Thank you for purchasing an Agilent G5405A/G Microplate Centrifuge or Centrifuge with Loader. 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. For bench or table specifications, see 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.
- Please consult Other Requirements section below for other product-specific information.
- For more details, see the Laboratory requirements section in the applicable user guide:
  - Microplate Centrifuge User Guide (part number G5405-90001)
  - Microplate Centrifuge with Loader User Guide (part number G5405-90002)

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 Centrifuge and Centrifuge with Loader only. For devices that are integrated with the Centrifuge or Centrifuge with Loader, see the corresponding site preparation checklist.
Dimensions and Weight

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

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. See the additional laboratory bench specifications in the Other Requirements section.
2. For mounting specifications and instrument orientation considerations, see the applicable user guide:
   - Microplate Centrifuge User Guide (part number G5405-90001)
   - Microplate Centrifuge with Loader User Guide (part number G5405-90002)

<table>
<thead>
<tr>
<th>Instrument Description</th>
<th>Weight Kg</th>
<th>Weight lbs</th>
<th>Height cm</th>
<th>Height in</th>
<th>Depth cm</th>
<th>Depth in</th>
<th>Width cm</th>
<th>Width in</th>
</tr>
</thead>
<tbody>
<tr>
<td>G5405A/G Centrifuge</td>
<td>26.1</td>
<td>57.5 lbs</td>
<td>20.0</td>
<td>8.09</td>
<td>45.8</td>
<td>18.1</td>
<td>32.7</td>
<td>12.9</td>
</tr>
<tr>
<td>G5405A/G Centrifuge with Loader</td>
<td>34.7 Kg</td>
<td>76.5 lbs</td>
<td>25.1</td>
<td>9.88</td>
<td>71.1</td>
<td>28.0</td>
<td>32.7</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Figure. Centrifuge dimensions (top view and front view)
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 Centrifuge is for indoor use only.

<table>
<thead>
<tr>
<th>Instrument Description</th>
<th>Operating Temp range °C (°F)</th>
<th>Operating Humidity range (%)</th>
<th>Heat Dissipation (BTU)</th>
<th>Pollution Degree</th>
<th>Installation Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>G5405A/G Centrifuge</td>
<td>5–40 °C</td>
<td>10–95% RH, non-condensing</td>
<td>–</td>
<td>2</td>
<td>II</td>
</tr>
<tr>
<td>G5405A/G Centrifuge with Loader</td>
<td>15–40 °C</td>
<td>10–95% RH, non-condensing</td>
<td>–</td>
<td>2</td>
<td>II</td>
</tr>
</tbody>
</table>
Power Consumption

Special Notes

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

<table>
<thead>
<tr>
<th>Instrument Description</th>
<th>Line Voltage &amp; Frequency (V, Hz)</th>
<th>Maximum Power Consumption (VA)</th>
<th>Fuse (AC entry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G5405A/G Centrifuge</td>
<td>110–240 VAC, 50/60 Hz</td>
<td>7A/120V, 3.5A/240V</td>
<td>7 A, 250 V, 3 AG</td>
</tr>
<tr>
<td>G5405A/G Centrifuge with Loader</td>
<td>110–240 VAC, 50/60 Hz</td>
<td>7A/120V, 3.5A/240V</td>
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</tr>
</tbody>
</table>

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](http://www.chem.agilent.com/en-US/Products/consumables/Pages/default.aspx)

<table>
<thead>
<tr>
<th>Item Description (including dimensions etc)</th>
<th>Vendor’s Part Number (if applicable)</th>
<th>Recommended Quantity</th>
</tr>
</thead>
</table>
| **Compressed air:** Clean, dry, compressed air is required to move pneumatic components inside the device. The compressed air can be from the following sources:  
- Centralized source (house)  
- Compressed-air cylinders  
- Portable pumps  
The minimum compressed air requirements are:  
- **Quality:** Clean, dry, compressed  
- **Flow rate and pressure:** 0.5 Lps at 550 kPa (1 cfm at 80 psi)  
**CAUTION** Ensure that the air coming into the device is properly filtered from moisture or aerosolized impurities. Significant moisture or impurities in the air line can adversely affect the performance and life of the device. |
Using oil compressors can cause oil to leak into the device and void your warranty.

Isopropyl alcohol for cleaning the device varies

Other Requirements

Laboratory Bench or Table Specifications
Ensure that the laboratory table meets the following specifications at a minimum:

- Has enough space to accommodate the Centrifuge device, computer, monitor, pendant, and integrated devices.
- Supports the weight of the Centrifuge device and integrated devices without excessive shaking or movement.
- Can be fixed in place, for example, casters that lock. Ensure that the Centrifuge device is mounted on a stable base that does not move in relation to your microplate-handling robot.
- Has proximity to a power outlet and air supply.
- Allows sufficient clearance on the back side of the Centrifuge to access power, communication, and air tubing connections.
- Is a proper height for any operator to comfortably operate the Centrifuge.
- Has a level, non-slip surface: 36 x 49 cm (14 x 19 in) surface. The frame should have a leveling mechanism in the feet or casters.
- Has a surface thickness of 1.3 cm (0.5 in)
- Has the correct bolt-hole pattern for mounting the device to the surface. For details, see the user guide.

Safety interlock circuit
The Centrifuge Loader has a safety interlock circuit that must be closed for it to operate. An E-stop jumper, which closes the interlock circuit, is included. However, the Machinery Directive requires that you connect the safety interlock to a safety guard, light curtain, or enclosure.

**WARNING:** Operating the Centrifuge with Loader without safety guards or an enclosure connected to the safety interlock circuit increases the risk of injury.

For safety guidelines, see the applicable user guide:

- Microplate Centrifuge User Guide (part number G5405-90001)
- Microplate Centrifuge with Loader User Guide (part number G5405-90002)
Important Customer Web Links

- Need to get information on your product?
- Need to know more?
  - Customer Education - [www.agilent.com/chem/education](http://www.agilent.com/chem/education)

Document part number: G5408-90002