

Agilent G5410A BenchCel Microplate Handler Site Preparation Checklist

Thank you for purchasing an Agilent **G5410A BenchCel Microplate Handler**. 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:

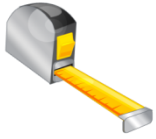
- The necessary laboratory or bench space is available. See specifications under the **Other Requirements** section.
- The environmental conditions for the lab as well as laboratory gases and plumbing.
- The power requirements related to the product (e.g., number & location of electrical outlets).
- The required operating supplies necessary for the product and installation.
- See the **Other Requirements** section for other product-specific information.
- For more details, see the laboratory requirements section of the **BenchCel Microplate Handler User Guide** (part number G5400-90004).

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 its 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.
4. This checklist is for the **BenchCel Microplate Handler** only. For devices that are integrated with the BenchCel Microplate Handler, see the corresponding site preparation checklist.

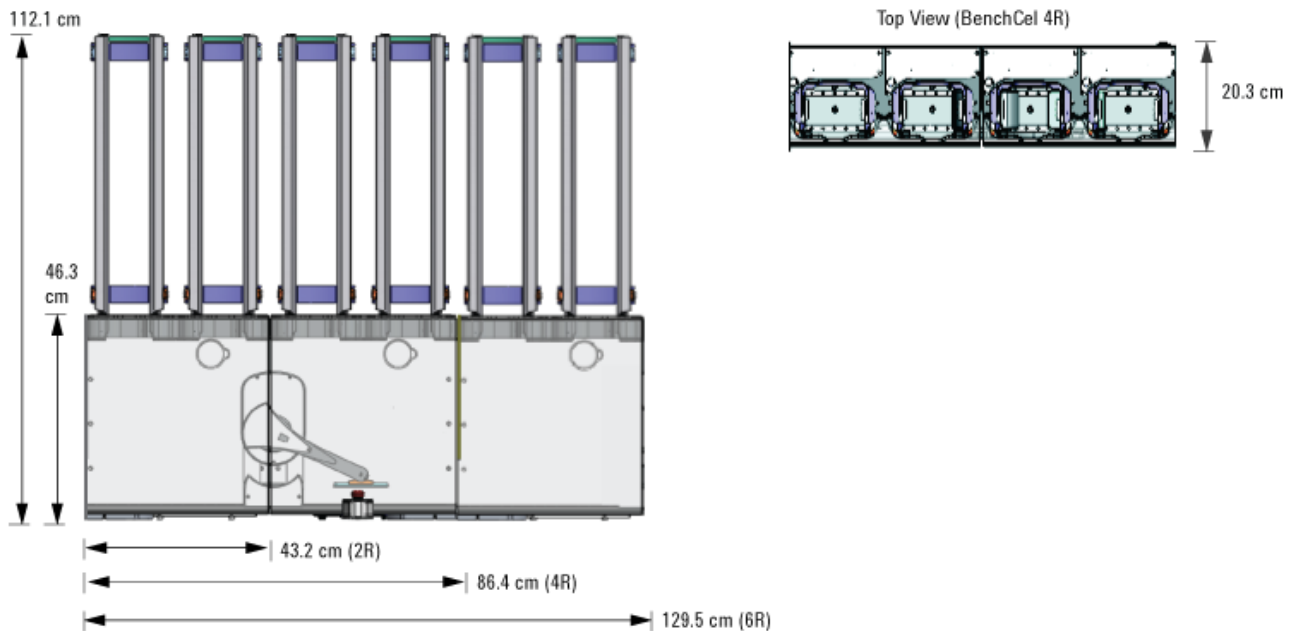
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Dimensions and Weight

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

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. In addition to the dimensions of the BenchCel instrument, you must plan space for the computer workstation and any other components integrated with the BenchCel Microplate Handler.
2. Also see laboratory table specifications under Other Requirements.

Instrument Description	Weight		Height*		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
G5410A BenchCel 2R (2 labware racks)	21.8 kg	40.1 lbs	46.3 cm	18.2 in	20.3 cm	8.0 in	43.2 cm	17.0 in
G5410A BenchCel 4R (4 labware racks)	28.1 kg	61.9 lbs	46.3 cm	18.2 in	20.3 cm	8.0 in	86.4 cm	34.0 in
G5410A BenchCel 6R (6 labware racks)	32.7 kg	72.1 lbs	46.3 cm	18.2 in	20.3 cm	8.0 in	129.5 cm	51.0 in

* The height of the BenchCel device without labware racks installed. The overall height varies depending on the rack height. The figure above shows the medium rack.

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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. The BenchCel Microplate Handler is for indoor use only.

Instrument Description	Operating temperature °C (F)	Operating humidity (%)	Pollution degree	Installation category
G5410A BenchCel 2R	5–40 °C	10–90% RH, non- condensing	2	II
G5410A BenchCel 4R	5–40 °C	10–90% RH, non- condensing	2	II
G5410A BenchCel 6R	5–40 °C	10–90% RH, non- condensing	2	II



Power Consumption

Special Notes

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Fuse (AC entry)
G5410A BenchCel 2R	100–240 VAC, 50/60 Hz	5A/120V, 2.5A/240V	5 A, 250 V, 5x20 mm, fast acting
G5410A BenchCel 4R	100–240 VAC, 50/60 Hz	5A/120V, 2.5A/240V	5 A, 250 V, 5x20 mm, fast acting
G5410A BenchCel 6R	100–240 VAC, 50/60 Hz	5A/120V, 2.5A/240V	5 A, 250 V, 5x20 mm, fast acting

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Required Operating Supplies by Customer

Item Description (including dimensions etc)	Vendor's Part Number (if applicable)	Recommended Quantity
<p>Compressed air:</p> <p>The BenchCel device requires the use of clean, dry, compressed air to move pneumatic components inside the device. The compressed air can be from the following sources:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Centralized source (house) <input type="checkbox"/> Compressed-air cylinders <input type="checkbox"/> Portable pumps <p>CAUTION Air pressure greater than 0.69 MPa (100 psi) can damage the BenchCel device.</p> <p>CAUTION Using oil compressors can introduce oil into the BenchCel device and void your warranty.</p> <p>To maintain the desired air supply in the device, the BenchCel device requires a source of air as follows:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Quality: Clean, dry, compressed <input type="checkbox"/> Flow rate: 34.0 Lpm (1.2 cfm) <input type="checkbox"/> Pressure: 0.65–0.69 MPa (95–100 psi) 		



Other Requirements

Laboratory Table Specifications

- The laboratory table must:
 - Have enough space to accommodate the BenchCel device, computer, monitor, pendant, and integrated devices.
 - Support the weight of the BenchCel device and integrated devices without excessive shaking or movement.
 - Be fixed in place, for example, casters that lock.

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- Have proximity to a power outlet and air supply.
- Allow sufficient clearance on the back side of the BenchCel Microplate Handler to access power, communication, and air tubing connections.
- Be a proper height for any operator to comfortably operate the BenchCel device.
- ❑ The table must be level in the direction of the width and the depth of the platform. Using a traditional bubble level, the table should be leveled such that the bubble is centered between the two limit lines of the level.
- ❑ The table surface must have a thickness relative to the material that will prevent warping when the BenchCel device and computer are set upon the table.
- ❑ The table surface must be attached to the table frame.
- ❑ The table frame must have:
 - A leveling mechanism in the feet or castors.
 - Dimensions that enable support of the table surface without overhang.
 - Have castors that can be unlocked to enable moving the platform away from a wall to provide maintenance access to the rear.

Computer Requirements

The computer available from Agilent Technologies (part number G5880 64009) has the following specifications:

- ❑ HP Mobile Workstation: Intel® Core™ i7-4600M (2.9 GHz, 4 MB cache, 2 cores), 15.6-in display (1920x1080), Windows 7 (64-bit) SP1 pre-installed, 8GB RAM, Intel Dual Band Wireless-AC 7260 802.11ac, USB Ethernet Adapter USB300M
- ❑ Preloaded with Office 2013

Safety Equipment and Precautions

WARNING Changing or modifying the safety equipment can prevent the safe operation of the workstation, invalidate its safety compliance, and lead to personal injury or property damage. Any customer who does not use the supplied safety equipment or who modifies the supplied safety equipment assumes full responsibility for providing an appropriate level of safety for its operators and for providing the applicable safety compliance marking and documentation.

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Important Customer Web Links

- For additional information about Agilent automation solutions, please visit our web site at <http://www.agilent.com/en-us/products/automation-solutions>
- Need to get information on your product?
 - VWorks **Knowledge Base** - <http://www.agilent.com/chem/askb>
 - Agilent product page - <http://www.agilent.com/en-us/products/automation-solutions/microplate-management-robotics/benchcel-microplate-handler>
 - Agilent Library - <http://www.agilent.com/en-us/library/literature>
- Need to know more?
 - Customer Education - www.agilent.com/chem/education
- Need Support Services? - www.agilent.com/crosslab

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