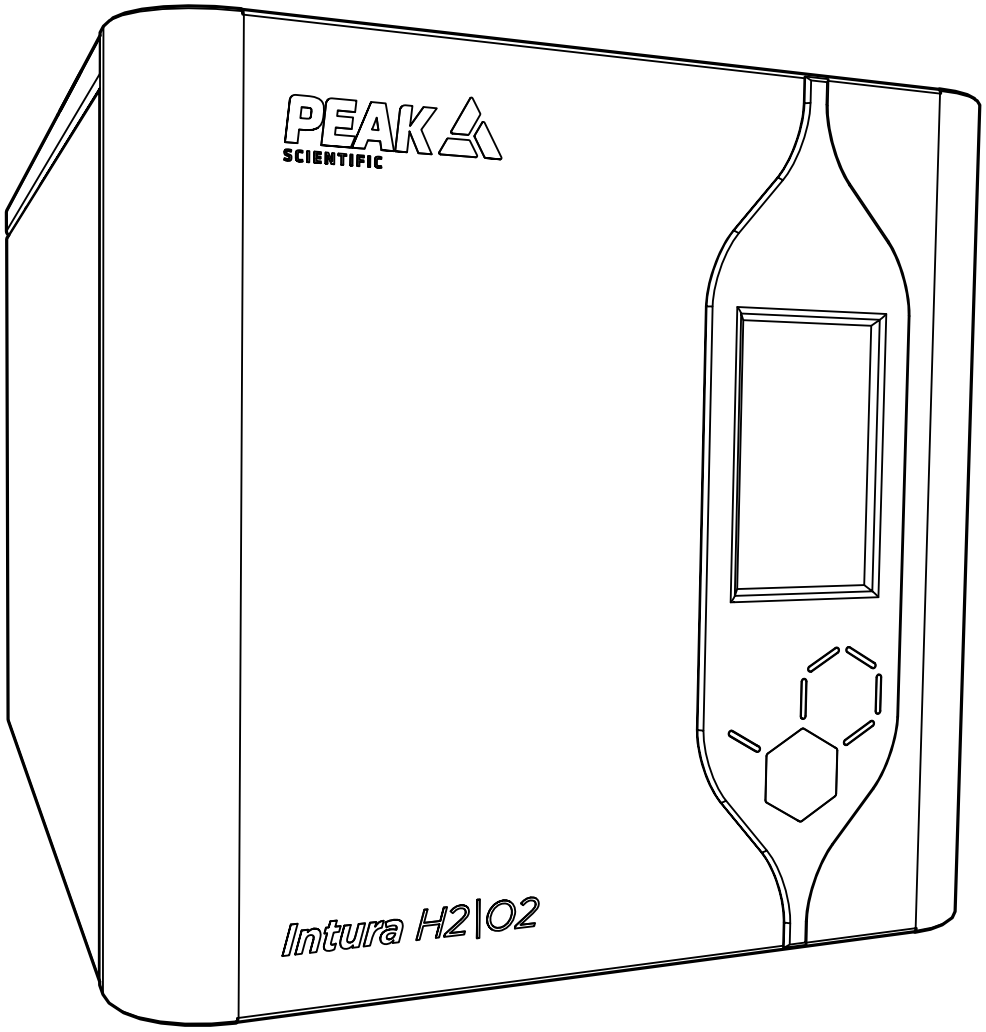
Intura H2|O2

User Manual



PEAK SCIENTIFIC

Register Product to Operate

To begin the operation of your unit you will need to register your generator. You can do so by visiting **www.peakscientific.com/activate** or by **downloading the PEAK Gas App.**



Important!
You must register your generator before Hydrogen generation can commence. In order to be eligible for warranty, your generator must be registered to the end user (not a reseller or distributor) and must have an annual preventative maintenance conducted within 12 months of the installation date.

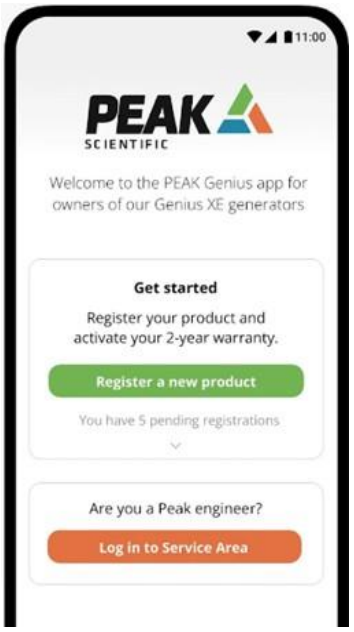
* For terms and conditions please visit **www.PEAKscientific.com/warranty-statement/**
** Call out and labour charges may apply where generator was not purchased directly from PEAK

PEAK Gas App (Download from Google Play Store / Apple App Store)

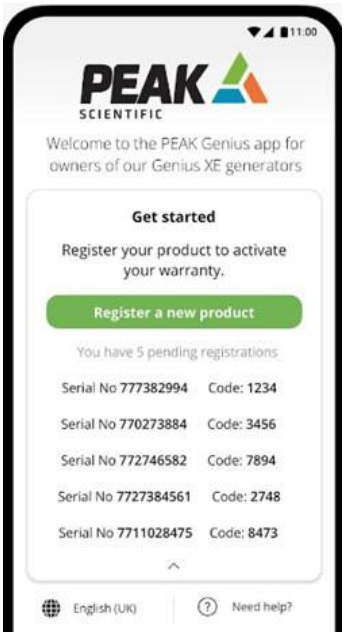
This dedicated app for PEAK gas generators offers many benefits to ensure a seamless setup.

- Simple 3-step Warranty Activation and Product Registration
- 4-digit PIN generation for first-time product installation
- Service Technician Access
- Generate codes without a network connection which automatically complete when you are back online









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Change History

Rev	Comment	Name	Date
2	Updates to Declaration of Conformity	F. Meier	07/09/2026
3	Updated guidance for installation and storage	J. Murphy	21 Oct 2026

How to use this Manual

If this unit is being installed for the first time, please ensure you have read and understood the Installation Guide prior to reading this User 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 usage, 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 the PEAK Partner from which you purchased your generator.

Introduction

The Intura H2|O2 generator has been developed to cater for the requirements of GC instruments. This generator provides a source of high purity hydrogen gas, suitable for GC carrier and detector gas and high purity oxygen for detector flame support.

Other features include:

- Small and compact design
- Status indicative LEDs
- User-friendly touch screen interface
- Regenerative PSA system for Oxygen and Moisture removal from Hydrogen
- Minimum maintenance with only one DI cartridge change per annum
- Integration with Shimadzu GC for signal relay
- Will support the PEAK Hydrogen Detector

To ensure this generator model meets our high expectations with regards to reliability and performance, we have carried out extensive testing at our manufacturing plant and with end users around the world to ensure reliability and consistent performance.

Safety Notices

PEAK Scientific Instruments cannot anticipate every possible circumstance which may represent a potential hazard. The warnings detailed within this manual refer to the most likely 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


WARNING

These instructions must be read thoroughly and understood before installation and operation of your PEAK Generator. Use of the generator in a manner not specified by PEAK Scientific may impair the safety provided by the equipment.


WARNING

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.


WARNING

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

Attention – Important Notice to All Users


WARNING

These instructions must be read thoroughly, section by section and understood before installation and operation of your Intura H2|O2 generator. Please follow the appropriate safety standards for handling hydrogen gas and other gases as determined by the laws and regulations of your country.

Please save the product packaging for storage or future shipment of the generator.

1. For your own personal safety and to prevent accidental damage to your generator please ensure that you read and understand our Installation Guide prior to reading this User Manual.
2. Do not store away the generator when not in operation. External water bottles must be made of a suitable material in order to prevent biological growth. It is recommended that you check the water quality weekly to prevent biological growth developing in the tank and tubing. Failure to do this will greatly reduce the life of the generator and render the 3-year cell warranty void.
3. Do not place the external water bottle above the height of the generator. The bottle may be placed at the same level or below the generator.
4. Maximum that should be used is ASTM Type II water only. (recommended ≤0.1µS/cm or better). Failure to use the correct quality water will invalidate the cell and system warranty. Do not attempt to connect pressurised water to the generator.
5. It is recommended that you operate the generator at the lowest pressure permissible for your particular application. Do not automatically set the pressure to maximum if not required to avoid potentially damaging your application.
6. Failure to maintain the deioniser cartridge as recommended will reduce the operational life of your generator and render its 3-year cell warranty void.
7. Do not attach any additional tanks or gas cylinders to your generator without first consulting PEAK Scientific.
8. Ensure your entire installation, both pipe work and analysers, are completely gas tight. Even minor leaks will affect the operation of your generator and generally reduce its operational life.
9. Has your generator been correctly sized for your application? If in doubt, consult your dealer or PEAK Scientific.
10. Ensure the ambient temperature inside your laboratory does not rise above 35°C/95°F. Extremes of operating temperature will reduce cell life.
11. Peak recommends installation within 6 months of date of manufacture, to reduce risk of internal water pumps seizing. If the generator is being installed >6 months of date of manufacture, contact local technical support.
12. If the generator is stored or inactive for >1 month after initial installation, ensure DI water is completely drained from the internal tank before restarting.

Technical Specification

Environment	Intura H2|O2
Minimum Operating Ambient Temperature	5°C / 41°F
Maximum Operating Ambient Temperature	35°C / 95°F
Maximum Altitude	3000m
Maximum Relative Humidity	80% @ 35°C
Minimum Storage Temperature*	5°C / 41°F
Maximum Storage Temperature*	35°C / 95°F

Generator Outlets	H_2	O_2
Max Gas Outlet Pressure	100psi / 6.9 bar	45 psi / 3.1 bar
Max Gas Outlet Flow Rate (ccs/min) **	250cc	100cc
Purity	Up to 99.99999%	99.999%
Dewpoint	-75°C	-20°C
Phthalates & Plasticisers	Phthalate & BHT Free	
Gas Outlets	1 x 1/8" Stainless Steel compression fitting	
Gas Exhaust Outlet	1 x 6mm push fit	
Gas Vent (H_2)	1 x 6mm push fit	
Gas Vent (O_2)	1 x 6mm push fit	
Start-Up Time	60 mins	

Electrical Requirements	
Voltage	~100-240V ±10%
Frequency	50/60Hz
Current	5A
Power Consumption @ 100 psi Max.	310W
Input Connection	C14 Plug
Power Cord	C13 Socket to local connection (10A minimum)
Circuit Breakers	6A MCB
Pollution Degree	2
Installation Category	Class II
Transient Over Voltage	Category II

General	
Dimensions (H x W x D)	324 x 330 x 518mm (12.8 x 13 x 20.4")
Generator Weight (No Water In Tank)	26 kg (57.3 lbs)
Shipping Dimensions (H x W x D)	510 x 765 x 545mm (20 x 30.1 x 21.5")
Shipping Weight	36 kg (79.4 lbs)
Noise Level†	<55dBA
Water Purity Requirement	Recommended ≤0.1 µS/cm OR >10 MΩ.cm Up to a maximum ASTM Type II (1 µS/cm) or approved DI purifier

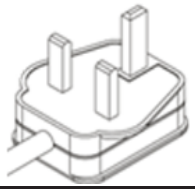
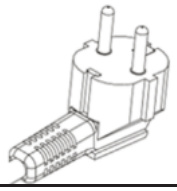
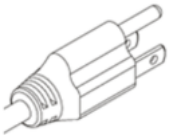
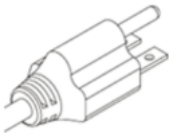
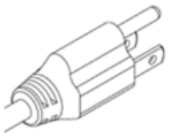
*Note: Please ensure Generator is situated in a well-ventilated environment. When taken out of storage, allow generator to acclimatize at room temperature for a minimum of 3 hours.

** Flows in ccs/min are expressed as standard volumes at 101.325 kPa, 20°C

† Note: Noise level expressed as SPL (Sound Pressure Level) measured at 1.5m from front of source.

Included Accessories

Supplied with each Intura H2|O2 generator as standard are the following accessories:

		Quantity
	UK Mains Power Cable C13 2.5m (04-1028) BS1363 230V 13A	1
	EU Mains Power Cable C13 2.5m (04-1038) CEE 7 230V	1
	US Mains Power Cable C13 2m (04-1039) NEMA 5-15 110V	1
	US Mains Power Cable C13 2.5m (04-1029) NEMA 6-15 230V	1
	JPN Mains Power Cable 100V (04-1006)	1
	Tygon Tubing × 1m (05-3131)	1
	Barbed Hose Fitting (05-7029)	1
	Installation Guide - Intura H2|O2	1

Principle of Operation

The Intura H2|O2 generator range produces high purity hydrogen gas, H_2, and Oxygen gas, O_2. Hydrogen gas is present in extremely low concentration in air and is normally formed via the decomposition of other molecules, in this case via the splitting of water molecules into hydrogen and oxygen in a process known as electrolysis.

The electrolyser used in the PEAK Scientific hydrogen generator is known as a Proton Exchange Membrane (PEM) electrolyser. This type of electrolyser was first described in the mid-1960's by General Electric as a method for producing oxygen for the Gemini space program. PEM electrolysis has been continually developed since its introduction and has remained the state-of-the-art technology for water electrolysis and the production of high purity hydrogen ever since.

The most important element of the generator is the electrolyser cell where the electrolysis reaction takes place. This consists of two electrodes (an anode and a cathode), which are separated by the proton exchange membrane which gives the technology its name. During operation deionised water is fed to the anode of the electrolysis cell where it is split into oxygen, protons and electrons with the aid of a precious metal catalyst. The oxygen is vented to atmosphere from the generator. The protons travel across the membrane and simultaneously the electrons travel around the external electrical circuit. These protons and electrons then recombine at the cathode of the electrolyser, again with the aid of a precious metal catalyst to produce the hydrogen gas. The high purity of the hydrogen is assured by the membrane which completely separates the hydrogen produced at the cathode from the oxygen being produced at the anode. These processes are described by the following equations:

Anode Reaction $2H_2O - 4e \rightarrow O_2 + 4H^+$

Cathode Reaction $4H^+ + 4e \rightarrow 2H_2$

Deionised water is critical to the operation of the system and must have a purity of 0.1µS/ cm or better to prevent damage to the membrane. **Failure to use this grade of deionised water will invalidate the 3-year cell warranty of your generator**. The water is automatically loaded (either at power up or periodically during operation) and the rate at which the water is consumed depends on the amount of hydrogen being produced.

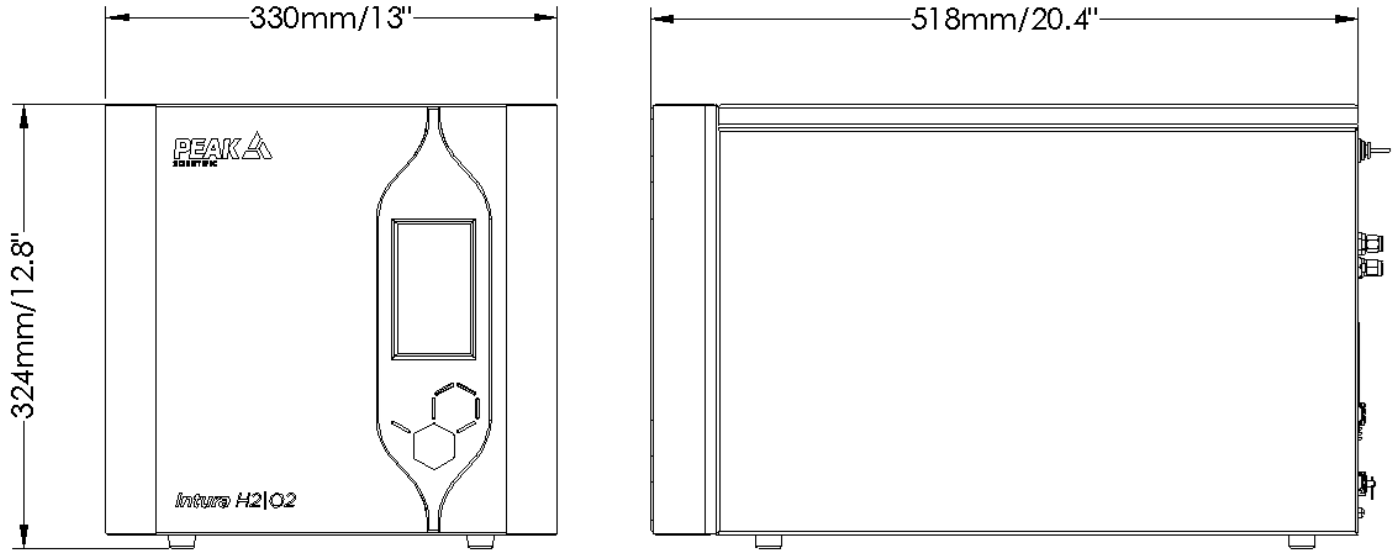
A small amount of the electrical energy input is lost as heat, and this is removed from the generator by the ventilation system.

The PEAK Scientific hydrogen generator generates hydrogen on demand. By maintaining the user's pre-set pressure and using this as a reference value, the generator will produce the precise amount of hydrogen required. As soon as the demand ceases, no further hydrogen will be sent to the user's application.

The Intura H2|O2 generator produces high purity hydrogen gas, H_2. Using Pressure Swing Adsorption (PSA) purification, the Intura H2|O2 removes moisture and oxygen from the hydrogen produced by the generator to provide a constant and consistent source of high purity H_2 for GC carrier and detector gas.

The Intura H2|O2, as well as providing purified hydrogen, provides purified oxygen on demand. The oxygen is purified using a passive, maintenance free dryer and pressurized using techniques unique to Peak. The combination of hydrogen and oxygen is specifically designed to supply both carrier and fuel gases.

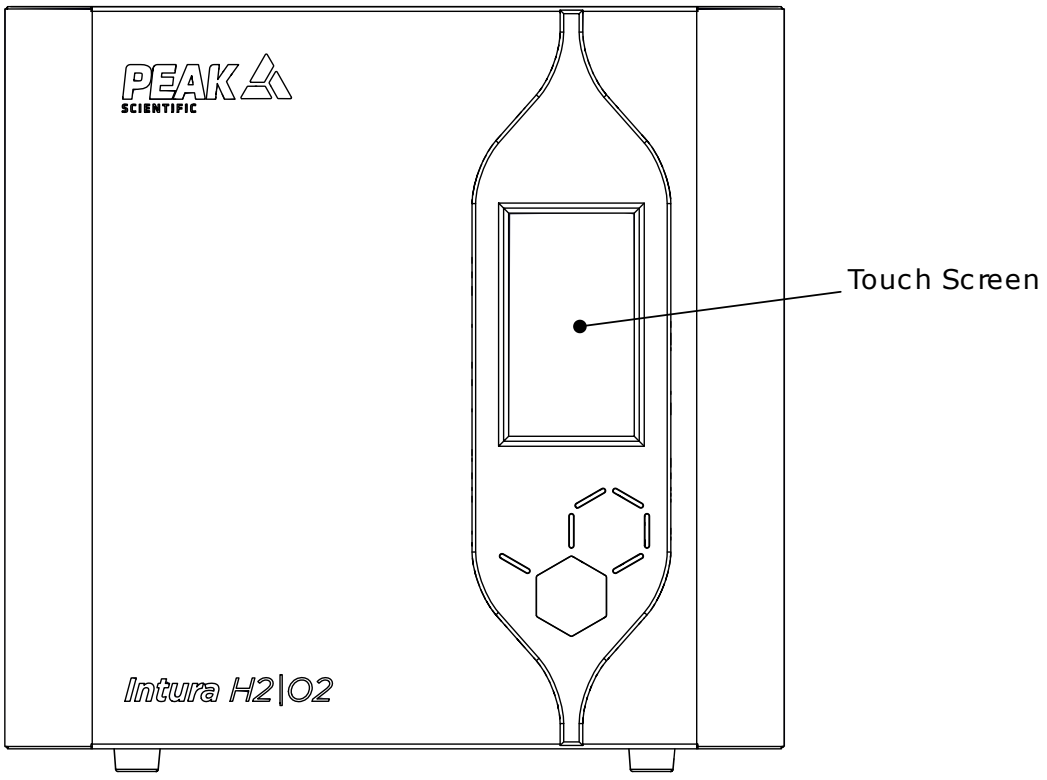
General Dimensions



WARNING

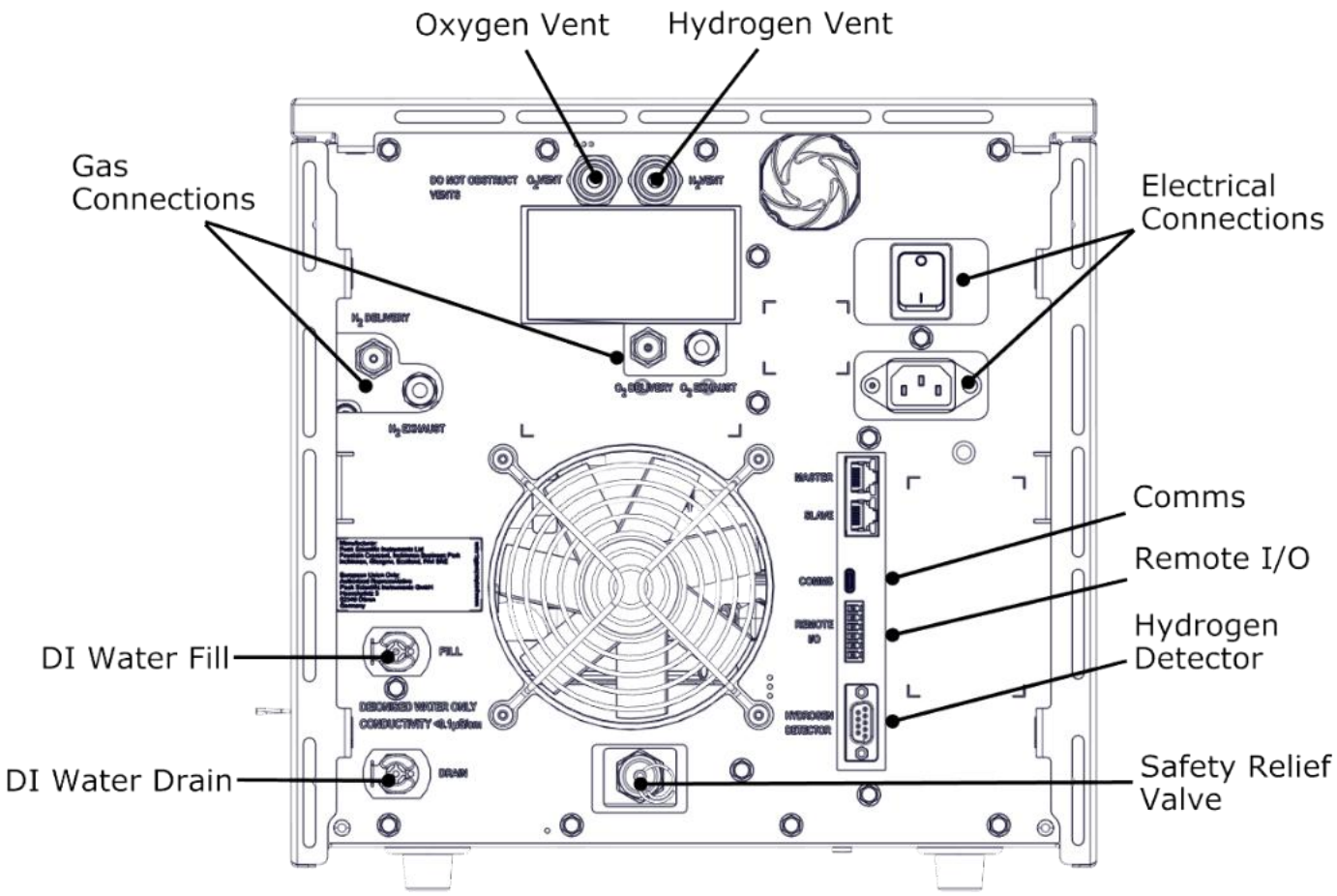
The generator must always be placed on a flat, level surface. Failure to do so will affect the performance of the generator.

Unit Controls



The generator is fitted with an HMI to provide updates and controls for the user.

Rear Panel



WARNING

Ensure all inlets and outlets are connected to correct sources and applications

WARNING

All Connections should only be carried out by trained personnel

WARNING

Generator must be switched off and unplugged prior to any cleaning or maintenance operation.

Site Preparation

Customer Responsibilities

To ensure the 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 section is an information guide and checklist that outlines the requirements for your site.

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

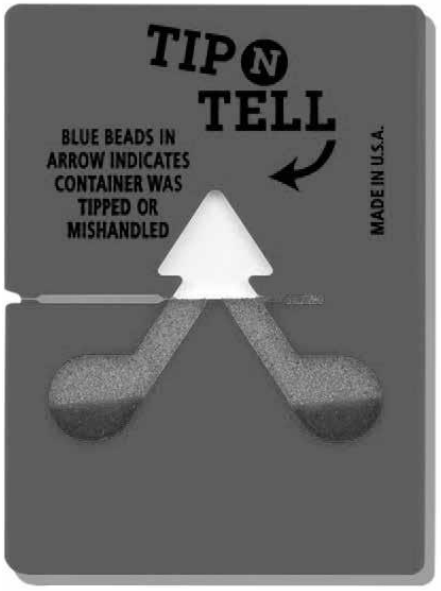
- The necessary spatial requirements are met.
- The correct environment is provided for the generator.
- Electrical outlet locations and quantities are planned.
- Adequate exhaust ventilation is provided.
- The correct tubing lengths and diameters are used in relation to the distance from the instrument.
- A supply of ASTM Type II deionised water (≤0.1µS/cm, >10MΩ.cm, <50ppb TOC), or deionised water from an approved water purifier is available for Intura H2|O2 generators.

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 **loss of warranty.**

Unpacking the generator

Although PEAK Scientific takes every precaution with safe transit and packaging, it is advisable to fully inspect the unit for any sign of transit damage.
Check 'SHOCKWATCH' and 'TIP-N-TELL' labels for signs of rough handling prior to unpacking.





Any damage should be reported immediately to the carrier and PEAK Scientific or the PEAK Partner from where the unit was purchased.
Please save the product packaging for storage or future shipment of the generator.
Note: Included with the generator is Accessories containing mains power leads for UK, EU & US with all the required fittings and warranty registration card. Be careful not to discard these with the packaging.

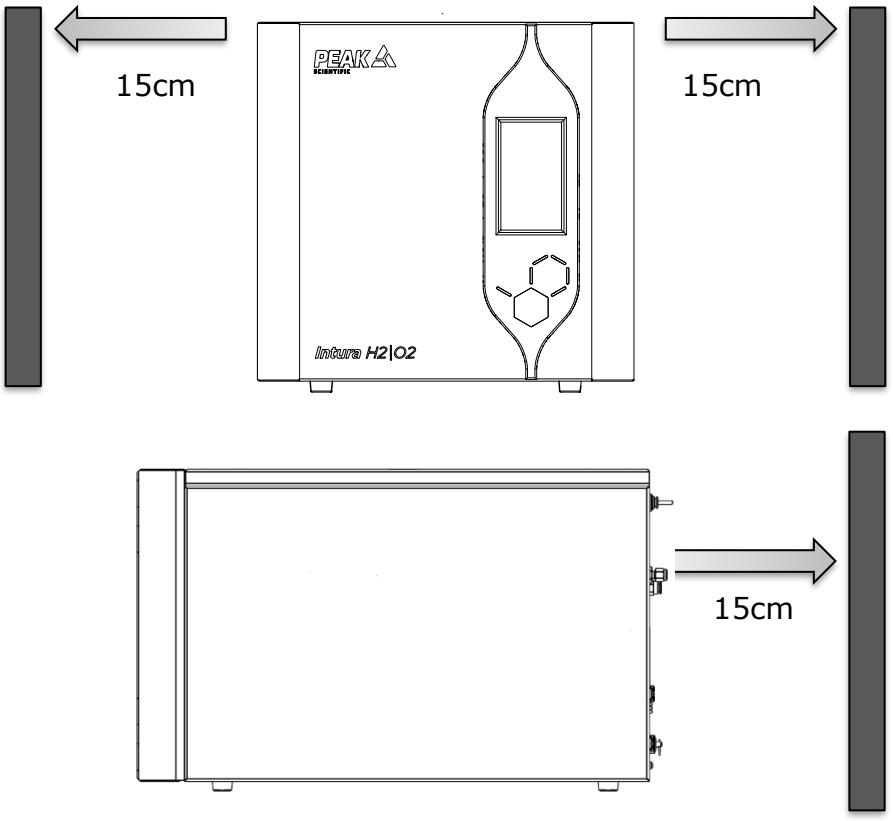
Units may be shipped without some or all of the above labels due to customer request.

Note: Intura H2|O2 generators are shipped with an empty internal water tank.

Safe lifting practices should be employed when unpackaging the Intura H2|O2 generator and as such, should be unpacked with the presence of at least two people.

Unpack the Intura H2|O2 generator as follows:

1. Cut the plastic strapping binding the generator and open packaging from the top.
2. Remove all documentation and included accessories. Place aside for reference.
3. Remove cardboard sleeve and plastic covering the generator.
4. Next, with someone on either side of the unit, position your hands underneath the unit ready to lift.
5. Ensuring knees are bent and back is straight, lift the unit out of the base and place upright on a flat, level surface in the desired location.
6. Ensure that there is at least 15cm of space on either side and rear of the generator.



7. Leave to acclimatise for 3 hours before continuing installation.
8. Open the Welcome Pack and refer to the **Installation Guide** for further instructions to connect the generator to your application.

General Safety

The generator only produces gas when the application places a demand on the unit. The maximum quantity of Hydrogen stored in the generator at any one time is 200cc at a pressure of 8.6 Bar (125psi). The unit meets the necessary requirements of the Electromagnetic Compatibility and Low Voltage Directives and as such carries both CE and UKCA markings.

The Intura H2 and H2|O2 range meets IEC 60079-2 safety standard and has had dilution testing carried out as part of PEAK Scientific's risk assessment evidence as part of the NRTL Accreditation process. This means that the Intura H2|O2 generator can be safely installed in your laboratory and poses no safety risk to the surrounding environment.

All Intura generators have the necessary control circuitry, both electrical and mechanical, to ensure the shutdown of the instrument in the event of a fault or faults occurring.

Generator Safety Features

The Intura H2|O2 has the following safety features to ensure safe and reliable operation:

1) To avoid any build-up of hydrogen from leaks inside the unit, the generator features forced air ventilation. This ensures that a Hydrogen/Oxygen mixture cannot form inside the generator.
2) On power-up the generator self-checks for internal leaks and if required it will shut down at the end of the system check informing the operator with an audible and visual alarm.
3) The generator will detect any Hydrogen leaks that occur within the generator, the user's application and gas lines. In the event of a major leak the generator will automatically shut down within 20 minutes.
4) The hydrogen pressure inside the generator will only reach a maximum of 8.6bar (125psi) and this is controlled in three ways:
    a) Gas pressure is monitored and controlled electronically by a pressure sensor.
    b) An electrical relay to remove power from the electrolyser PSU if control communications are lost.
    c) An ASME certified pressure safety relief valve is set at 9.7bar (140psi).
5) When the generator is in alarm status the following occurs:
    a) The current to the cell is stopped so no Hydrogen is generated therefore preventing a hazardous situation.
    b) The over-pressure relief valve opens allowing the unit to depressurise.
    c) An audible and visual alarm relevant to the fault condition is displayed. The generator can sense for internal and external leaks, excessive gas demand and lack of water.

Generator Environment

The generator is designed for indoor use only. If possible, the generator should be installed adjacent to the application(s) it is supplying. If the generator is located away from the application, consideration should be given to the lengths of supplying tubing, to avoid pressure drops which can affect instrument performance. See section "Gas Connections" for guidance on tubing lengths greater than 3m.

The generator should be located on a flat, level surface for operation - this will ensure that the water level sensors within the unit operate correctly. Some components in the generator produce heat during operation and therefore an adequate airflow must be maintained around the generator to allow the ventilation system to perform efficiently. Please take care as the rear of the generator will become warm to the touch during operation. Performance of the generator is affected by ambient conditions. Note should be taken to the proximity of air conditioning outlets. These can sometimes give rise to "pockets" of air with high relative humidity. Operation of the generator within such a pocket could adversely affect its performance. Consideration should be given to the air flow around the unit. An air gap of 15cm (6") should be maintained down both sides and rear of the unit.

If the generator is stored in an enclosed space the environment must be controlled via an air conditioner or extraction fan. The provision must be made to allow the volume of air in the room to be changed a minimum of 5 times per hour. Hydrogen poses a fire/explosion risk if it is present in the environment at a level of 4.1% or greater.

Do not obstruct or connect the vents to any application. Failing to observe this could lead to permanent damage to the generator.

Do not expose the unit to freezing conditions. Please adhere to the operating temperatures below:
Minimum Operating Ambient Temperature: 5 °C (41 °F)
Maximum Operating Ambient Temperature: 35 °C (95 °F)

Do not position the equipment so that it is difficult to disconnect the mains plug.

Note: It is recommended that any Intura H2|O2 unit is installed with a moisture trap in line between the generator and GC.

The generator must always be placed on a flat, level surface. Failure to do so will affect the performance of the generator.

Water Quality

Use only High-Grade Deionised water, which must have a conductivity of less than or equal to 0.1µS/cm @ 20°C and should be replaced as required. Water quality should be checked prior to being used to supply the Intura H2|O2 generator. Use of water in the Intura H2|O2 generator with a purity not specified above will result in a reduced efficiency of hydrogen production, failure of the generator and loss of warranty.

Water should be stored in a container of suitable material away from direct sunlight. The bottle should have a vented lid to minimise any dust or debris contaminating the water supply. A suitable external water bottle is available from PEAK Scientific (3306818).

The Intura H2|O2 generator utilises a conductivity sensor to detect water quality. An image is displayed in the top right corner of the Home screen with variable colouring (see section "Screens Overview - Water Quality Icon" for further information):

Note: Water quality of the external water supply should be checked once a week to maintain the health of the generator.

Automatic Filling

The Intura H2|O2 generator uses an automatic water filling system and is manufactured as standard with a water loading pump. Sensors in the unit's internal water tank detect when the water level reaches a minimum and then refills the tank using a rear connection to an external DI water supply.
Using the length of supplied Tygon tubing (05-3131) and the Barbed Hose fitting (05-7029), attach the barb to the tubing. Connect the barbed end to the Fill port at the rear of the generator and the opposite end to the water supply. For efficient water filling the external supply should be no more than 2 metres away from the connection on the generator.


WARNING

The DI Water supply source MUST NOT be located higher than the height of the surface that the Intura H2|O2 Generator is placed upon. A supply located higher than specified will result in siphoning, causing the generator's internal water bottle to overfill.


WARNING

A pressurised DI Water supply source will also result in the internal water bottle over filling and MUST NOT be used.


WARNING

Do NOT connect the Fill port and the Drain port at the same time. This will cause the generator to not load water.

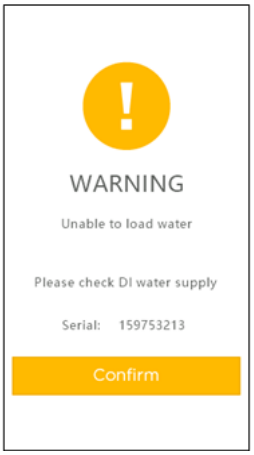
Water Loading

Water Loading During Startup



On startup, if the generator cannot load enough water within its allocated time to switch the sensors in the water bottle, the generator will alarm and display the message:
"Water Tank fill timeout.
Please connect DI Water to fill line and power cycle generator".
Please check the fill connection at the rear of the generator before pressing Confirm. The load pump will re-engage allowing the generator to recommence filling. If, after 5 power cycles, the error message continually displays, please contact PEAK Scientific quoting the error message to organise a Service request.

Water Loading During Standby/Operation



When the system detects a low water level during standby or delivery, an allocated timer to allow the generator to load water begins. If this timer expires without detecting an increase of water level, an alarm will trigger and display the error message:
"Unable to load water. Please check DI water supply."
The external water supply should be checked prior to pressing "Confirm" on the screen, after which, the pump will re-engage and allow the generator to continue to fill with water.

Water Loading





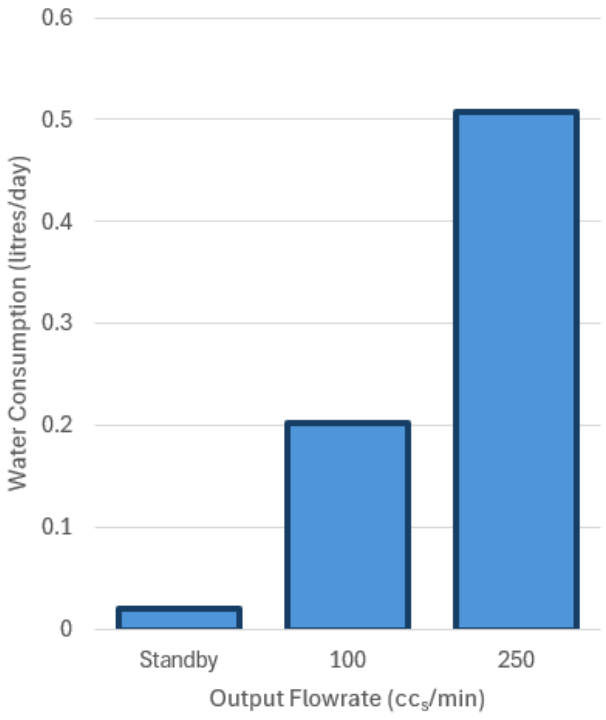
The Intura H2|O2 generator will continue to operate even when detecting a low water level. However, after some time, the level will reach a critical state. At this point, the generator will cease Hydrogen production and exhaust all gas to prevent damage to the Cell and ensure that your Intura H2|O2 generator remains in its optimum operating condition.
If the generator has reached this point, the screen to the right will be displayed with the message:
"Water Level Below Critical. Please connect DI Water to fill line."
Before pressing Confirm, ensure that the DI water source is connected and not twisted or blocked. After pressing Confirm, the generator will begin to load water. During this time, all operations are ceased until the system detects a sufficient level of water to begin Hydrogen production again.

Draining the Water Tank

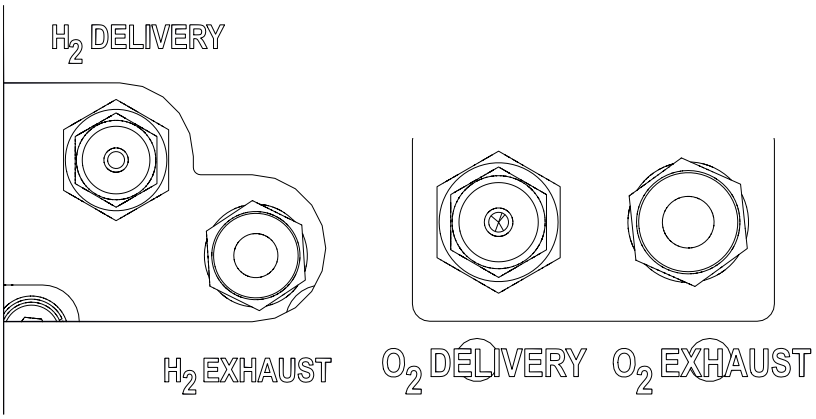
1) Before draining the generator, ensure that you have tubing with a barbed connector and a vessel to collect the drained water.
2) Connect tubing to the 'Drain' port on the rear of the Intura H2|O2 generator using the barbed fitting with loose end in the vessel.
3) Once the barbed fitting is inserted into the drain connector, water will drain from the generator's internal tank in the vessel.
4) Fill the external water bottle with fresh DI water (Maximum ASTM Type II, recommended ≤0.1µS/cm).
5) Once the internal tank of the generator is emptied, connect the barbed connector to the 'Fill' port of the generator and the generator will automatically draw water from the external water bottle.

Water Usage

The water consumption rate of the Intura H2|O2 generator is completely dependent on the rate at which Hydrogen is produced. The graph below shows an estimation of the water at 100cc and 250cc H_2 output in litres per day.



Gas Connections



Tubing

For the Hydrogen and Oxygen supply lines, it is recommended that only clean grade stainless-steel tubing should be used.

Plastic tubing material such as Teflon, polyvinyl chloride, or Tygon should not be used when plumbing GCs since these materials will allow air and water to diffuse into the gas lines. In addition, plastic tubing can give off organic impurities which can cause ghost peaks and baseline instability.

Furthermore, PEAK Scientific recommend that compression fittings are used, and that the fittings are free from Teflon tape. A 1/8" Stainless-Steel compression fitting is attached to the generator as standard. Do not overtighten.


WARNING

Once the tubing is connected to the application, please ensure that it is thoroughly checked for leak-tightness. Even the slightest leak in the gas supply between the generator and the application can lead to a drop in Hydrogen purity or insufficient supply pressure.

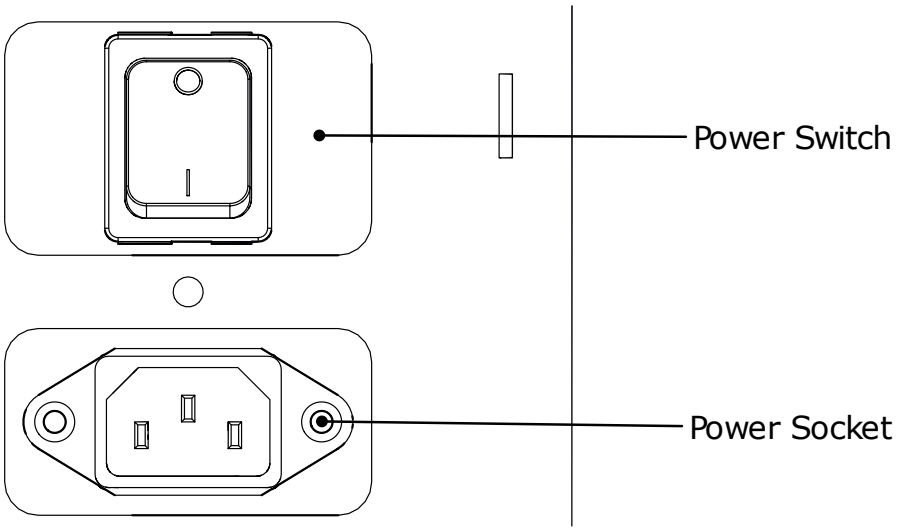
Ventilation

PEAK Scientific recommends that the H_2 Exhaust, O_2 Exhaust, H_2 Vent and O_2 Vent ports at the rear of the unit are connected to a fume hood, or other ventilation system to ensure safe disposal of vented gases. Tubing size required to connect to the vent ports is 6mm OD.

If tubing is connected to the generator's exhaust and vent ports, hydrogen and oxygen should be vented to separate exhaust systems to avoid any risk of the gases mixing.

If only a single exhaust system is available, tubing should be attached to the H_2 Exhaust and H_2 vent ports to allow venting of hydrogen via the exhaust system. Oxygen from the O_2 Exhaust and O_2 vent ports can be vented safely into the laboratory, avoiding directing vented oxygen toward any naked flame or GC flame detectors.

Electrical Connections



1. Select the appropriate mains cable (04-1029/04-1030/04-1038/04-1039/04-1006)
2. Connect the generator to any voltage supply. Refer to the generator serial plate for input specification and ensure your supply matches the requirements. Refer to the generator serial plate for input specification and ensure your supply matches the electrical supply requirements.

WARNING

If an appropriate mains power cords is not supplied or a substitute one is used then ensure that all components of it: the plug, cord and connector have adequate ratings for the generator and appropriate approvals for the country of use. Failure to do so could cause damage to the generator or risk overloading of the power cord.

WARNING

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.

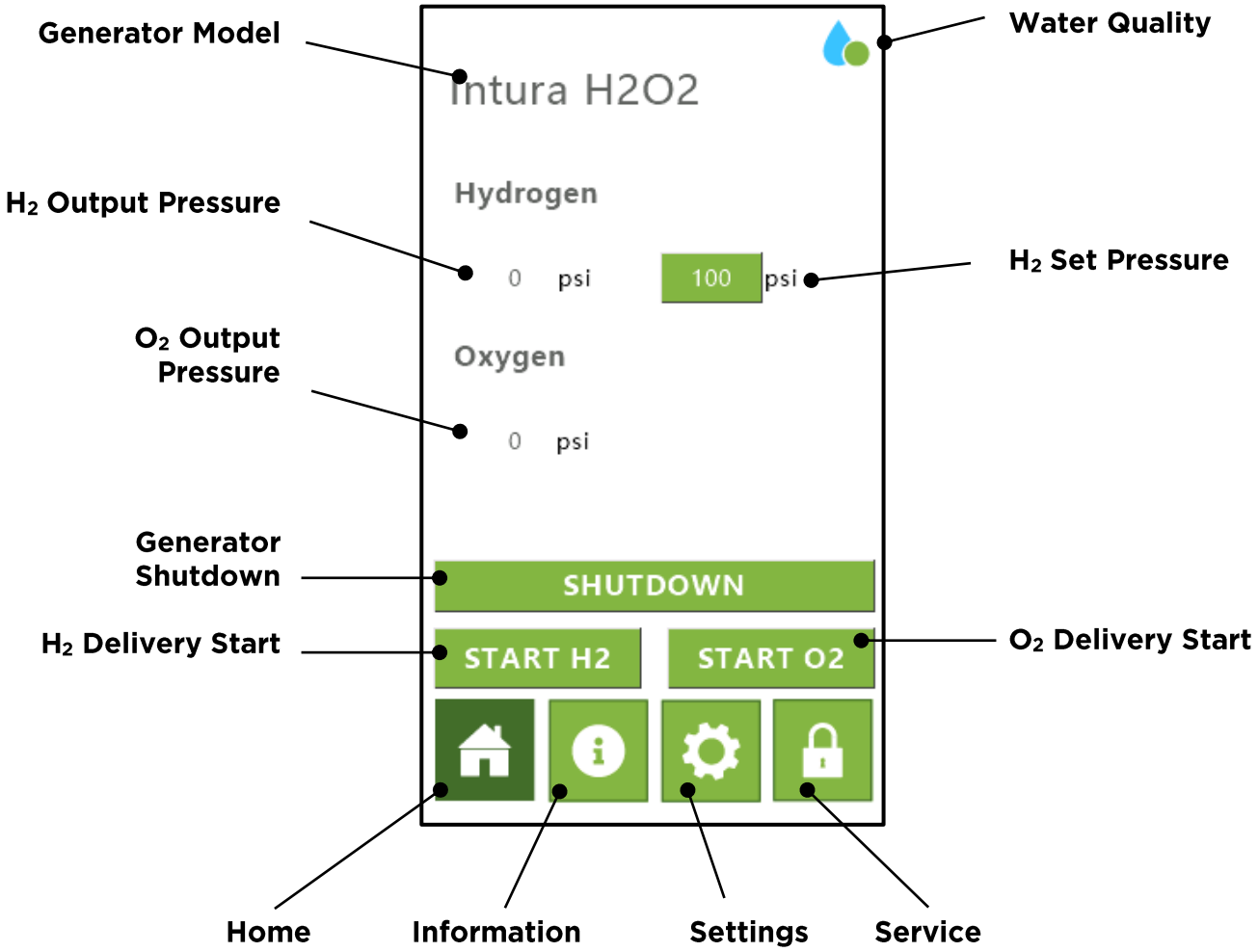
EARTH/GROUND (E):-	Green & Yellow	or	Green
LIVE (L):-	Brown	or	Black
Neutral (N):-	Blue	or	White

WARNING

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

Home Screen

This is the main home screen in normal operation.



First Time Use

Before the generator will start-up for the first time the user must enter a unique 4-digit PIN code. To receive your generator's unique PIN code, please register on the PEAK website **www.PEAKscientific.com/activate** or download the PEAK mobile app from the Google Play Store or Apple App Store. A PIN code may also be requested by phoning the PEAK helpdesk.

(continues on next page)

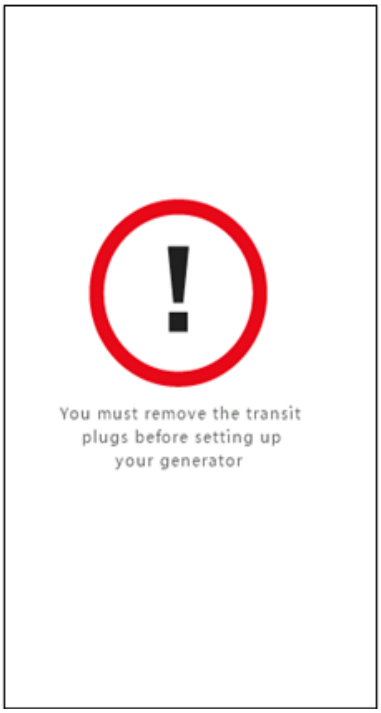
This code is only required on the initial start-up of the unit. Use the Touch Screen at the front of the generator to complete the registration process.



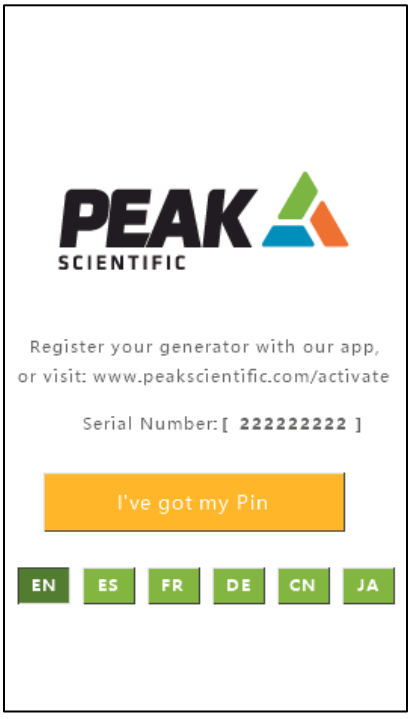
1) Switch generator ON: touch screen will display the start up



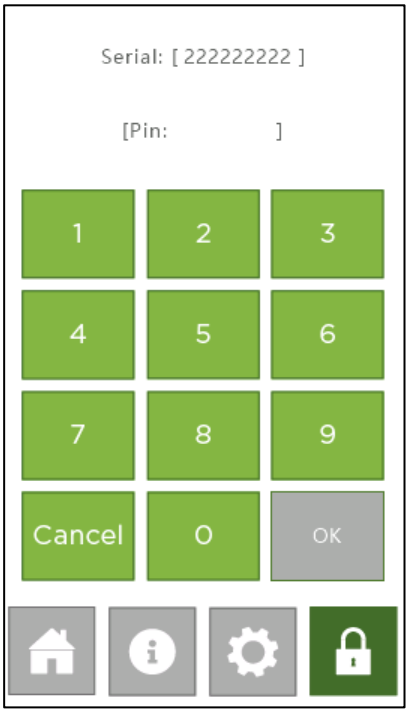
2) The screen will go through its initialisation.



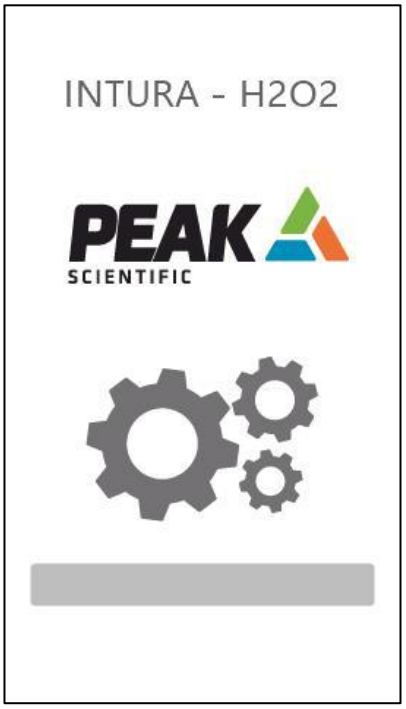
3) Warning to remove transit plugs.



4) Select Language and Press "I've got my PIN".



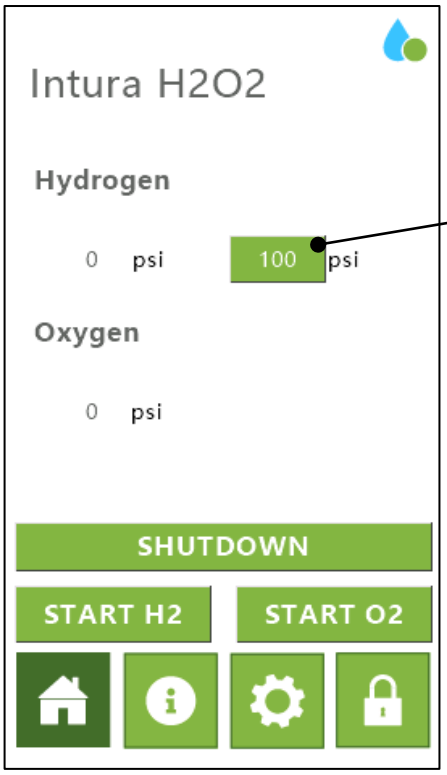
5) Enter PIN to complete the Registration.



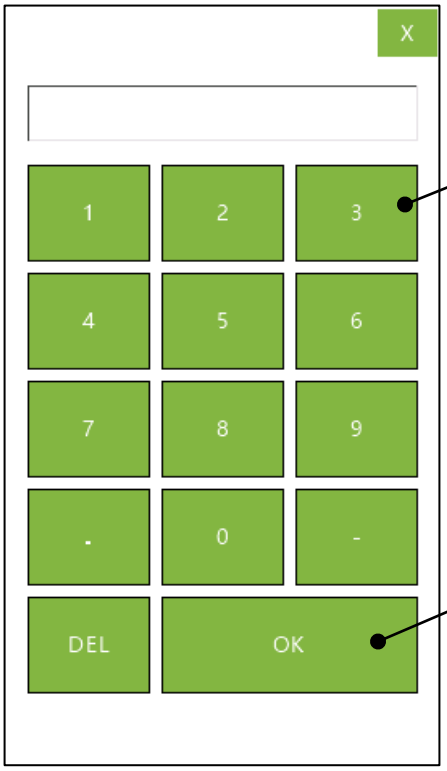
Once complete, generator will go through startup.

Setting Output Pressure

The output pressure is factory set to the maximum allowable 100psi. The output pressure can be adjusted using the pressure settings function on the HMI home screen.



Press to set required Delivery Pressure



Use keypad to enter required Delivery Pressure

Press OK to confirm required Delivery Pressure. User will be returned to the Home Screen where the new Set Pressure will be displayed.

General Information

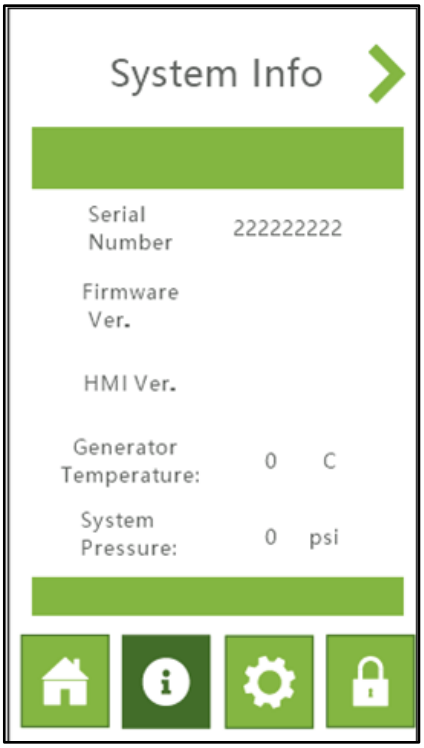
The information screens show general information about your Intura generator, as shown below.

System Info

- Generator Serial Number
- Current Generator Firmware Version
- Current HMI Version
- Generator Temperature
- Generator System Pressure

Water Supply

- Water Level
- Water Quality
- Alternate information displayed can be found in following section - Water Supply





System Hours

DI Cartridge Change Due:
– time until next DI cartridge change
Generator On Time:
– total time generator has been On

User Manual

QR code to access this manual electronically

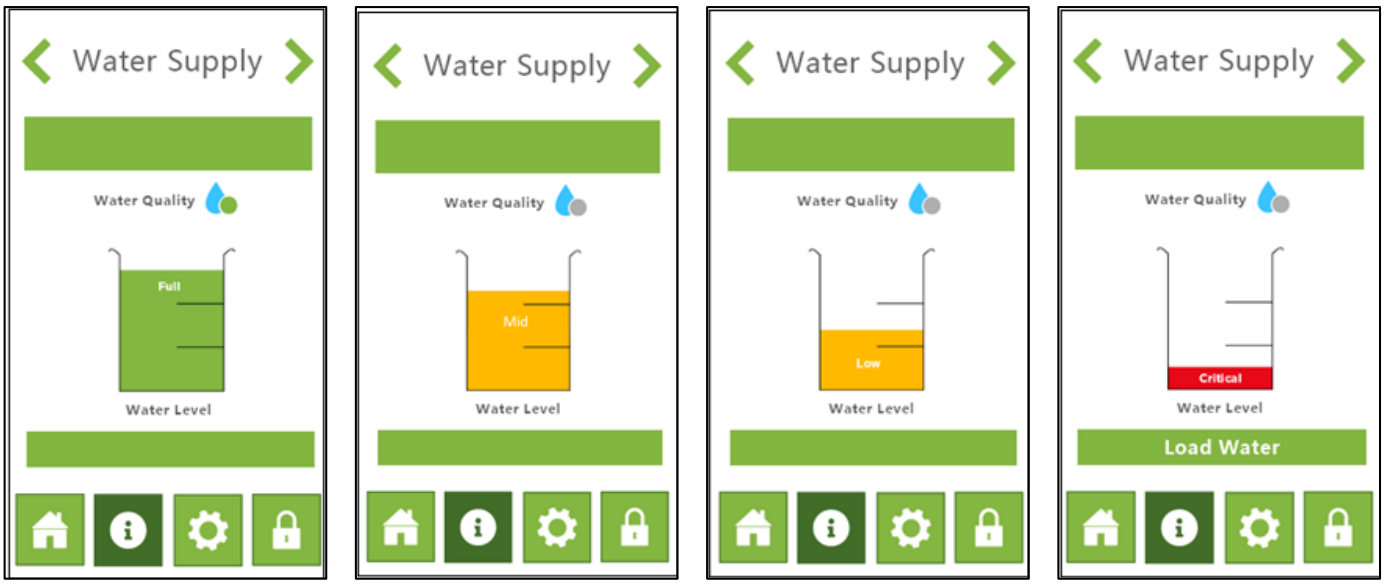




Water Supply

The Water Supply screen will change depending on the water level within the internal tank. There are 4 modes:

Full Mid Low Critical



If the water level reaches Critical, an alarm will appear prompting the user to check the DI water connection. Further information on this can be found in previous section "Automatic Filling – Water Loading". The Load Pump can be manually triggered by pushing the button "Load Water" underneath the water level display.

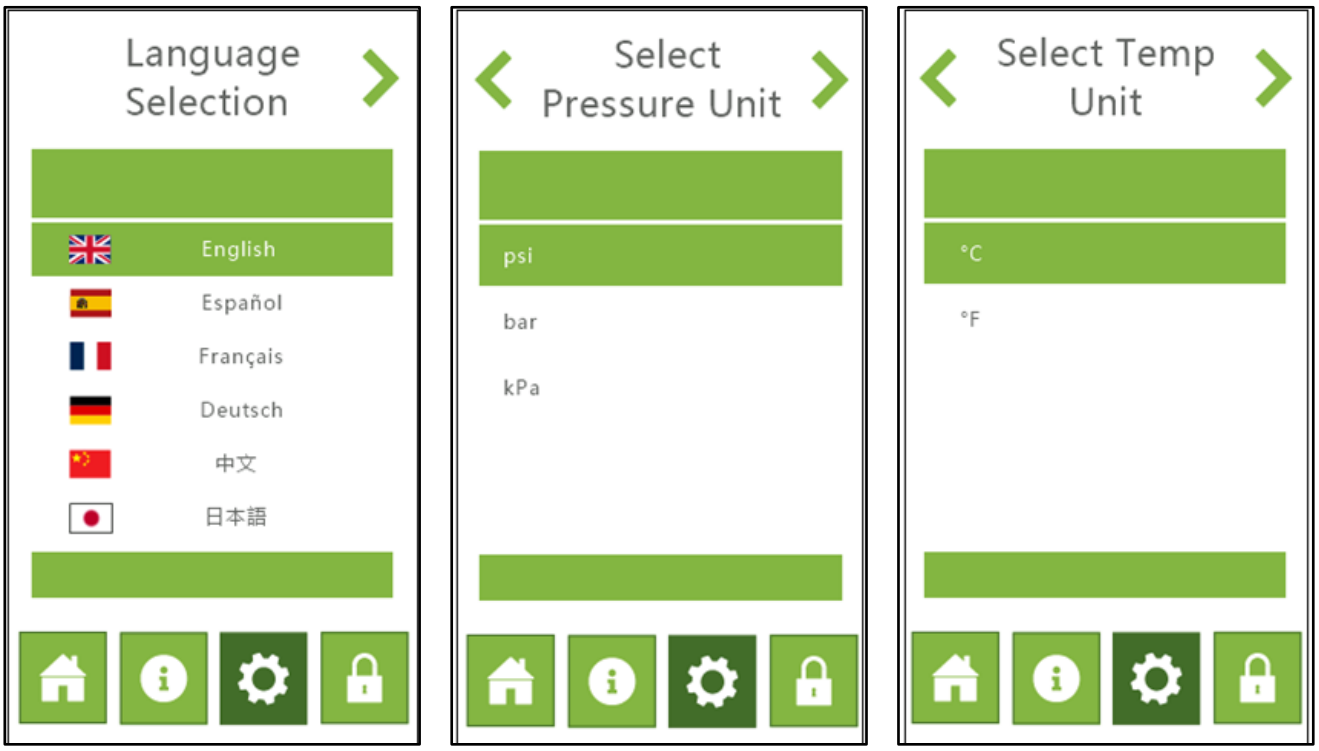
Water Quality Icon

In the top right corner of the Home Screen, and above the Water Level display, the Water Quality icon is shown. This will change depending on the quality of the deionised water in the system. Please take note of the colour shown and act accordingly.

Colour: Quality	Green: OK	Amber: Caution	Red: If colour persists, drain generator immediately and refill with fresh ASTM Type II DI Water

Generator Settings

The language, pressure units and temperature units can be changed within the setting screens.



Please choose options according to your display preferences.

Start-up Sequence

The generator requires minimal operator input. So long as the generator is installed as described in earlier sections and is serviced in accordance with the specified maintenance recommendations (see Service Requirements), then it will operate in accordance with the demands of connected applications. Do not run generator without DI Water Supply connected as it will damage the system. Generator is shipped without water in the internal tank. Allow to fill.

The generator will automatically produce the factory set pressure of 100psi. The outlet flow rate of an Intura H2|O2 will provide up to 250sccm.

CHECK:

1) H_2 Delivery is connected to the application

2) Mains power is connected

3) DI Water Supply is connected to the Fill Port

Turn the power switch ON. The HMI will light up and the cooling fan will rotate.

On power up, the generator will check all sensors before subsequently checking the water level and will load water until the internal tank is full, after which it will perform a diagnostic check including a leak test. This should take approximately six minutes.

Upon successful completion of the leak test, the operator is presented with the Home screen on the HMI, and the generator is ready to deliver Hydrogen.

The first time the unit is switched on the user should select the Settings button to select desired Language, Pressure units, and Temperature. Delivery Pressure should also be set to the user's preference. Please follow instructions in section "Screens Overview".

The main screen has three options available, H2 Start, O2 Start and Shutdown. After selecting the required Delivery Pressure, the main screen can be accessed by pressing the Home button on the bottom left of the HMI. Pressing Start on either button will begin the flow of Hydrogen or Oxygen to the application. Shutdown will depressurise the generator. This should be selected before turning the unit off using the Power switch at the rear of the unit.

If the unit has been used previously, the Start button will initiate the supply of Hydrogen to the application at the last used pressure.

Note: If at any point, the startup sequence is unsuccessful, an alarm will sound, and an Error message will appear on the screen. The user is prompted at this point to contact their PEAK service provider. See section Troubleshooting at the end of this manual.

Variable Power Output

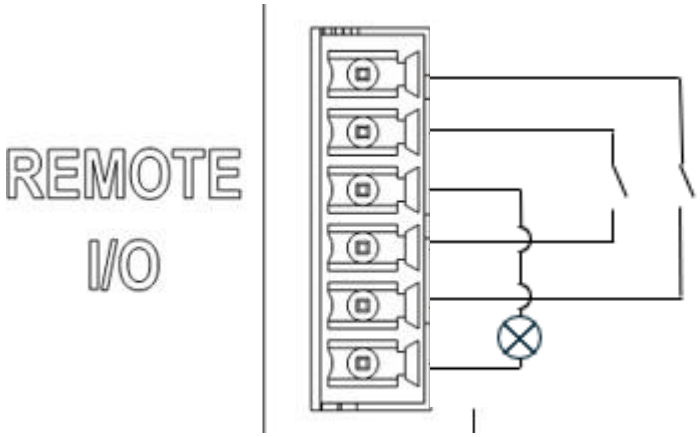
When demand from the instrument stops, the Intura H2|O2 generator will run in a reduced power state to reduce energy consumption and minimise component wear.
If demand from the application starts again, the system will detect the demand for gas and will automatically increase workload to match the flow requirement.

Generator Shutdown

The generator can be switched off at any time using the following procedure.
On the home screen, press the Stop button if hydrogen delivery is in process. Press Shutdown. The generator will exhaust remaining gas from the system. The generator can now be safely switched off.

Remote I/O

The Remote I/O connection is a Molex: 395126006. A compatible male plug should be used to interface with the functions. The I/O is shown below:



Pin 6 – 5V In - O_2 Remote Start/Stop
Pin 5 – 5V In - H_2 Remote Start/Stop
Pin 4 – 5V Out - Low Water
Pin 3 – 5V Out - Remote Ready
Pin 2 – 5V Out - Fault
Pin 1 – GND

Fault

If any alarms occur this signal will be removed.

Remote Ready

Once the generator has completed its startup testing and is ready to deliver gas the signal will be present. If any alarms occur this signal will be removed.

Low Water

This is present when the water level is below the "low water" sensor of the internal water tank. This signal will activate periodically as water is used and replenished from the external source. If this signal is present for an extended period, it indicates that the internal water tank is not being replenished. Indicating that the external water source is empty.

Note that the system will continue to run until the internal water level is below the "critical" sensor.

H_2 Remote Start/Stop

Once the generator has completed startup testing and the H_2 remote ready signal is enabled the remote start/stop can be used.

A high signal applied to the H_2 start/stop pin will start gas delivery. Once the signal is removed the gas delivery will cease.

O_2 Remote Start/Stop

Once the generator has completed startup testing and the O_2 remote ready signal is enabled the remote start/stop can be used.

A high signal applied to the H_2 start/stop pin will start gas delivery. Once the signal is removed the gas delivery will cease.

Service Requirements

Service Schedule

Purchase Interval	Component	Qty.	Visit
12 months	Intura Annual Service Kit	1	www.PEAKscientific.com/ordering
48 months	Intura H2|O2 Year 4 Service Kit	1	

* On the 4th annual service of your Intura H2|O2 generator, the circulation pump needs to be replaced. This is contained with the Year 4 Service Kit.

Please contact your service provider for more information.

DI Cartridge Service Indication

The generator will notify the user of the service interval for the DI cartridge. The generator has the following Service Indication Stages:

Stage 1

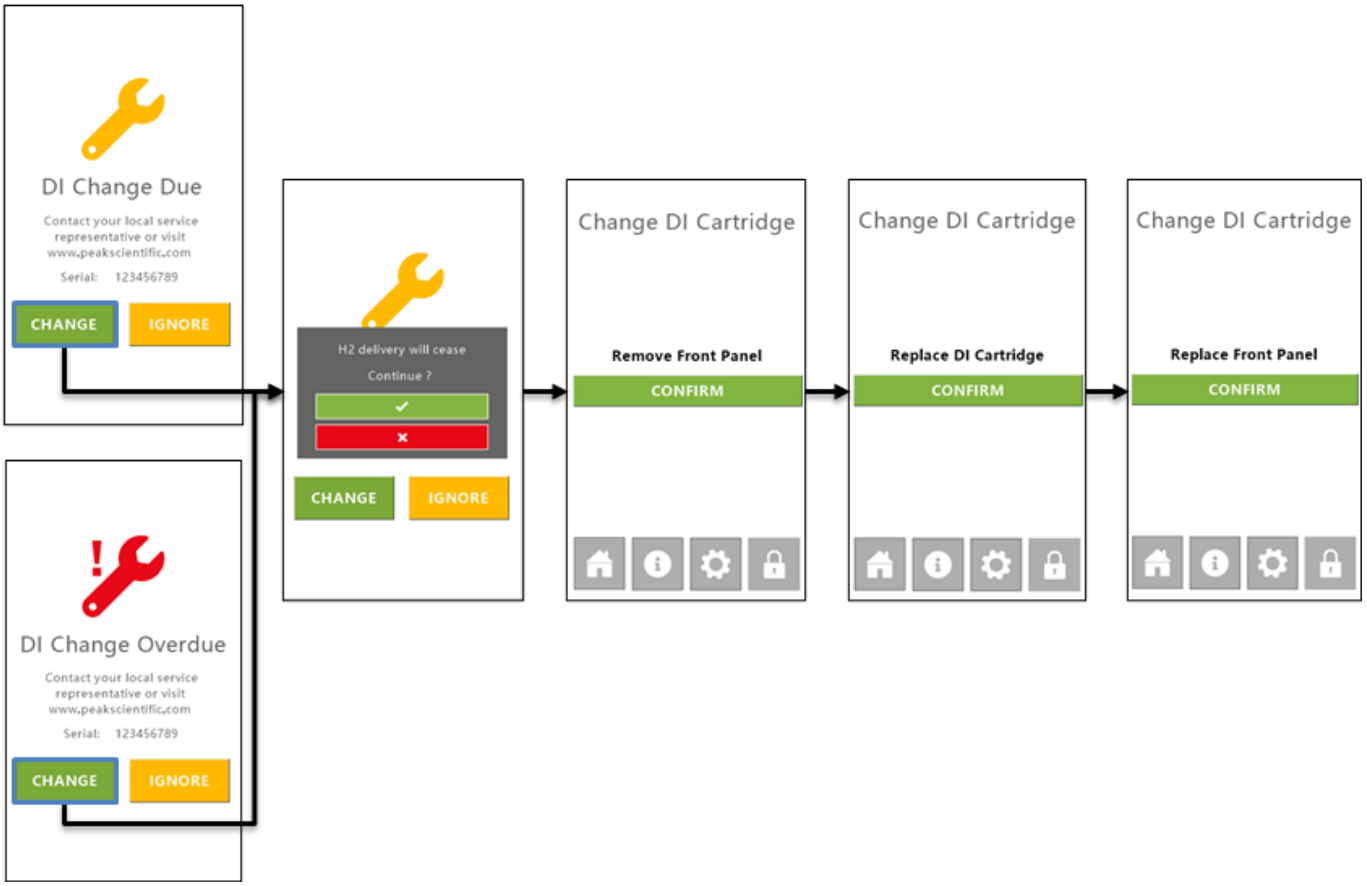
11 months after installation, the service indicator will be shown on the display. This is to make the user aware that the DI cartridge is due to be changed. The generator will continue to operate as normal with the service indicator on. If the warning message has been acknowledged, the user will be returned to the Home screen, with the service icon displayed in the top corner of the HMI. Pressing the icon will take the user to the Service screen.

Stage 2

If the service is not completed the generator will continue to run. After 4 weeks, the service overdue indicator will show on the display. This is to make the user aware that the service of the generator is now overdue and must be completed immediately to ensure the continuous trouble-free operation of the generator. If the warning message has been acknowledged, the icon will still be displayed in the corner of the HMI. Pressing the icon will take the user to the error page.

Failure to maintain the deioniser cartridge as recommended will reduce the operational life of your generator and render its 3-year cell warranty void.

Follow instructions outlined below in order to change the DI cartridge.



PEAK Protected

With PEAK Scientific you invest in not only a product but peace of mind. With a network of certified PEAK engineers stationed throughout the globe, PEAK's rapid response team are never far away and our commitment is to keep your generator running day in, day out, protecting your laboratory workflow.

[Peak Protected] can provide...



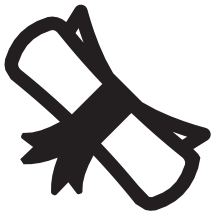
Installation
A dedicated Peak engineer will visit your lab to install and setup your generator



Complete plan
Swift response by a Peak Service Engineer within 72 hours & planned preventative maintenance



Premium Protected
Guaranteed rapid on-site response within 24 hours & planned preventative maintenance



IQ/OQ
Certified assurance for applications requiring documented qualification



Spares
Genuine Peak parts with express delivery, ensuring optimal performance and lifetime



Technical Support Hotline
Around the clock support by phone or online with our global technical helpdesk

To find out more about protecting your investment visit: **www.PEAKscientific.com/protected**

Cleaning

Clean the outside of the generator, with the exception of the HMI screen, using only warm soapy water and a clean damp cloth. Ensure all excess fluid is thoroughly removed from the cloth prior to use.

	Cleaning should only be undertaken with the power switched off and the power cord removed from the rear of the generator.
 CAUTION	Under no circumstances should any solvents or abrasive cleaning solutions be used as these can contain fumes that could be harmful to the generator.
 CAUTION	To clean the HMI screen, moisten a cloth either isopropyl or ethyl alcohol. Do not use water, ketone or aromatic solvent to clean the HMI screen. Ensure that saliva or water drops are wiped off immediately and avoid contacting with oil or fats.

Chlorinated Hydrocarbons

Chlorinated Hydrocarbon compounds and chlorofluorocarbons (or freons) will severely damage the catalyst used in this gas generator, resulting in generator failure.
The generator can also be contaminated by high concentrations of lead, sulphur or phosphorous compounds, heavy metals and long chain polymers. Care should be taken to avoid introducing these compounds into this gas generator. Please ensure that none of these compounds are stored nearby.

Chlorinated Solvents

Under no circumstances should any Chlorinated solvents be stored in the immediate vicinity of the gas generator. Failure to adhere to this could result in severe contamination of the generator or failure.

Liquid Leak Detectors

Liquid leak detectors should not be used on any generators in the Intura range. These solutions are easily drawn into the high purity hydrogen gas system and can cause irreparable damage to a GC column. If a liquid solution must be used, then it should be IPA based, or a portable hydrogen detector should be used.

Alarm Messages

In the event of an alarm condition a message will be displayed on the user interface with a descriptive message and error code.

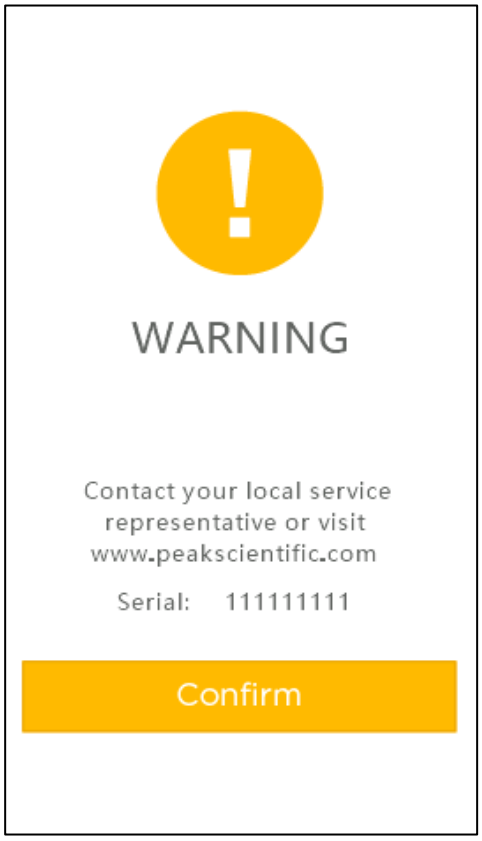
Minor Alarm Message

There is a problem with the generator that requires the attention of the user.

Major Alarm Message

There is a problem with the generator that may prevent it from supplying gas at the required pressure, flow or purity. In some instances, the generator will automatically shut down to prevent further damage.

Please note the error code displayed and contact your service provider.





Reporting Issues

Follow these steps to report a fault using the QR code displayed on your PEAK Scientific generator.

Step 1: Scan the QR Code For iPhone (iOS 11 or later):

1) Open the Camera app.
2) Point it at the QR code displayed on the generator screen.
3) Wait for a notification banner to appear.
4) Tap the banner to proceed.

Step 1: Scan the QR Code For Android devices:

1) Open the Camera app (or Google Lens, depending on your device).
2) Point it at the QR code.
3) Wait for a pop-up or banner to appear.
4) Tap the link that appears to continue.

Note: If scanning doesn't work, ensure your phone is connected to the internet. If needed, install a free QR code scanning app from your app store.

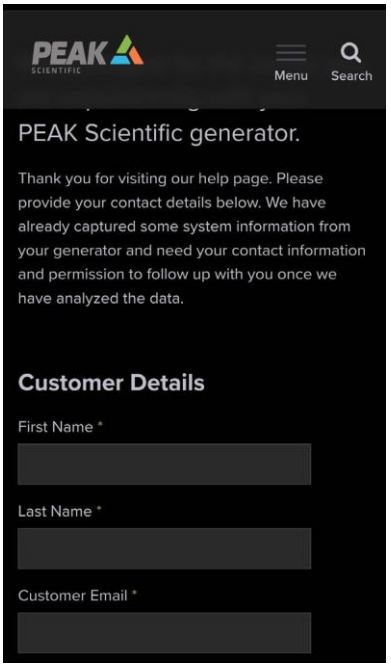
Step 2: Diagnostic Data Capture

Once the QR code is scanned:

- The system will automatically read the error code from your generator.
- It may also collect your approximate location (if permitted) and other key diagnostic data to assist with support.

Step 3: Enter Contact Details

Fill in the required contact information in the appropriate fields provided. Ensure the details are accurate so our team can reach you easily.



Step 4: Submit the Form

After submitting your information:

- A support ticket will be automatically created and directly linked to your generator.
- The issue will be raised with our Service Team.
- A member of the team will contact you shortly to assist further.
- If you need help during this process, please reach out to PEAK Scientific Customer Support.

ATTENTION: Should the situation arise where it is not possible to use electronic devices on site, please contact PEAK Scientific Customer Support when appropriate.

Troubleshooting

Problem	Possible Solution
The generator will not switch on and the power switch does not illuminate.	Ensure power cable is plugged into the generator and that the power socket is turned on. Check the fuse in the power cable plug (if fitted). Contact your service provider. 
The HMI is on, but the generator will not start.	Check the unit is not in stand-by mode Contact your service provider
Generator is displaying low water level	Ensure generator is connected to ASTM Type II (<0.1µS/cm) Deionised water source
Water Tank Timeout	Connect external water tank to fill port Disconnect drain port Contact your service provider
Electrolyser PSU Comms Lost	Contact your service provider.
Startup Test 1 Failure	Contact your service provider.
Startup Test 2 Failure	Contact your service provider.
Startup Test 4 Failure	Contact your service provider.
H_2 Overpressure	Contact your service provider.
High Cell Voltage	Check water level Contact your service provider
Separation Tank Lock Out	Contact your service provider.
Separation Tank Fault	Contact your service provider.
Capacity Excess – 1	Contact your service provider.
Capacity Excess – 2	Contact your service provider.
Capacity Excess – 4	Contact your service provider.
Water Loading	No external water connected
Water Tank Sensor Fault	Contact your service provider.
H_2 Detector Low Level	H_2 Detector lower level exceeded

Problem	Possible Solution
H_2 Detector High Level	H_2 Detector upper limit exceeded
H_2 Detector Fault	Contact your service provider.
I^2C Comms error	Contact your service provider.
System Pressure Sensor Fault	Contact your service provider.
Delivery Pressure Sensor Fault	Contact your service provider.
DI Cartridge Change Due (Yellow)	Refer to DI Cartridge Service Indication **OR** Contact your service provider to schedule a service
DI Cartridge Change Due (Red)	Refer to DI Cartridge Service Indication **OR** Contact your service provider to schedule a service
O_2 Overpressure	Contact your service provider.
O_2 Delivery Pressure Sensor Fault	Contact your service provider.
O_2 System Pressure Sensor Fault	Contact your service provider.
Capacity Excess - 6	Contact your service provider.

Warranties and Liabilities

Visit: www.PEAKscientific.com/warranty-statement/

EU Declaration of Conformity

We **Peak Scientific Instruments Ltd.**

Of **Fountain Crescent, Inchinnan, Renfrewshire, Scotland, PA4 9RE, UK.**

Hereby declare that, this declaration of conformity is issued under the sole responsibility of the manufacturer.

Equipment Type : Intura H2IO2.

Model Designator : Hydrogen / Oxygen Generator

To which this declaration relates, is in conformity with the following applicable EU Directives, harmonized standards, and other normative requirements.

Low Voltage Directive 2014/35/EU
EN 61010-1: 2010+ A1:2019 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use.

Electromagnetic Compatibility Directive 2014/30/EU
EN 61326-1: 2021 Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements. (Class A)

Restriction on the use of certain hazardous substances in electronic equipment (RoHS) Directive 2011/65/EU as amended by EU 2015/863.

Signed for and on behalf of Peak Scientific by

Signature: 

Name: Aine Finlayson

Position: Chief Operating Officer

Peak Scientific Instruments ltd, Inchinnan, Renfrew, Scotland, PA4 9RE, UK.

Date: 24th August 2026

CE

UK Declaration of Conformity

We **Peak Scientific Instruments Ltd.**

of **Fountain Crescent, Inchinnan, Renfrewshire, Scotland, PA4 9RE, UK.**

Hereby declare that, this declaration of conformity is issued under the sole responsibility of the manufacturer.

Equipment Type: Intura H2IO2

Model Designator: Hydrogen/ Oxygen Generator

To which this declaration relates, is in conformity with the following applicable UK Statutory Instruments, Standards and other normative requirements.

The Electrical Equipment (Safety) Regulations 2016 (SI 2016 / 1101) as amended.
BS61010-1:2010+ A1:2019 Safety Requirements for Electrical Equipment for Measurement Control and Laboratory Use.

The Electromagnetic Compatibility Regulations 2016 (SI 2016 / 1091) as amended.
BS61326-1:2021 Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements. (Class A)

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (SI 2012 / 3032) as amended.

Signed for and on behalf of Peak Scientific by

Signature: 

Name: Aine Finlayson

Position: Chief Operating Officer

Peak Scientific Instruments ltd, Inchinnan, Renfrew, Scotland, PA4 9RE, UK.

Date: 24th August 2026

UK CA

WEEE Compliance Statement

The Waste Electrical and Electronic Equipment (WEEE) Regulations SI 2013 No 3113 and or the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU apply to all electrical and electronic equipment placed on the market in the UK and EU covered by the scope of regulations which can be found in the Government Guidance Notes (PDF) produced by the Department for Business Innovation and skills for the UK and here for Europe.

All PEAK products that are subject to the WEEE directive are compliant with the WEEE marking requirement. Such products are marked with the "crossed-out wheelie bin" symbol (shown below) in accordance with European standard EN50419. All old electrical equipment can be recycled. Please do not dispose of any electrical equipment (including those marked with this symbol) in general rubbish bins. Please contact your dealer or distributor for clarity.



EMC Class A Compliance Statements

European Union (EU) and United Kingdom (UK) Class A Compliance statement

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Class A Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Industry Canada Class A emission compliance statement

This ISM device complies with Canadian ICES-001 (A).
Cet appareil ISM est conforme à la norme NMB-001 (A) du Canada.

Korea Communications Commission (KCC) statement

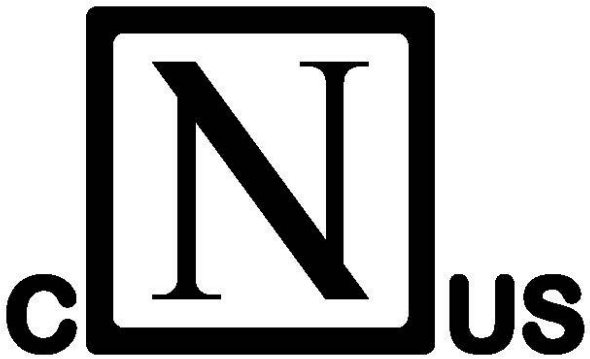
이 기기는 업무용(A급)으로 전자파적합기기로 서 판매자 또는 사용자는 이 점을 주의하시기 바라며,

가정외의 지역에서 사용하는 것을 목 적으로 합니다.

(This is electromagnetic wave compatibility equipment for business (Type A). Sellers and users need to pay attention to it. This is for any areas other than home.)

NRTL Compliance Statement

Nemko Group AS is headquartered in Norway, it is also a Nationally Recognised Testing Laboratory (NRTL), operating primarily out of a facility in Ottawa Canada.
They are authorised to evaluate product to both United States and Canadian standards and certify the product to be in compliance to the relevant standards.
Peak products are certified to the current in force revision of the following standards in order to cover both Canadian and United States requirements for “Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory use, Part 1: general Requirements”.
Canada : CAN/CSA C22.2 No 61010-1-12, AMD1 :2018
United States : UL 61010-1, 3rd edition (2012), AMD1:2018
As a result the products covered by this statement are certified and listed by Nemko accordingly and are entitled to carry the Nemko mark with both Canadian and United States subscripts, as shown below on the product rating label.



Health and Safety Data

Molecular Sieve

This sheet to be retained by the 'Health & Safety Officer'

The recipient of this Health & Safety Data sheet is required to ensure that all personnel handling, using or likely to come into contact with the material are made aware of the Health & Safety information contained herein.

General Description
Column containing white to tan molecular sieve.

Chemical Components
Zeolite >70%, Kaolin Clay: <30%

Form	Spheres
Flash Point	N/A
Colour	White to Tan
Ignition Temperature	N/A
Odour	Odourless
Explosion Limits	N/A
Decomposition Temperature	N/A
Vapour Pressure	N/A
Viscosity	N/A
Solubility in Water	Insoluble
Relative Density	0.7
Eye Protection	Safety Glasses (BS2092C)
Storage	All containers must be in closed airtight and kept in a dry place.
Fire & Explosion Hazards	N/A
Disposal	This product can be disposed as ordinary waste if local regulations permit.

Emergency & First Aid Procedures

Spillages
Contain spillage. Collect in suitable containers for recovery or disposal. During collection avoid creating dust.
Extinguishing Media
N/A. Inorganic compound. Not combustible.
Fire Fighting and Protection
Wear HSE approved, pressure demand, self-contained breathing apparatus or equivalent.

First Aid

Skin Contact
Wash spillages from skin with soap and water. Consult doctor if irritation persists.

Eye Contact
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Inhalation
This product should present no hazard if operated under normal conditions. If irritation persists, move patient to fresh air.

Ingestion
Rinse mouth and then drunk plenty of water.

Toxicological Data
No toxicity data available on this product

Occupation exposure limits
STEL/TLV = None established.

Incompatible Materials (to avoid hazardous reactions)
Avoid contact with reducing agents.

Deioniser Resin

This sheet to be retained by the 'Health & Safety Officer'

The recipient of this Health & Safety Data sheet is required to ensure that all personnel handling, using or likely to come into contact with the material are made aware of the Health & Safety information contained herein.

General Description
Cylinder containing ion exchange resin. 60% Cation and 40% Anion by mass.

Chemical Components
Sulphonated copolymer of styrene and divinylbenzene in the hydrogen form. Triethylamine functionalised copolymer of styrene and divinylbenzene in the hydroxide form.

Form	Spherical Beads
Flash Point	N/A
Colour	White to Dark Amber
Flammability	Auto Ignition > 500°
Odour	Slight amine
Solubility in Water	Virtually insoluble
pH @ 25°C	7-9.5 in aqueous slurry
Eye Protection	Safety Glasses (BS2092C)
Storage	Store in a cool place above 0°C and below 50°C, out of direct sunlight
Fire & Explosion Hazards	Toxic combustion products may include sulphur oxide and sulphur trioxide.
Disposal	This product can be disposed as ordinary waste if local regulations permit.

Emergency & First Aid Procedures

Spillages
Floor may be slippery. Use care to avoid falls. Wear protective glasses. Sweep up and transfer to containers for recovery and disposal.
Extinguishing Media
Carbon Dioxide (CO2), Water Fog and Dry Powder.
Fire Fighting and Protection
Wear HSE approved, pressure demand, self-contained breathing apparatus or equivalent.

First Aid

Skin Contact
Wash off in flowing water or shower.

Eye Contact
Product can cause eye irritation. Irrigate with flowing water for at least 15 minutes. Consult medical staff if irritation persists.

Inhalation
No adverse effects anticipated.

Ingestion
If resin has been confined to the mouth, administer 250 ml. of water as a mouthwash. Avoid swallowing. This product is considered non-hazardous if ingested in small amounts; however, it is advisable to seek medical advice.

Toxicological Data
No toxicity data available on this product

Occupation exposure limits
LD 50 >5000 mg/kg if ingested

Incompatible Materials (to avoid hazardous reactions)
Avoid contact with concentrated nitric acid and any other strong oxidising agents at all times.

Catalyst

This sheet to be retained by the 'Health & Safety Officer'

The recipient of this Health & Safety Data sheet is required to ensure that all personnel handling, using or likely to come into contact with the material are made aware of the Health & Safety information contained herein.

General Description
Column containing grey catalyst.

Chemical Components
0.2% Palladium, on 2 to 5mm alumina spheres

Form	Spherical pellets 2mm to 5mm
Colour	Grey
Auto Ignition	N/A
Odour	None
Melting Point	>2000°C
Solubility in Water	Insoluble
Bulk Density	0.9 kg/L
pH	N/A
Eye Protection	Safety Glasses (BS2092C)
Storage	Store in a cool place above 0°C and below 50°C, out of direct sunlight.
Fire & Explosion Hazards	Monomers, Residual organics, Carbon Oxides, Amines, Nitrogen Oxides and Sulphur Oxides.
Disposal	This product can be disposed as ordinary waste if local regulations permit.

Emergency & First Aid Procedures

Spillages
Contain spillage. Collect in suitable containers for recovery or disposal. During collection avoid creating dust.
Extinguishing Media
Use firefighting measures to the surroundings.
Fire Fighting and Protection
Wear HSE approved, pressure demand, self-contained breathing apparatus or equivalent.

First Aid

Skin Contact
Wash spillage from skin with soap and water.

Eye Contact
Wash immediately with copious amounts of water and obtain medical attention.

Inhalation
Remove from source of exposure.

Ingestion
Wash out mouth with water. If large amount swallowed or symptoms develop obtain medical attention.

Toxicological Data
The lethal dose for humans for synthetic amorphous silica is estimated at
over 15,000 mg/kg

Occupation exposure limits
DNEL/PNEC < 1 = No immediate concern.

Incompatible Materials (to avoid hazardous reactions)
None known.

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PEAK Scientific has highly trained, fully certified Field Service Engineers located in over 20 countries across every continent around the world. This allows us to provide an industry-leading rapid response service to our customers. With **[PEAK Protected]**, your laboratory's productivity becomes our top priority.

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