Agilent CrossLab
From Insight to Outcome

Agilent G5571AA, G5572AA AssayMAP Bravo Platform

Site Preparation Checklist

For Research Use Only. Not for use in diagnostic procedures.

Thank you for purchasing an Agilent G5571AA, G5572AA AssayMAP Bravo Platform.

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.

Introduction

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date.
For details, see specific sections within this checklist.

- ❑ Dimensions and weight: Required laboratory or bench space for AssayMAP Bravo Platform.
- ❑ Environmental conditions: Requirements for operating the AssayMAP Bravo Platform.
- ❑ Power consumption: Number, type, and location of electrical outlets.
- ❑ Required operating supplies provided by Customer: Supplies for installation and operation.
- ❑ Special requirements. Additional equipment, laboratory bench specifications, computer requirements, and safety equipment.

For more details, see the *Bravo Platform Safety and Installation Guide* (part number 5563-90002).

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.

Revision: 1.1, Issued: December 2019
Document part number: SD-V1000342

Agilent

Customer Information

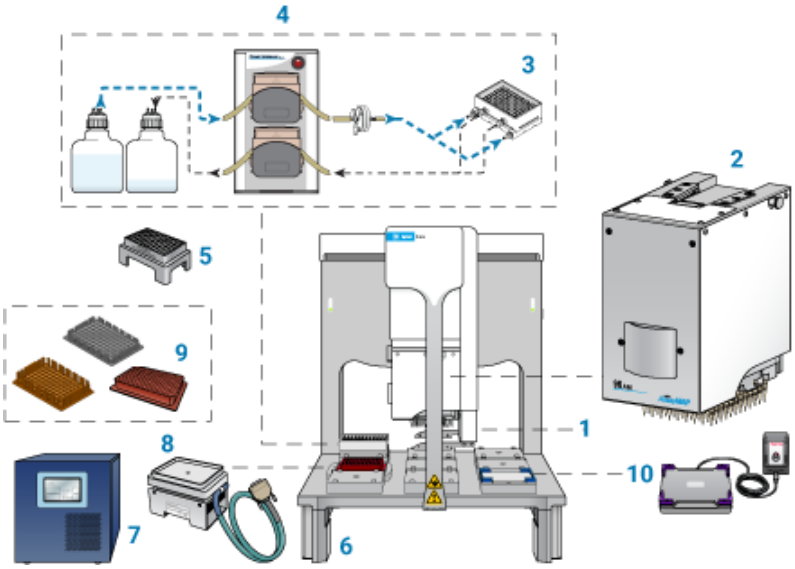
1. If you have questions or problems in providing anything described as a Customer Responsibility in this checklist, please contact your local Agilent or partner support service organization for assistance before the scheduled installation. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your site.
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 extra training, compliance services and consultation for user-specific applications may also be provided. Please discuss with your Agilent Sales representative before the installation is scheduled.
4. The Protein Sample Prep Workbench uses Microsoft Excel for the method setup tools and reagent volume calculators. The customer must obtain Microsoft Excel or Office (2016 US Versions) to use these AssayMAP method setup tools and calculators because Agilent is not able to provide or resell any Microsoft products.

Important Customer Web Links

- For additional information about the AssayMAP platform, please visit the product pages at https://www. agilent.com/en/products/automation-solutions/protein-sample-preparation/assaymap-bravo-platform
- Need to get information on your product?
  - VWorks Knowledge Base: https:// www.agilent.com/chem/askb
  - If the Protein Sample Prep Workbench is installed, go to the Literature Library in the locally installed software.
- To access *Agilent University*, visit http://www.agilent.com/crosslab/university/ to learn about training options, which include online, classroom and onsite delivery.
  A training specialist can work directly with you to help determine your best options.
- Need technical support, FAQs, supplies? – visit our *Support Home page* at http://www.agilent.com/search/support
- Get answers. Share insights. Build connections:
  Join the *Agilent Community* at https://community.agilent.com/welcome

Revision: 1.1, Issued: December 2019
Document part number: SD-V1000342

Hardware components of standard configuration



Item	Description
1	Bravo with Gripper assembly
2	AssayMAP liquid-handling head (Bravo 96AM Head)
3	Wash Station*
4	Pump Module 2.0 with tubing and two carboys
5	96AM Cartridge and Tip Seating Station
6	Deck risers
7	STC controller (for Peltier Thermal Station)
8	Peltier Thermal Station with custom plate nest
9	Thermal Plate Insert (Red PCR Plate Insert, 96 Greiner V-Bottom Thermal Insert, 96 AbGene U-Bottom Thermal Insert)
10	Orbital Shaking Station
11	Plate Risers (not shown)
12	Safety equipment: Light Curtain and emergency-stop pendant (not shown)
13	Computer (not shown)

* The platform requires one of the following models:
-- 96 Channel Wash Station (part number G5498B#90). Equipped with white, wide-bore chimneys, which are compatible with 5 µL or 25 µL AssayMAP cartridges.
--96AM Wash Station (part number G5498B#57). Equipped with normal-bore chimneys, which are compatible only with the 5 µL AssayMAP cartridges. Before using 25 µL AssayMAP cartridges, this wash station must be retrofitted with wide-bore chimneys. See the *96 Channel Wash Station Maintenance Guide* (part number SD-V1000098).

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your instrument 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.

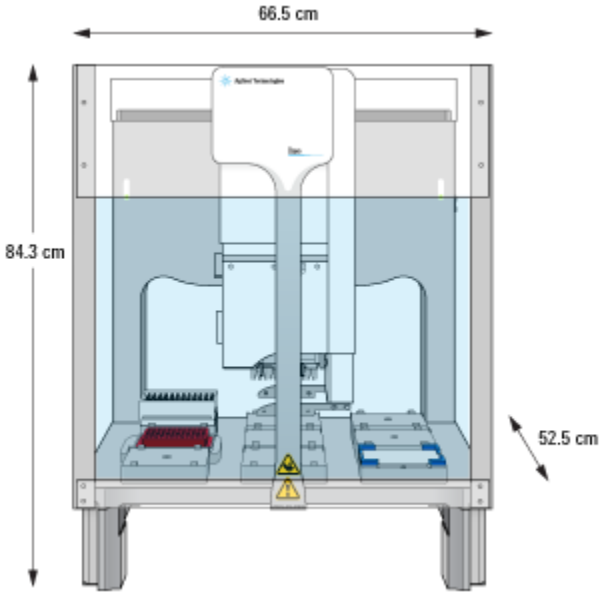
Special notes

1. The table surface must be at least 86 cm (34 in) from the floor to restrict reach-over access above the Light Curtain and shields. Reaching over the Light Curtain and shields can expose operators to moving-parts hazards.
2. In addition to the dimensions of the AssayMAP Bravo Platform, you must plan space for the computer workstation.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
Bravo instrument on risers with Light Curtain	60.7	133.5	84.3	33.2	52.5	20.7	66.5	26.2
Bravo 96AM Head	3.83	8.5	20.3	8.0	18.4	7.25	10.5	4.13
Pump Module 2.0			25.4	10.0	23.5	9.25	14.6	5.75
Computer workstation with space for emergency-stop pendant	2.9 approx	6.4 approx	36.3	14.3	61.6	24.3	72.6	28.6
Orbital Shaking Station with Control Unit	(Installs on the Bravo deck at location 9.)							
Peltier Thermal Station (CPAC Ultraflat Heater/Cooler)	(Installs in the Bravo deck at location 4.)							
Single Inheco Control (STC) for the Peltier Thermal Station*	3.3	7.3	17.7	7	22.4	8.8	14.7	5.8

* The STC controller must be placed within proximity of the Bravo deck to accommodate the reach of the cables that connect to the Peltier Thermal Station installed on the deck. The controller may be placed on a shelf or on the floor below the Bravo Platform.

Dimensions of standard configuration with Light Curtain



Environmental Conditions

Operating your instrument within the recommended temperature ranges ensures 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, and drafts.
2. The laboratory's ambient temperature conditions must be stable for optimum performance.
3. The AssayMAP Bravo Platform is intended to operate in a low-vibration environment. Excessive vibration may induce pipettor and robot errors.
4. The AssayMAP Bravo Platform is for indoor use only.

Operating Temperature °C	Operating Humidity %	Heat Dissipation BTU	Pollution degree	Installation category
4°C to 40°C	10-90% Relative Humidity, non-condensing	682.4 BTU/hour (200 W)	2	II

Power Consumption

Special notes

Ensure at least four electrical outlets are in proximity of the AssayMAP Bravo Platform. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.

Instrument Description	Line Voltage and Frequency (V, Hz)	Maximum Power Consumption (VA or W)
AssayMAP Bravo Platform	100-240 Vac, 50/60 Hz	300 VA
Laptop Computer	100-240 Vac, 50/60 Hz	150 W
Pump Module 2.0	100-240 Vac, 50/60 Hz, 1.5 A	200 W
Orbital Shaker	100-240 Vac, 50/60 Hz	-
Peltier Thermal Station with STC Controller	115 Vac, 60 Hz	-

Required Operating Supplies by Customer

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
Labware for your AssayMAP applications Note: Labware requirements vary depending on experimental design. For details, see the AssayMAP Bravo Labware Reference Guide (part number G5496-90018).	various	various
AssayMAP Cartridges for your applications The Cartridge Selection Guide (part number 5991-4863EN) provides basic information.	Agilent	varies
250 uL pipette tips	Agilent 19477-002	varies
DI water for the wash station	Not applicable	Not applicable
(Optional) AssayMAP Syringe Replacement Kit Includes syringe replacement tools and 10 new replacement syringes for repairing the Bravo 96AM Head.	Agilent G5409-68002	1
Microsoft Excel or Office (2016 US Versions)	-	-

The following supplies are included with the AssayMAP Bravo Platform:

- AssayMAP Resin-Free Cartridges, rack of 96
- AssayMAP Syringe Test Kit
- Carboys, two

Special Requirements

Laboratory table specifications

- The laboratory table must support the weight of the AssayMAP Bravo Platform without excessive shaking or movement. The table should be fixed in place, for example, castors that lock.
- 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 AssayMAP Bravo Platform and computer are set upon the table.
- The table surface must be attached to the table frame.

Additional equipment requirements

The AssayMAP Syringe Test Kit (Agilent G5496-60050) is required for evaluating the performance of the syringes in the AssayMAP liquid-handling head (Bravo 96AM Head). The following equipment is also required for the AssayMAP Syringe Test.

Items required for AssayMAP Syringe Test	Manufacturer and part number	Quantity required
Microplate reader Must be capable of measuring absorbance at 425 nm or 405 nm and generating a text (.txt) or Microsoft Excel (.xlxs) file for the Syringe Test Analysis.	various	1
Microplate centrifuge Must be equipped with a microplate rotor and capable of spinning at 500g for the AssayMAP Syringe Test procedure.	various	1

Computer requirements

The standard AssayMAP computer available from Agilent Technologies has the following specifications:

- HP Mobile Workstation: Intel® Core™ i7-4600M (2.9 GHz, 4 MB cache, 2 cores), 15.6" display (1920x1080), 8GB RAM, Intel Dual Band Wireless-AC 7260 802.11ac, USB Ethernet Adapter USB300M
- Windows 10 (64-bit), US English version pre-installed
- C drive only, no partitioned drives

If you use a computer other than this standard laptop, ensure that the computer meets the following specifications:

- Windows 10 (64-bit), US English version
- C drive only, no partitioned drives

The AssayMAP Bravo Platform includes installation of the following software:

- VWorks Automation Control Software 13.1.5
- Protein Sample Prep Workbench 3.2

IMPORTANT: The VWorks Workspace folder must be installed to C:\VWorks Workspace. The AssayMAP Protein Sample Prep Workbench software requires this file path. If the computer has a second larger drive, the VWorks installer forces the installation of the VWorks Workspace folder to the larger drive. In this case, you must copy the VWorks Workspace folder to the C drive.

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 AssayMAP Bravo Platform will be installed for you. The safety equipment includes:

- Emergency-stop pendant (e-stop pendant)
- Light Curtain and shields

The safety equipment prevents operator access to moving-parts hazards. Pressing the red emergency-stop button on the pendant or interrupting the Light Curtain will stop the motion of the device. Ensure that you understand the potential safety hazards and how to avoid them. For details see the following guides, which are shipped with the Bravo Platform.

- Automation Solutions Products General Safety Guide (part number G5500-90015)
- Bravo Platform Safety and Installation Guide (part number G5563-90002)