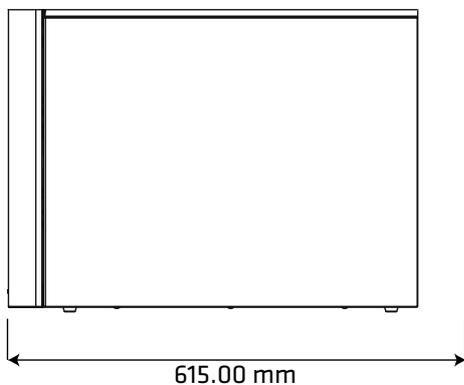


Zero Air 1.5L

Zero Air 3.5L



All models



Failure to provide adequate cooling space around the generator may cause damage to the generator. This will reduce service life and invalidate warranty.

Electrical Requirements

Connect the generator into an appropriate voltage supply between 100-240V rms, refer to the generator serial plate for input specification and ensure your supply matches the requirements.

If the appropriate power cord is not supplied; a new plug, rated to at least 10 amps, can be fitted by a qualified electrician.



This unit is classified as SAFETY CLASS 1. THIS UNIT MUST BE EARTHED. Before connecting the unit to the mains supply, please check the information on the serial plate. The mains supply must be of the stated AC voltage and frequency.

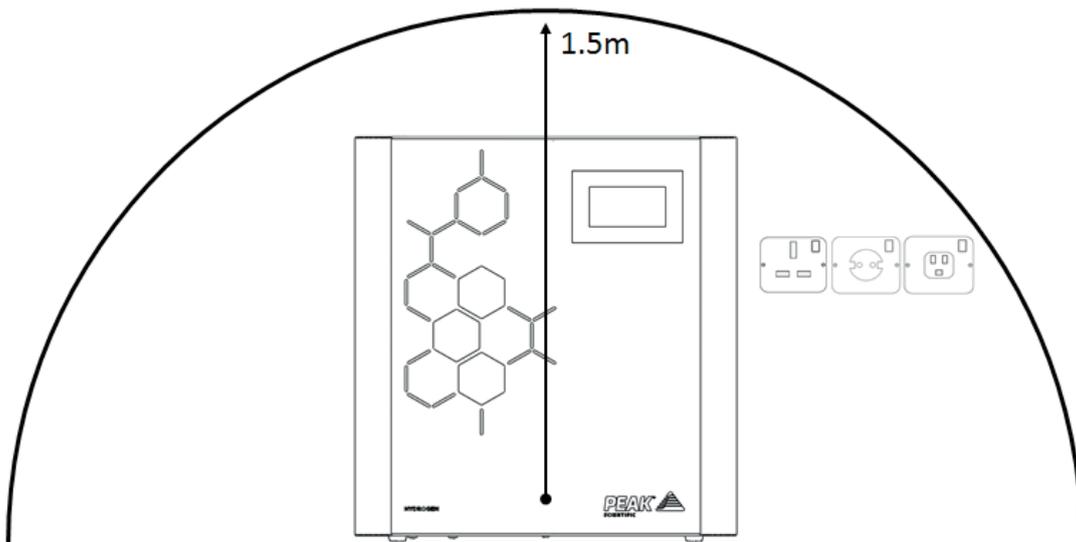
EARTH/GROUND (E):- Green & Yellow or Green

LIVE (L):- Brown or Black

Neutral (N):- Blue or White

If the mains power at your location is outside the required range of 100-240V rms nominal, then a transformer suitable transformer should be sourced, to boost the mains power to an acceptable level.

The power cable supplied with the generator is 2m long. A mains socket providing the power should be located adjacent to the generator and within a 1.5m radius to the generator.



*Precision Hydrogen Model Shown

On-Site Transit

Take care when moving the generator in its shipping crate through doorways and other openings such as elevators. The shipping weights are stated in the generators User Manual, please ensure correct lifting practices are employed for your units shipping weight.

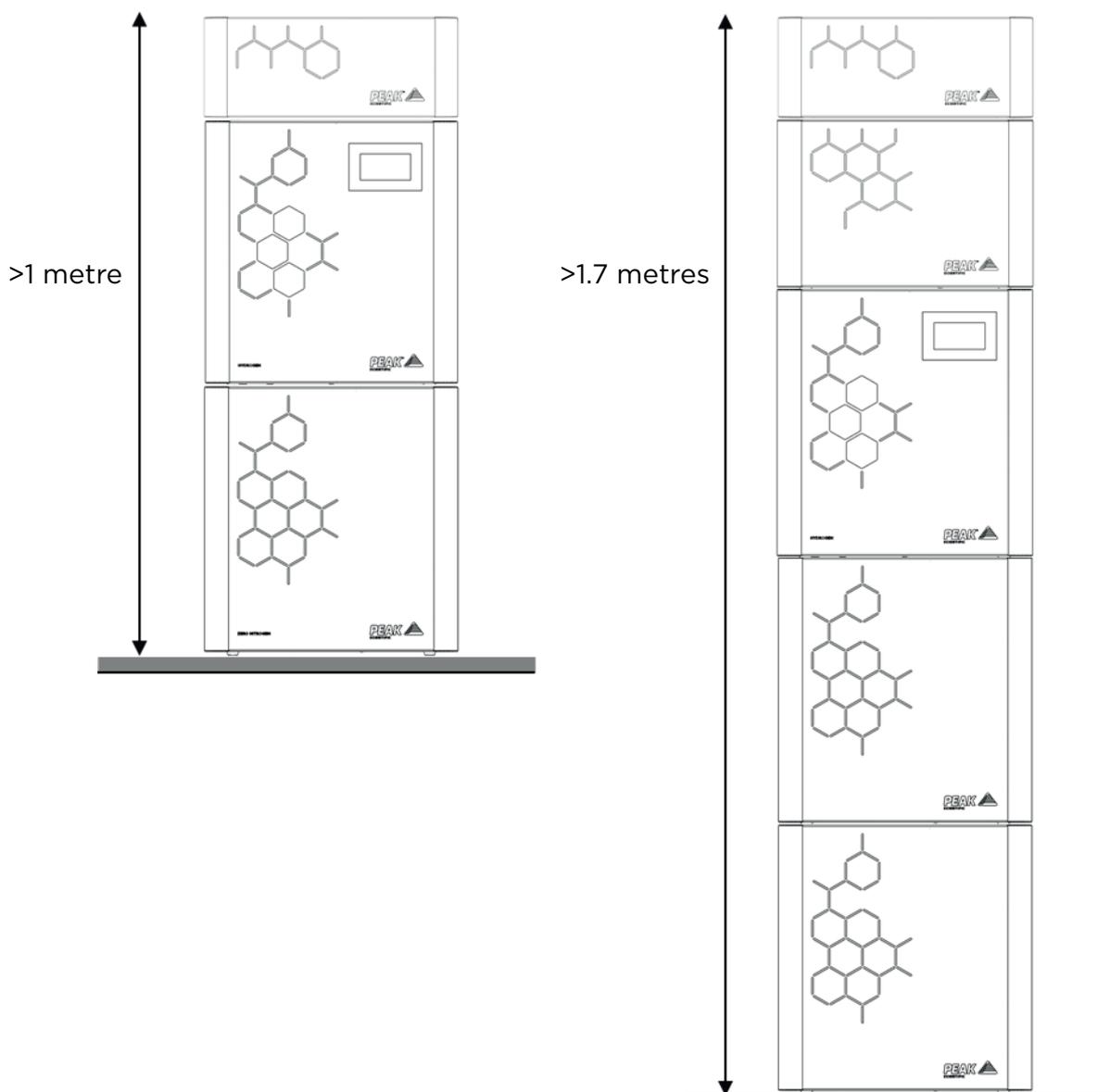
Stacking Units

The units in the Precision range can be stacked on top of one another, allowing for better use of space in laboratories.

When stacked on top of a work bench, the maximum height a combination of generators can reach is 1 metre.

When stacked from the floor, the maximum height a combination of generators can reach is 1.7 metres.

Example Combinations have been illustrated in the image below.



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