

Thank you for purchasing an Agilent G5589AA Bravo Metabolomics Sample Prep 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.

Make sure your site meets the following specifications before the installation date. For

Customer Responsibilities

de	letails, see specific sections within this checklist, including:					
	The necessary laboratory or bench space is available, and it meets the specified requirements.					
	The environmental conditions for the lab, as well as laboratory 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 G5562-90001).					

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

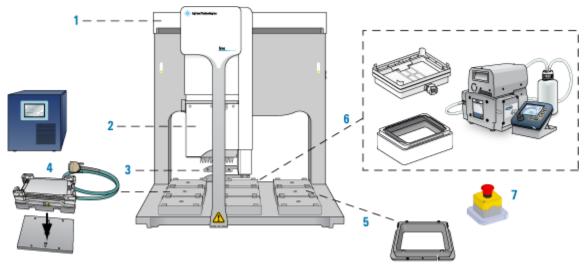
- 1. If you have questions or problems in providing anything described as a Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation 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 rearrange any services that have been purchased.
- 3. Other optional services, such as additional training, operational qualification (OQ) and consultation for user-specific applications may 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**.

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Hardware components

The Agilent G5589AA Bravo Metabolomics Sample Prep Platform includes the following hardware components and a computer and monitor:



- 1. Bravo Automated Liquid Handling Platform
- 2. 96LT disposable-tip liquid-handling head
- 3. Gripper upgrade
- 4. Heating Shaking Station (deck location 4) and STC controller
- 5. Filter Plate Holder (deck location 6)
- 6. Vacuum Filtration Station and Agilent ME4C NT VARIO Pump: Manifold base (deck location 2), Deep-well collar with black gaskets (deck location 3)
- 7. Bravo safety equipment: emergency-stop pendant and Light Curtain and shields (not shown)

Note: Optionally, the PlateLoc Thermal Microplate Sealer may be ordered for use with the platform.

Software components

Agilent G5589AA Bravo Metabolomics Sample Prep Platform includes the following software, which runs on the Windows 10 64-bit operating system.

Software	Version
VWorks Automation Control Software	13.1.3
Bravo Metabolomics Workbench	1.0

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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 to ensure your laboratory bench can support this weight. Also avoid bench space with overhanging shelves.

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.

	Weight Heigh		ght	nt Depth		Width		
Instrument Description	Kg	lbs	cm	in	cm	in	cm	in
Agilent G5563A Bravo Platform with Standard Light Curtain	60.7	133.5	69.7	27.4	52.5	20.7	66.5	26.2
Agilent Vacuum Filtration Station manifold base	Installs on the Bravo deck at deck location 2.							
Filter Plate Holder	er Installs on the Bravo deck at deck location 6.							
Agilent ME4C NT VARIO Pump	13.6	30.0	29.1	11.5	31.6	12.4	24.3	9.6
Heating Shaking Station	Installs on the Bravo deck at deck location 4.							
Inheco STC Controller*	3.3	7.3	17.7	7	22.4	8.8	14.7	5.8
Computer workstation with space for emergency-stop pendant	2.9**	6**	36.3	14.3	61.6	24.3	72.6	28.6

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

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^{*}Approximate





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 pipetting and placement errors.
- 3. The Bravo Platform is for indoor use only.

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



Power Consumption

Special Notes

1. If a computer system and accessories are 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)
Agilent G5563A Bravo Platform	100-240 V~, 50/60 Hz	300 VA	250 V, 6.3A, 5 x 20-mm, slow blow
Laptop Computer	100-240 V~, 50/60 Hz	150 W	-
Heating Shaking Station with STC Controller	100-240 V~, 50/60 Hz		_
Vacuum Filtration Station and Agilent ME4C NT VARIO Pump	100-230 V~, 50/60 Hz	3.4 A at 100 V~, 1.8 A at 230 V~	_

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Required Operating Supplies by Customer

Special Notes

1. For information on other Agilent consumables, accessories and laboratory operating supplies, please visit https://agilent.com

Item Description	Vendor's Part Number (if applicable)	Minimum Quantity
250 µL pipette tips, disposable http://www.agilent.com/en-us/products/automation-solutions/automated-liquid-handling/disposable-pipette-tips	Agilent 19477.002	6-8 tip boxes
96 Agilent A696001000 Captiva collection plate	Agilent A696001000	1
96 Seahorse Storage Plate 2mL Square Pyramid	Agilent 201240-100	2
Reservoir, Seahorse 201254-100, PP, no walls, pyramid bottom	Agilent 201254-100	5
96 Agilent 203426-100 PP, 1 mL Rnd Btm	Agilent 203426-100	2
96 well Captiva EMR-Lipid Filter plate	Agilent 5190-1001	1
96 Thermo 3741, V-bottom, ScrewTop, Storage Tubes (required for the On-site Plasma Metabolite Extraction application)	Thermo Fisher Scientific 3741	1

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Other Requirements

Laboratory Bench or Table Specifications

Th	e laboratory bench (table) must:
	Have enough space to accommodate the Bravo Platform, computer, monitor, Light Curtain 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.
tra	e table must be level in the direction of the width and the depth of the platform. Using a ditional bubble level, the table should be leveled such that the bubble is centered between the two nit lines of the level.
	e table surface must have a thickness relative to the material that will prevent warping when the avo Platform and computer are set upon the table.
Th	e table surface must be attached to the table frame.
Th	e table frame must have:
	A leveling mechanism in the feet or casters.
	Dimensions that enable support of the table surface without overhang.
_	outer Requirements
Mi	crosoft 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
12	80×1024 pixel screen resolution
	ne of the following browsers with JavaScript enabled (required for using the context-sensitive help d knowledge base):
	Microsoft Edge on Windows 10 (64-bit), US English version
	Microsoft Internet Explorer 10.x, 11.x
	Mozilla Firefox 1.x,- 39.x
act Int	te: When using Internet Explorer to display the help, you might have to allow local files to run tive content (scripts and ActiveX controls). To do this, open the Internet Options dialog box in ternet Explorer. Click the Advanced tab, locate the Security section, and select Allow active ntent to run in files on my computer.

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	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)
Sa	afety Equipment and Precautions
wo cu eq	ARNING: Changing or modifying the safety equipment can prevent the safe operation of the orkstation, invalidate its safety compliance, and lead to personal injury or property damage. Any stomer who does not use the supplied safety equipment or who modifies the supplied safety uipment assumes full responsibility for providing an appropriate level of safety for its operators of for providing the applicable safety compliance marking and documentation.
Pla pe eq	I safety equipment supplied with the Bravo Metabolomics Platform will be installed for you. The Bravo atform is connected to an emergency-stop pendant. Pressing the red emergency-stop button on the endant, which connects to the safety interlock circuit, will stop the motion of the device. The safety uipment also includes shields and a Light Curtain to prevent access to moving-parts hazards. Ensure at 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)
Co	opies of these guides are included in your shipment and are available in the VWorks Knowledge Base.
Ir	nportant Customer Web Links
	For additional information about Agilent automation products, please visit our web site at https://www.agilent.com/en-us/products/automation-solutions
	Need to get information on your product?
	 VWorks Knowledge Base - https://www.agilent.com/chem/askb
	 Agilent Bravo product page - https://www.agilent.com/en/products/automation-solutions/automated-liquid-handling/bravo-automated-liquid-handling-platform
	Need Support Services? - https://www.agilent.com/en/crosslab
Do	ocument part number: G5589-90007