

GPC 220 Gel Permeation Chromatograph Site Preparation Checklist

Thank you for purchasing an Agilent **instrument**. To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide AND checklist** prepared for you that outlines the supplies, consumables, space and utility requirements for your equipment for your site.

Customer Responsibilities

Make sure your site meets the following prior specifications before the installation date. For details, see specific sections within this checklist, including:

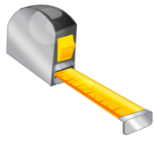
- The necessary laboratory or bench space is available
- The environmental conditions for the lab as well as laboratory gases and plumbing
- The power requirements related to the product (e.g., number & location of electrical outlets)
- The required operating supplies necessary for the product and installation
- Please consult Other Requirements section below for other product-specific information.
- For more details, please consult the product-specific Site Preparation or Pre-Installation manual (delete this line if a Site Prep Guide does not exist).

If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.

Important Customer Information

1. If you have questions or problems in providing anything described as a Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or it's partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
2. Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
3. Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.

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Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below.

Pay special attention to the **total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves**. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special Notes

1. The oven and solvent module lids open upwards to a full height of 97cm (38"). Please be aware of overhead obstructions.
2. If a Precision PD2040 or PL-BV 400HT is included in the instrument allow an additional 30cm (12") for each of these detector control systems on the width of the bench space.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
GPC 220	180	370	63	25	56	22	140	55



Environmental Conditions

Operating your instrument within the recommended temperature ranges insures optimum instrument performance and lifetime.

Special Notes

1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
2. The site's ambient temperature conditions must be stable for optimum performance.
3. Situate the instrument in a well-ventilated area. An air change rate of at least 15 per hour is recommended.
4. The instrument is equipped with two fan-forced air exhausts (4" dia) at the rear of each module, which must be routed to a fume extraction system or vented to a safe place via the supplied hoses. Both vent hoses for the Instrument are 4 inches in diameter.
5. The air flow of the extraction system should be <1 SLM. Care must be taken that the efficiency of (LEV) systems are compromised by the change in airflow characteristics caused by the hose positioning and that inhalation exposures to harmful substances are still under control. If in doubt, please contact a qualified ventilation engineer specialising in LEV and an occupational hygienist.

Instrument Description	Operating temp range °C (F)	Operating humidity range (%)	Heat Dissipation (BTU)
GPC 220	15-35°C (59-95°F)	<80% at 25-35°C (77-95°F)	7900

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Power Consumption

Special Notes

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
2. Two power outlets are required; one for the main oven unit and one for the solvent module.
3. For countries where 230V will have to be installed the main power leads are provided with NEMA L6 -15R Locking Receptacle 2Pole, 3Wire, Single Phase as below:



4. Ensure that the mains supply is fitted with a residual current circuit breaker.
5. Please have a qualified Electrician arrange for the proper electrical service.

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Maximum Power Consumption (W)
GPC 220	230V (AC) ±10%,	3300	2310



Required Operating Supplies by Customer

Special Notes

1. For information on Agilent consumables, accessories and laboratory operating supplies, please visit <http://www.chem.agilent.com/en-US/Products/consumables/Pages/default.aspx>
2. Author to add info in table below on **required** supplies in order to ensure successful installation.

Item Description (including dimensions etc)	Vendor's Part Number (if applicable)	Recommended Quantity
Isopropanol-2-ol (IPA) required for the Tetrahydrofuran checkout test.	Fisher; Part#: P/7500/PB08	10ml
THF (Tetrahydrofuran) GPC grade for Gel Permeation Chromatography Or alternatively, HPLC grade	Fisher; Part#: T/0709/PB17	2.5 L

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Other Requirements

The instrument will be delivered in two, pallet type closed boxes. As our commissioning engineers do not carry lifting or moving equipment, nor are they trained to use such equipment, instruments must be positioned at the commissioning location before they arrive. If you do not possess the necessary resources to unpack, move &/or position the instrument modules safely for commissioning, please contact us as soon as possible and we will assist you in locating a suitable contractor to do this on your behalf.

As part of the electrical safety regulations, forming part of the overall CE compliance, the unit is fitted with two surge safe devices, one located in the control drawer towards the rear and the other is hard wired behind the solvent module back panel. This device protects the instrument from high voltage line surges by filtering the incoming supply. This device will cause the instrument to fail the insulation resistance test of the standard portable appliance test (P.A.T Test) and therefore should be unplugged before the P.A.T test is performed (please refer to the procedures below).

In the case of the solvent module the surge safe is hard wired in and will need to be disordered in order to be able to PAT test as per the procedure below:

PROCEDURE:

Materials;

M4 Allen key

Pair of cutters (pliers)

Wire stripper

Cross head screwdriver

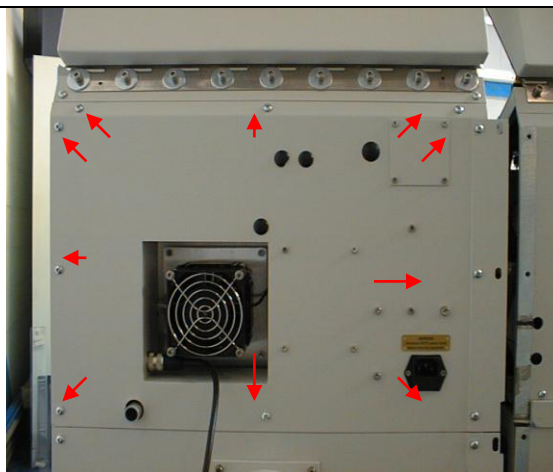
Crimping Tool

2 off Red bullet crimps

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Please switch the Instrument off and remove the mains plug from the back of the instrument.

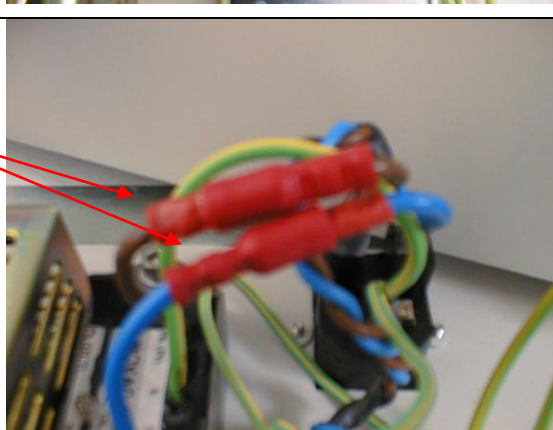
Remove the ten fixing screws and tilt the back panel to get access to the surge safe module



By using the cutters cut the Live and Neutral wires and unsleeve using the wire stripper. Crimp/fit the bullet connectors to each end of the live and neutral wire. PAT test the solvent module.



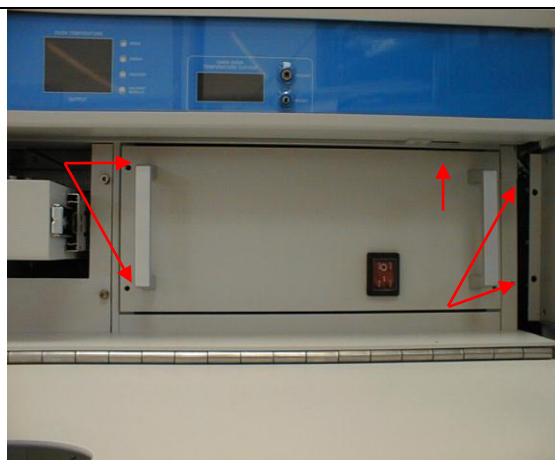
Connect the bullet connectors (ensuring brown to brown and blue to blue) and refit the back panel, replacing the ten screws. Reconnect the mains plug and switch on the solvent module ready to be used.



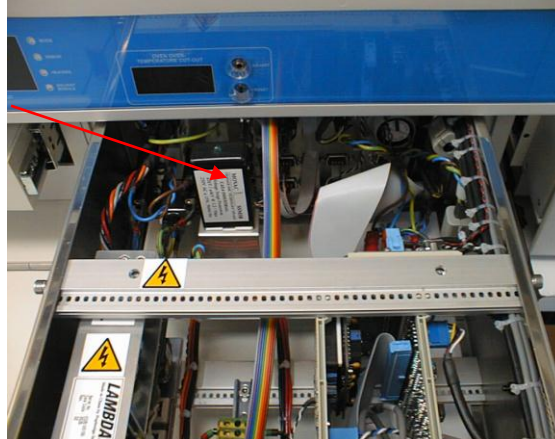
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As for the control drawer surge safe module, please do the following

**Please switch the main unit off and remove the mains plug from the back of the control drawer.
Remove the five fixing screws and withdraw the control drawer forward.**



**Unplug the surge safe module and perform the PAT test.
Replace the surge safe module.
Replace the five screws and switch the instrument on and start using.**



READ ABOVE SECTION BEFORE ATTEMPTING A P.A.T. TEST

Important Customer Web Links

- For additional information about our solutions, please visit our web site at <http://www.chem.agilent.com/en-US/Pages/HomePage.aspx>
- Need to get information on your product?
Literature Library - <http://www.agilent.com/chem/library>
- Need to know more?
Customer Education - <http://www.agilent.com/chem/education>
- Need technical support, FAQs? - <http://www.agilent.com/chem/techsupp>
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Document Control Logs

Revision Log

Revision	Date	Reason For Update
add revision # of doc here	Date of issuance	Author to describe main features/changes made for this specific revision

Approval Log

Revision	Approver	Title of Approver
add rev#	Add approver name here	Add approver's function or title here