Thank you for purchasing an Agilent G5563A/G5562A Bravo Automated Liquid Handling Platform. 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, and meets the specified requirements.
- 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). No power strips allowed.
- The required operating supplies necessary for the product and installation.
- Please consult Other Requirements section for other product-specific information.
- For more details, please consult the G5562A, G5563A Bravo Platform Safety and Installation Guide (part number G5562-90001A).

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. Field service engineer cannot return for this service if it was available to do so during installation.

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. See the Safety Equipment and Precautions section under Other Requirements.
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.

Figure. Bravo Platform standard (left) and SRT (right) dimensions

<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>G5563A Bravo (Standard Platform)</td>
<td>52.1</td>
<td>114.9</td>
<td>69.7</td>
<td>27.4</td>
<td>43.8</td>
<td>17.2</td>
<td>64.8</td>
<td>25.5</td>
</tr>
<tr>
<td>(Optional) G5498B#022 Light Curtain</td>
<td>–</td>
<td>–</td>
<td>84.3</td>
<td>33.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(Optional) G5498B#055 Risers (146 mm)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>G5562A Bravo (SRT Platform)</td>
<td>51.5</td>
<td>113.5</td>
<td>61.7</td>
<td>24.3</td>
<td>43.8</td>
<td>17.2</td>
<td>64.8</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Special Notes

1. In addition to the dimensions of the Bravo Platform, you should plan space for the Pump Module, if applicable, and the computer workstation.
2. See additional laboratory bench specifications under Other Requirements.
### 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 and cold, for example, direct sunlight, heating/cooling from air conditioning outlets, or drafts, and vibrations. The site’s ambient temperature conditions must be stable for optimum performance.

2. The Bravo Platform is intended to operate in a low-vibration environment. Excessive vibration may induce pipettor and robot errors.

3. The Bravo Platform is for indoor use only.

<table>
<thead>
<tr>
<th>Temperature range °C (°F)</th>
<th>Humidity range (%)</th>
<th>Heat dissipation (BTU)</th>
<th>Pollution degree</th>
<th>Installation category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating: 4 to 40 °C</td>
<td>10-90% RH, non-condensing</td>
<td>682.4 BTU/hour (200 W)</td>
<td>2</td>
<td>II</td>
</tr>
<tr>
<td>Storage: -10 to 60 °C</td>
<td>10-80%, non-condensing</td>
<td>Not applicable</td>
<td>2</td>
<td>II</td>
</tr>
</tbody>
</table>
Power Consumption

Special Notes
1. If a computer system and accessories are 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>G5563A/G5562A Bravo Platform</td>
<td>100-240V &amp; 50/60 Hz</td>
<td>300 VA</td>
<td>250 V, 6.3A, 5 x 20-mm, slow blow</td>
</tr>
</tbody>
</table>

Required Operating Supplies by Customer

Special Notes
1. For information on other 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)

2. | Item Description (including dimensions, etc) | Vendor's Part Number (if applicable) | Recommended Quantity |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipette tips, disposable</td>
<td>Agilent</td>
<td>varies</td>
</tr>
<tr>
<td>Labware</td>
<td>varies</td>
<td>varies</td>
</tr>
<tr>
<td>Note: Labware requirements vary depending on experimental design.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Requirements

Laboratory Bench or Table Specifications
- The laboratory bench (table) must:
  - Have enough space to accommodate the Bravo Platform, computer, monitor, Light Curtain and pendant, and accessories.
  - Support the weight of the Bravo Platform and other components without excessive shaking or movement.
  - Be fixed in place, for example, casters that lock.
  - Have proximity to a power outlet, and allow rear access to enable quickly disconnecting the power to the Bravo Platform if the need arises.
  - Be placed to allow access to the rear of the Bravo Platform for maintenance.
- 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 Bravo Platform 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 casters.
  - Dimensions that enable support of the table surface without overhang.

Computer Requirements
- Microsoft Windows 10 64-bit operating system
- 2 GHz or faster 32-bit (x86) processor, multicore preferred
- 4 GB RAM
- 40 GB hard drive capacity with 10 GB free space
- 1280 x 1024 pixel screen resolution
- One of the following browsers with JavaScript enabled (required for using the context-sensitive help and knowledge base):
  - Microsoft Edge on Windows 10
  - Microsoft Internet Explorer 10.x, 11.x
  - Mozilla Firefox 1.x,- 39.x
Note: When using Internet Explorer to display the help, you might have to allow local files to run active content (scripts and ActiveX controls). To do this, open the Internet Options dialog box in Internet Explorer. Click the Advanced tab, locate the Security section, and select Allow active content to run in files on my computer.
You can use Google Chrome to view the help topics in the online web version of the knowledge base, but not to display the local help within the VWorks software.

- A PDF viewer, such as Adobe Reader (required for opening the user guide PDF files)
- Communications Interface: Dedicated 10BaseT or faster Ethernet card (two network cards if connecting to your local area network)
- VWorks software computer requirements: See the VWorks software release notes or the VWorks Knowledge Base at www.agilent.com/chem/askb

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.

All safety equipment supplied with the Bravo Platform will be installed for you. The Bravo Platform is connected to an emergency-stop pendant. Pressing the red emergency-stop button on the pendant, which connects to the safety interlock circuit, will stop the motion of the device. The safety equipment also includes shields and a Light Curtain to prevent access to moving-parts hazards. Ensure that you understand the potential safety hazards and how to avoid them. For details see:

- Automation Solutions Products General Safety Guide (part number G5500-90015A)
- G5562A, G5563A Bravo Platform Safety and Installation Guide (part number G5562-90001A)

Copies of these guides are included in your shipment and are available in the VWorks Knowledge Base.

Important Customer Web Links

- For additional information about Agilent automation products, please visit our web site at http://www.agilent.com/en-us/products/automation-solutions
- Need to get information on your product?
- Need to know more?

Document part number: G5563-90005