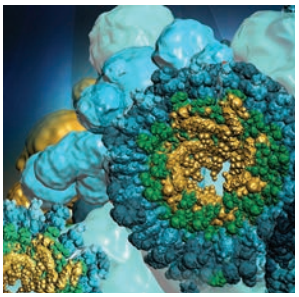
Help Any Workflow Run More Smoothly

Accessories catalog for the Bravo automated liquid handling platform

Agilent

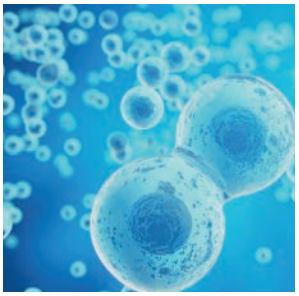
Genomics



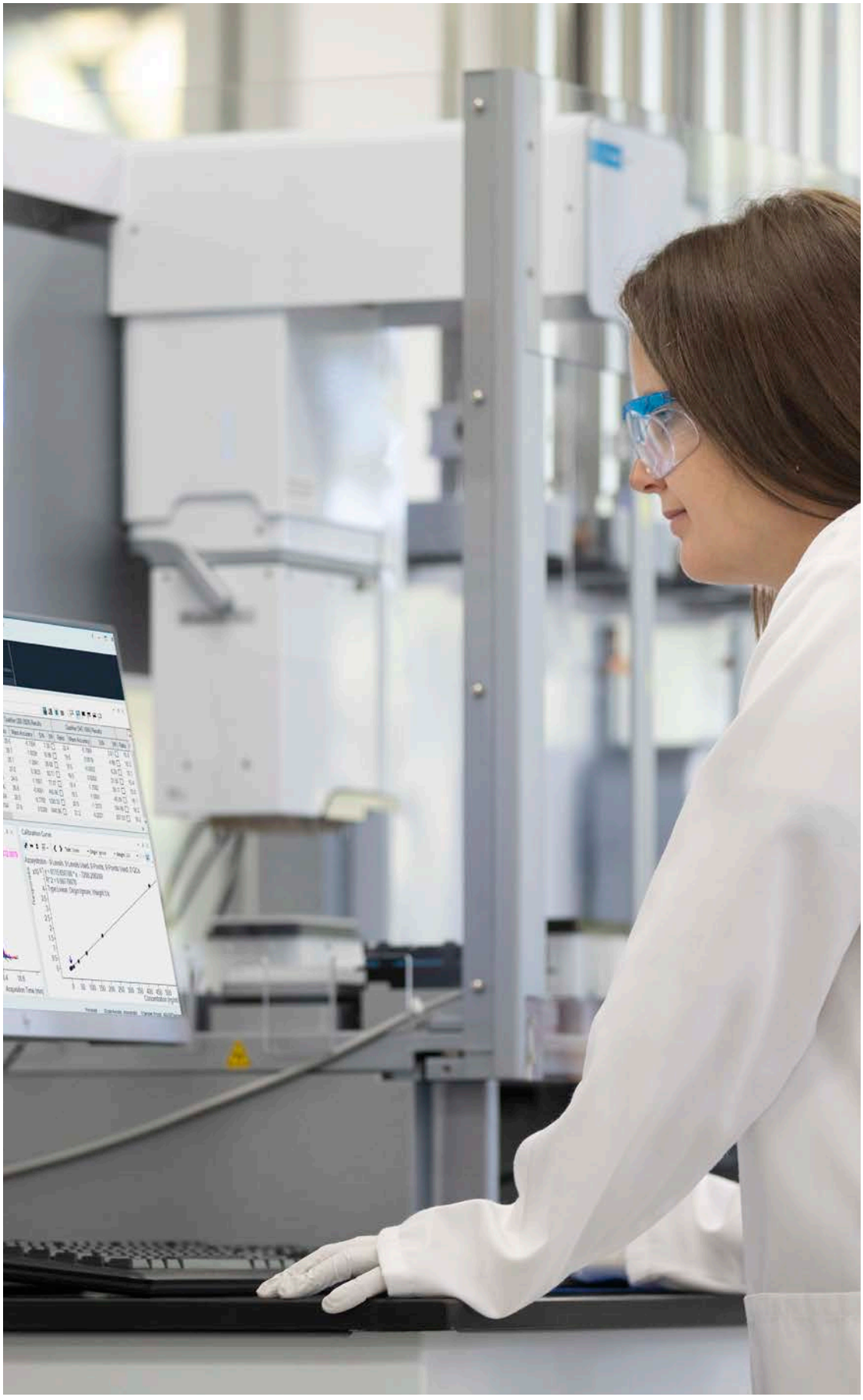
Proteomics

Metabolomics

Pharmaceuticals



Cell biology



Meet the Agilent Bravo automated liquid handling platform

Achieve accurate and precise pipetting over a wide volume range to improve your data quality and consistency. The Bravo automated liquid handling platform has the versatility and scalability to provide you with an extensive choice of configurations and a unique, open design that assists integration into existing workflows in your laboratory. Incorporating the Bravo platform into your research will minimize the hours spent manually setting up and running complex applications.

Agilent Bravo automated liquid handling platform on risers.

High-accuracy liquid handling heads

Accurately, reliably, and reproducibly dispense 300 nL to 250 µL into 96-, 384-, and 1536-well plates.

Nine deck positions

An open, integration friendly design that delivers maximum versatility for shaking, heating, cooling, filtration, and more.

On-deck accessories

Customize the configuration of the Bravo platform for your specific application.

Available in two space-saving models

The Bravo automated liquid handling platform is available in two models: the standard Bravo platform fits most laminar hoods and the Bravo SRT platform is three inches shorter to accommodate smaller hoods. Both versions enable automated liquid handling for cell-based assays or hazardous reagent handling. VWorks automation control software allows users to quickly start the system and run pre-programmed protocols with confidence, while the open platform provides the flexibility to serve a wide range of applications.

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Higher throughput and greater reproducibility for your laboratory

The Bravo platform offers an expansive line of tools that enable applications across all major life science research areas. The Agilent accessories showcased in this catalog are carefully designed tools used to create customized and turnkey solutions for a wide range of research and discovery applications. This catalog will help you explore the possibilities to make better use of your samples and process them with greater efficiency.

Choose preconfigured or customize

With Agilent, you can choose a preconfigured hardware/accessory bundle based on a specific application requirement, such as protein sample preparation with the Agilent AssayMAP Bravo platform or library preparation for next generation sequencing (NGS). Alternatively, you can select the specific accessories you need to customize the Bravo deck to meet changing assay requirements. Whether you are automating cell viability assays or next generation sequencing workflows, Agilent has the accessories and configurations to fit your workflow.

Research areas	Applications/assays	Agilent automation solutions
Genomics Proteomics Metabolomics Pharmaceuticals Cell biology	NGS sample preparation CGH CGH + SNP Protein sample preparation LC/MS sample preparation Cytochrome P450 Small molecule screening Colony inoculation Cell viability ADME Toxicology Cell biology	**Customized** Select individual accessories from this guide and create a custom configuration for your application. **Preconfigured** Order a new Bravo application bundle, prepackaged with everything you need to automate NGS, protein, or metabolomics sample preparation.

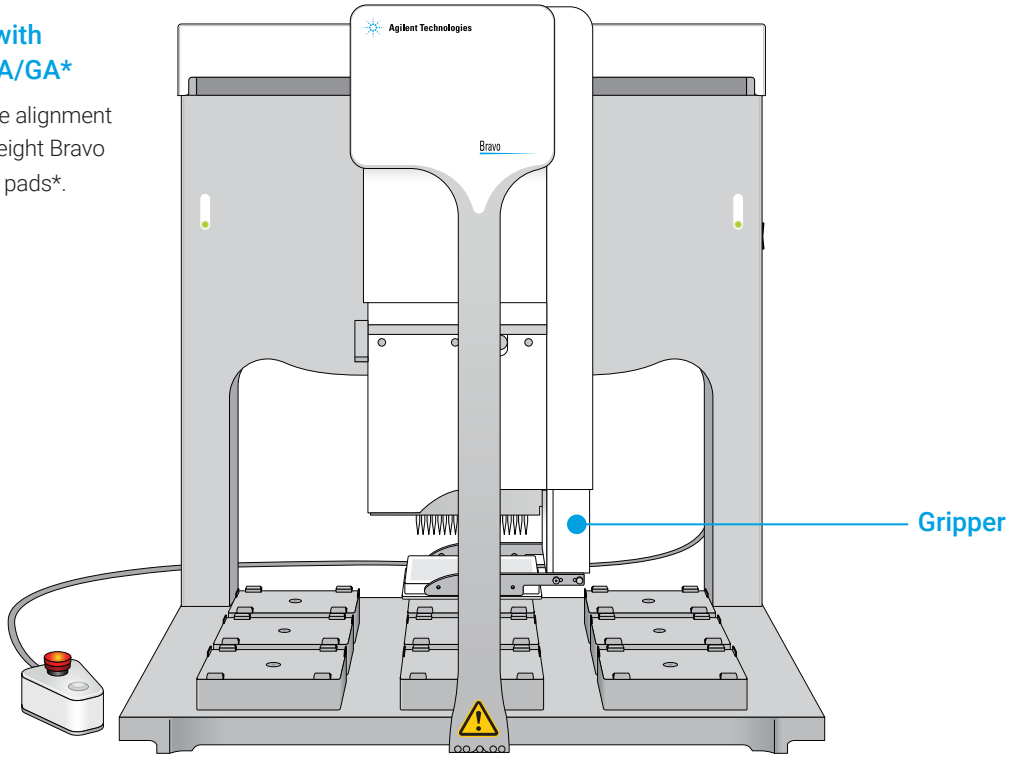
Tailor the Bravo platform to your workflow

Add accessories to the Bravo base platform

Agilent offers a base Bravo platform configuration with a nine position, open deck that can be customized for your application using the accessories found in this catalog.

Bravo platform with gripper G5563AA/GA*

Includes one passive alignment deck plate pad and eight Bravo standard deck plate pads*.



**G5563AA/G5562AA = Bravo automated liquid handling platform bundles. G5563GA/G5562GA = Bravo automated liquid handling platform bundles for genomics application.*

Choose accessories to customize your Bravo platform

The versatile Bravo platform is easily adapted to a wide range of applications using the accessories in this catalog. Choose on-deck heating, cooling, shaking, and separation, or swap liquid handling heads to meet requirements for changing assays and throughput.

The sections included are shown below:


Liquid Handling Heads 8


Identification and Integration 10


Platepads and Inserts 12


Reagent Reservoirs and Tip Wash Stations 15


Separation 19


Shaking and Temperature Control 21


Trash, Disposable Tips 29

Installation services—applications made easy

Whether you are choosing a new Bravo platform and accessories, or upgrading an existing Bravo platform for a new application, installation services can make the experience simple and straightforward.

Customers with a standalone Bravo platform may choose to install accessories themselves or take advantage of two levels of installation and training support. When a customer buys a Bravo platform, onsite accessory installation is included.

For accessory-only upgrades, most items in this catalog include a labor hours estimate for Agilent onsite field service installations as an option for installation and services, which may be added to the quotation. Estimates for an onsite visit from an applications expert are also available through an Agilent product specialist and the Agilent Professional Services department (as an optional add-on service).

Ready to order? Contact your local product specialist.

Hardware expert

Field service engineers (FSEs) provide installation and introduction (hardware installation and simple training basics).

Applications expert

Field application engineers are available after the accessory has been installed and can provide in-depth training on the Bravo platform, accessories, or software.

Disposable-tip pipette heads

Many of today's laboratory liquid handling applications require the use of disposable tips to prevent carryover/contamination (for example, PCR). The Bravo platform uses interchangeable disposable-tip liquid handling heads that, when combined, cover a very wide volume range (300 nL to 250 µL).

Agilent pipette heads are designed to be easily mounted or exchanged and to offer the advantage of being more forgiving than metal-tipped, fixed-tip heads during collisions, increasing uptime during the life of your instrument.

Single-well, column, row, array, and full-plate liquid handling

The Bravo platform provides liquid handling automation for microplates, including low-volume single-well, column, row, array, and full-plate liquid handling.

Disposable-tip pipette heads can aspirate or dispense into one sample well or an array of sample wells (which include a corner and are contiguous). This is primarily used for single-tip cherry picking and occasionally for multiple-tip or array cherry picking. This feature is available in Agilent VWorks automation control software, within the Bravo platform's liquid handling tasks (Set Head mode). The Set Head mode allows use of all tip barrels, full columns, full rows, or partial rows and columns.

Liquid handling performance*

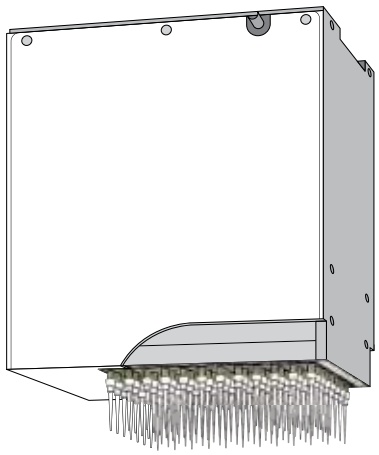
Together, Agilent disposable-tip pipette heads and tips cover a pipetting volume range from 300 nL to 250 µL with 5% CV. High precision is achieved by optimizing each head for a specific portion of the pipetting volume range. Typical %CVs for dispensing 2 µL are 2.1% using DMSO. Agilent pipette heads are designed to be compatible with most common life science laboratory reagents and, with optimization, CVs better than 5% can be achieved across many liquid types.

Agilent disposable-tip heads are designed to work in two liquid volume ranges: small transfer (ST) and large transfer (LT).

**Agilent Bravo platform performance data is based on the use of Agilent-certified, thin-walled, low-retention tips and optimized liquid classes.*

Description	Maximum Volume	Compatible Well Formats	Part Number
384ST 384-well Agilent disposable-tip pipette head	70 µL	384- or 1536-well	G5056A/G
96ST 96-well Agilent disposable-tip pipette head	70 µL	96-, 384-, or 1536-well	G5057A/G
96LT 96-well Agilent disposable-tip pipette head	250 µL	96- or 384-well	G5055A/G

Ready to order? Contact your local product specialist.



Agilent disposable-tip pipette head.

To learn more about Agilent-certified disposable pipette tips, visit www.agilent.com/lifesciences/pipettetips

AssayMAP microchromatography head and accessories

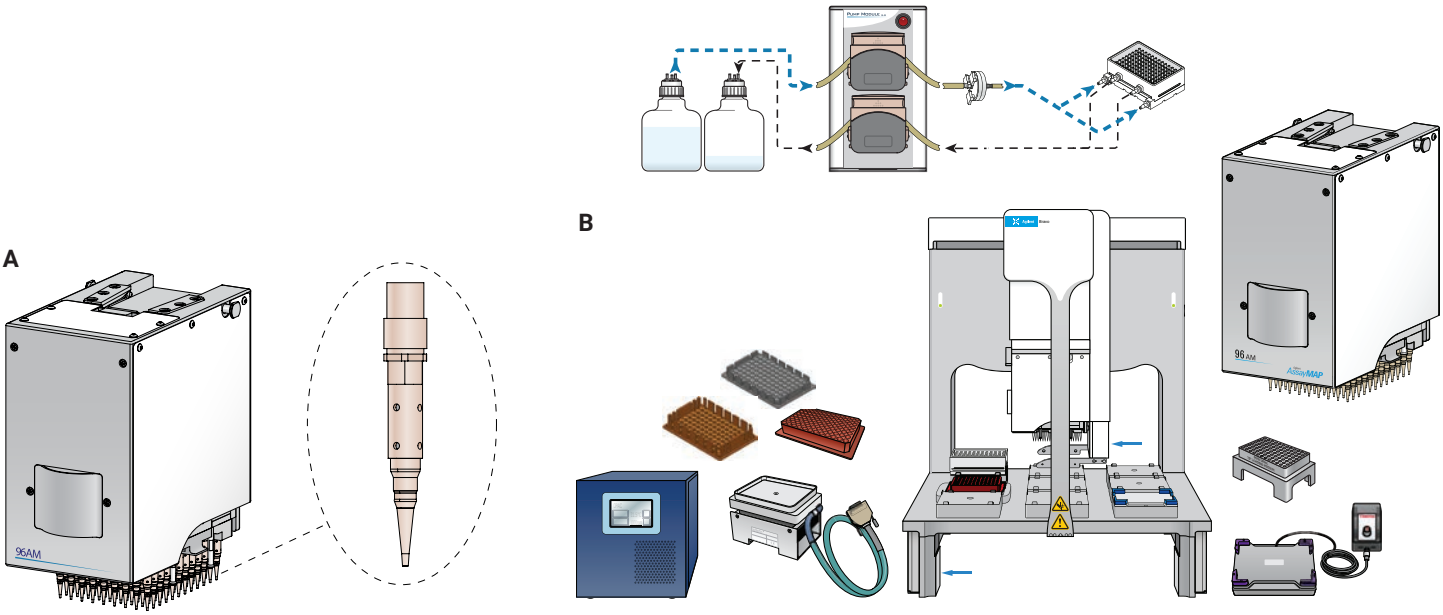
The Bravo platform for AssayMAP technology provides accessible, walkaway automation for complex sample preparation workflows. The platform is equipped with a Bravo 96AM head containing containing 96 ultralow dead-volume syringes, which are capable of highly precise positive-displacement flow control in either direction. The Bravo 96AM head is designed to be easily installed and removed by a user.

When paired with AssayMAP cartridges, the platform delivers a scalable, easy-to-use, high-throughput solution for affinity purification and quantitation of antibodies, post-translational modifications, proteomics, and biomarker research and development.

A standard Bravo platform can be upgraded to an AssayMAP Bravo platform using the AssayMAP upgrade kit. This kit includes the Bravo 96AM head and all accessories needed to convert the most basic Bravo platform to perform AssayMAP workflows. To avoid duplication of accessories (such as the gripper or risers) with your existing configuration, please work with your automation product specialist to modify the upgrade kit to include only the items you need.

Description	Part Number
Agilent AssayMAP upgrade kit	G5572AA

Ready to order? Contact your local product specialist.



Agilent Bravo 96AM head (A) and AssayMAP Bravo upgrade kit (B).

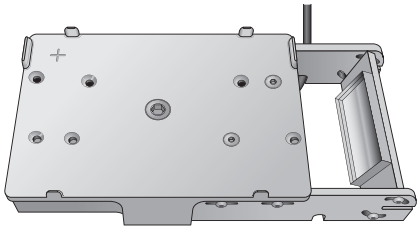
Mirrored barcode reader

The Agilent mirrored barcode reader reduces errors and saves time tracking labware. It is compatible with machine-readable, linear (1D) barcode labels, and is used to identify labware and match them with relevant information through a database lookup. It replaces a plate pad at any deck position, reads barcode labels on either the east or west side of the labware, and is compatible with VWorks automation control software.

- Compatible symbologies include: code 39, code 128, interleaved 2 of 5, code 93
- Barcode height: 3.34 mm (0.13 in) or higher
- Required print contrast: 25% at 650 nm
- Includes mirrored barcode reader
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Description	Part Number
Agilent mirrored barcode reader	G5498B/G #031

Ready to order? Contact your local product specialist.



Agilent mirrored barcode reader.

Agilent offers an automation-friendly microplate labeler that prints and applies 1D or 2D adhesive labels directly to microplates.

Risers

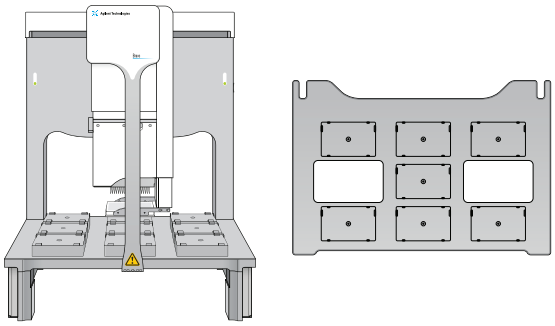
Flexibility is a key benefit of using the Bravo automated liquid handling platform. Agilent risers make it easier to add taller devices that must pass through the deck (locations 4 or 6), such as the Peltier thermal station or the deck position trash. For example, with on-deck trash, disposable tips can fall through the deck for more convenient collection.

Risers are also used for integration, such as when an automated microplate handler, robot, or other adjacent device must be placed at a higher level.

- Includes a set of two 146 mm risers, and a set of four screws and washers
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Description	Part Number
Agilent risers, 146 mm	G5498B/G #055

Ready to order? Contact your local product specialist.



Agilent Bravo automated liquid handling platform with risers.

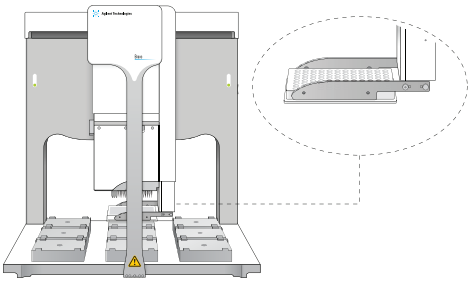
Gripper upgrade

The Agilent gripper upgrade allows a field service engineer to add a labware gripper to your existing Bravo platform. The gripper is used to move microplates, microplate lids, and tip boxes between the platepads but is not designed for off-deck placements.

- Includes labware gripper accessory, hardware components only
- Estimated field service engineer installation time is 8 hours (required, not included)

Description	Part Number
Agilent gripper upgrade, non-RoHS Bravo	G5199A
Agilent gripper upgrade, RoHS Bravo	G5597A

Ready to order? Contact your local product specialist.



Agilent Bravo platform with gripper upgrade.

Light curtain

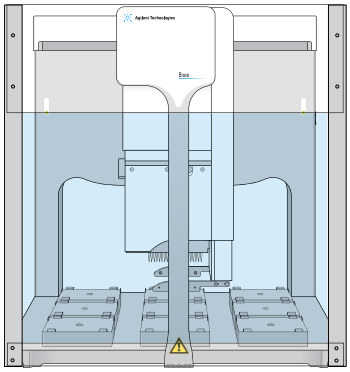
The Agilent Bravo platform light curtain arrives with a Bravo platform purchased in compliance with regional safety requirements, or it can be purchased separately and added to an existing Bravo platform.

As part of the safety interlock circuit, the light curtain works in a manner similar to the robot-disable pendant. Two light posts mounted at the front of the Bravo platform project light beams across the front of the device. If an object disrupts the light beams, the safety interlock circuit disables the pipette head motors.

- Includes a junction box for electrical and communication connections (derived from connection to the pendant port of Bravo platform), clear plastic shields for the front, sides, and rear opening of the Bravo platform
- Estimated field service engineer installation time is 2 hours (not included)

Description	Part Number
Agilent light curtain, Bravo	G5498B/G #022
Agilent light curtain, Bravo SRT	G5498B/G #522
Agilent Bravo dust cover for standard light curtain	G5498B/G #122
Agilent Bravo wrap-around light curtain (for standard Bravo and Bravo SRT)	G5598A

Ready to order? Contact your local product specialist.



Agilent Bravo platform with light curtain.

Platepads

The deck of the Bravo platform has been designed to be compatible with a wide range of labware, tip boxes, and devices through the use of standard and specialized platepads and inserts. Most platepad hardware can be easily relocated by an end user, but there may be software or protocol constraints that govern when and where certain platepad types may be used.

- May be located in any deck position
- Estimated field service engineer installation time is 30 minutes (not included)

Description	Part Number
Agilent deck platepad, short (standard Bravo SRT)	G5498B/G #005
Agilent deck platepad (standard Bravo)	G5498B/G #004
Agilent Bravo platepad, closed corners	G5498B/G #125

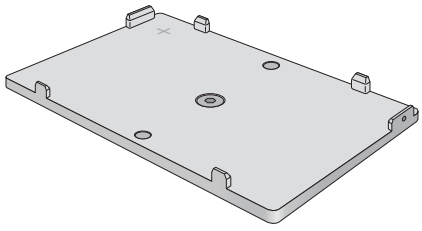
Ready to order? Contact your local product specialist.

Glossary of terms

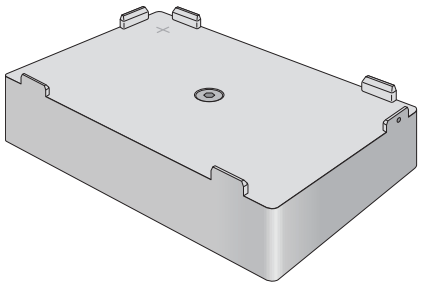
Platepad—holds microplate on deck

Alignment station—platepad designed to align microplates and tip boxes

Insert—sits within platepad to hold compatible devices in place (for example, teach plate or thermal plate insert)



Agilent deck platepad, short.



Agilent deck platepad.

Agilent Bravo platepad, closed corners.

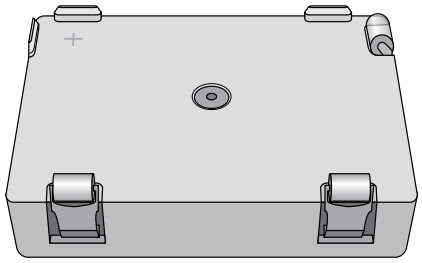
Alignment station

The Agilent alignment station improves the alignment and positioning of microplates and tip boxes. It is recommended for 384-tip boxes and can be located in any deck position.

- Included in some Bravo platform configurations
- Estimated field service engineer installation time is 30 minutes (not included)

Description	Part Number
Agilent alignment station (passive, three-springed rollers 384/1536 plates, ST tip boxes)	G5498B/G #028

Ready to order? Contact your local product specialist.



Agilent alignment station.

Tip box platepads

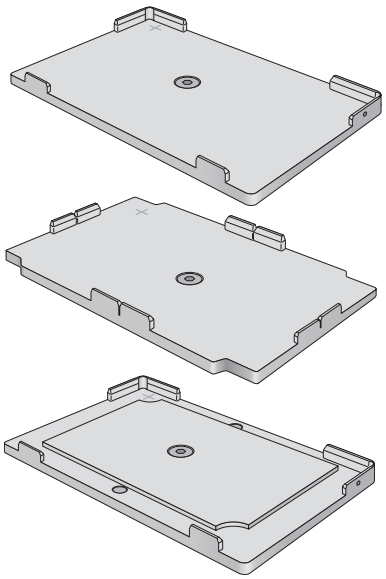
Agilent disposable tip box platepads provide extra support and improve the alignment of disposable tip boxes. They may be located in any deck position and are also known as tip loading stations.

– Estimated field service engineer installation time is 30 minutes (not included)

Description	Part Number
Agilent ST tip loading station (Bravo SRT)	G5498B/G #029
Agilent LT tip rack insert, for legacy 200 µL tips (Bravo SRT)	G5498B/G #007
Agilent SRT platepad for 250 µL LT tip boxes	G5498B/G #020

Note: The Agilent Bravo platform works in two liquid volume ranges: small transfer (ST) and large transfer (LT).

Ready to order? Contact your local product specialist.



Agilent deck platepads: ST tip loading station, SRT platepad, and LT tip rack insert.

Inserts

Agilent inserts are typically passive, machined metal blocks that sit on a platepad on the Bravo platform deck. They can be used in various configurations with other Agilent accessories for the Bravo platform.

There are three kinds of inserts available:

– **Nested rack**—supports nested disposable tips, to save deck space
– **Teach plate**—marked with a cross, for creating teachpoints on the deck position within the VWorks automation control software
– **Thermal plate**—improves heat transfer to microplates on a standard or Agilent Peltier thermal station

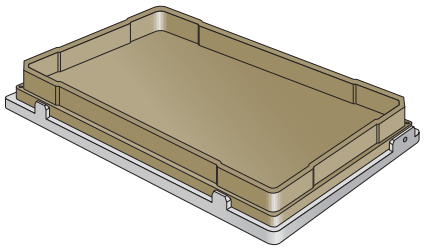
Nested rack insert

The Agilent nested rack insert is required for use with nested tips when they are used with ST heads. They can be located in any deck position on a regular Agilent platepad.

– Estimated field service engineer installation time is 30 minutes (not included)

Description	Part Number
Agilent nested rack insert	G5498B/G #003

Ready to order? Contact your local product specialist.



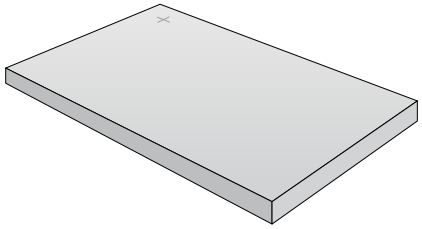
Agilent nested rack insert on a Bravo SRT platepad.

Teach plate insert

The Agilent teach plate insert is marked with a cross and is used to adjust the teachpoint for an accessory, such as the orbital shaking station, after it has been installed on the Bravo platform deck. It is included with all new Bravo platforms and can be placed in any deck position.

Description	Part Number
Agilent teach plate, HW1	G5550-17692

Ready to order? Contact your local product specialist.



Agilent teach plate insert.

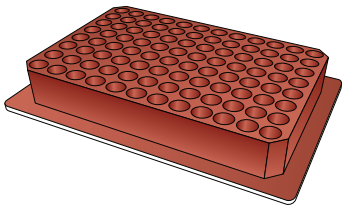
Thermal plate insert

Agilent thermal plate inserts improve heat transfer to microplates when they are placed on a heating, standard thermal, or Peltier thermal station. The best heat transfer to labware on heating, thermal, and Peltier thermal stations is achieved when inerts are used in conjunction with the custom nest described later.

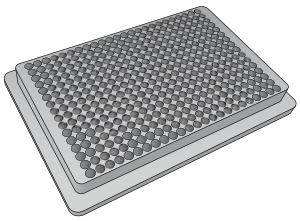
In addition to heat transfer, the PCR plate inserts provide support for unskirted and semiskirted PCR plates.

Description	Part Number
Agilent PCR plate insert, 96-well	G5498B/G #013
Agilent PCR plate insert, 384-well	G5498B/G #060
Agilent deep-well plate insert, Nunc 2 mL	G5498B/G #012
Agilent U-bottom plate insert	G5498B/G #126
Agilent deep-well plate insert, Abgene 1.2 mL	G5498B/G #127
Agilent Bravo labware riser, 28.4 mm	G5498B/G #061

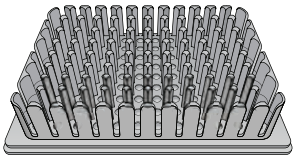
Ready to order? Contact your local product specialist.



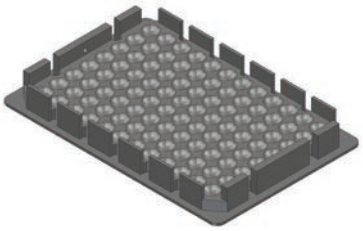
Agilent PCR plate insert, 96-well.



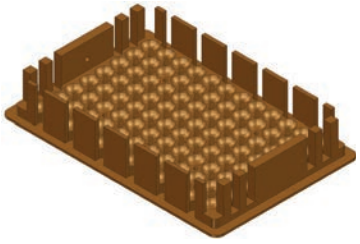
Agilent PCR plate insert, 384-well.



Agilent deep-well plate insert, Nunc 2 mL.



Agilent U-bottom plate insert.



Agilent deep-well plate insert, Abgene 1.2 mL.

Reagent reservoirs and tip wash stations

Agilent offers three different types of reagent reservoirs:

- Open reservoirs
- Reservoirs with overflow troughs
- Reservoirs with arrays of individual tip chimneys (96 or 384)

Agilent reagent reservoirs are approved for use with many reagents and solvents commonly used in life science applications. If you have questions on the use of a particular chemical or solvent in an Agilent reservoir, contact automation solutions technical support before use.

Autofilling reservoir—good efficiency

The Agilent autofilling reservoir is an open reservoir that can supply reagents to 96- and 384-channel pipette heads while providing high efficiency in washing tips and conserving precious wash fluid. The autofilling accessory is compatible with an optional weigh station and may be located in any deck position.

Although open reservoirs are typically used to hold reagents and reservoirs with chimneys are used to wash tips, both can be used for either application depending on the wash fluid or reagent and its sensitivity to air or light.

Agilent autofilling accessories can be automatically filled or drained with VWorks automation control software using the Agilent peristaltic pump module (purchased separately).

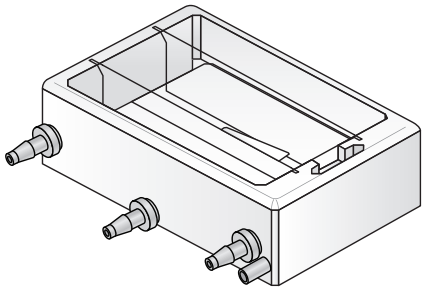
- Estimated field service engineer installation time is 1 hour (not included)

Description	Part Number
Agilent autofilling reservoir	G5498B/G #053

Ready to order? Contact your local product specialist.

Integration tips

- Requires pump module
- Pump is VWorks software controlled
- Ideal deck locations: 1, 2, and 3
- Compatible with all Bravo and Bravo SRT models



Agilent autofilling reservoir.

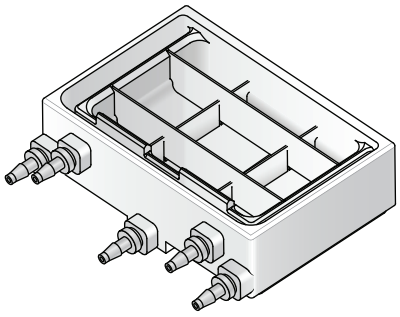
Agilent open bath tray—better efficiency

This is an open tray[1] that can supply reagents to 96- and 384-channel pipette heads. It has an overflow trough to reduce the mixing of fresh and spent fluids. It provides better efficiency for washing tips and conserving precious wash fluid. It is an autofilling accessory that is compatible with the optional Agilent weigh station and may be located in any deck position.

– Estimated field service engineer installation time is 1 hour (not included)

Description	Part Number
Agilent open bath tray	G5498B/G #048

Ready to order? Contact your local product specialist.



Agilent open bath tray.

Tip wash stations—best efficiency

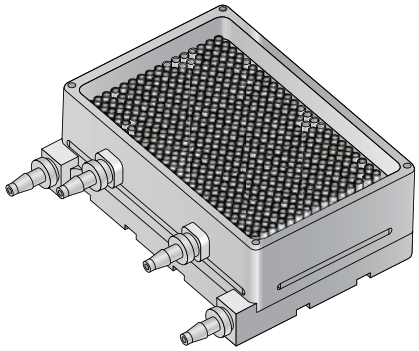
This reservoir[2] has individual tip chimneys and an overflow trough to reduce the mixing of fresh and spent fluids. It demonstrates the best efficiency in washing tips and conserving precious wash fluid. It is an autofilling accessory that is compatible with the optional Agilent weigh station and may be located in any deck position.

– Estimated field service engineer installation time is 1 hour (not included)

Description	Pipette Head Compatibility	Part Number
Agilent 384-chimney	96-well or 384-well	G5498B/G #052
Agilent 96-chimney	96-well	G5498B/G #051
Agilent AssayMAP (96)	AssayMAP Bravo	G5498B/G #057

[1]*Formerly the open wash reservoir and open wash station.*
[2]*Also known as the Agilent MicroWash reservoir.*

Ready to order? Contact your local product specialist.



Agilent 384-chimney tip wash station.

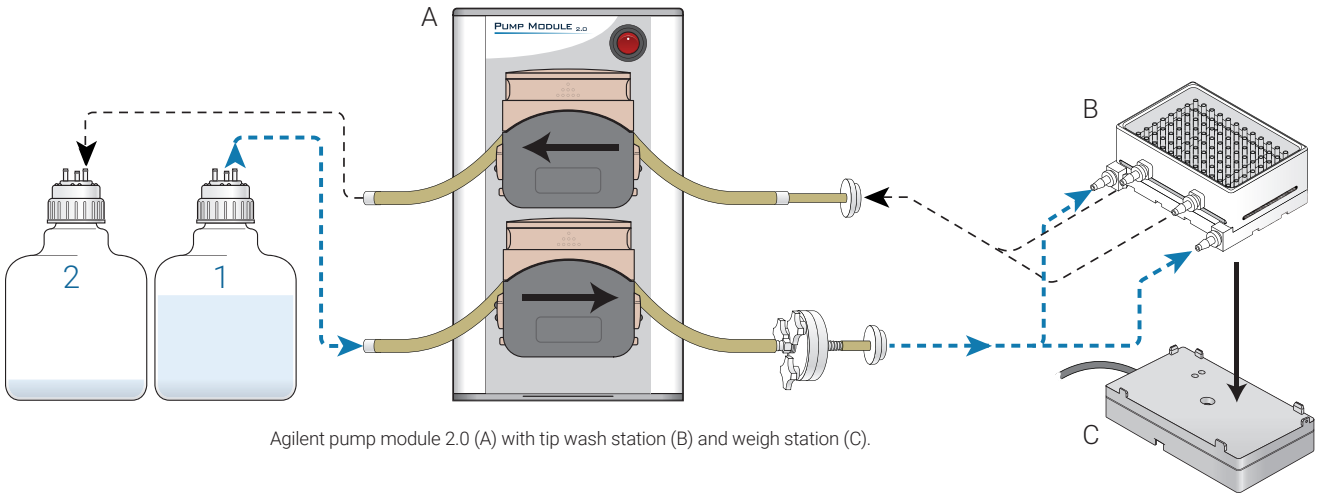
Peristaltic pump module 2.0

The Agilent peristaltic pump module 2.0 can be used with autofilling accessories to automatically fill reagent reservoirs. It works with the optional Agilent weigh station, which, when properly configured in Agilent Bravo Diagnostics, can be used to ensure that the reservoir or tray is filled to a constant liquid level during the pump reagent task in a protocol. By monitoring the weight of the reservoir that sits on it, the weigh station controls when the pump module is activated. One pump module is used for each pairing of reservoir and weigh station. The weigh station replaces a standard Bravo platepad.

- Uses a dedicated RJ45 serial connector on the Agilent Bravo platform
- Operates under full VWorks software control
- Estimated field service engineer installation time:
  - Pump module: 1 hour 30 minutes (not included)
  - Weigh station: 2 hours (not included)

Description	Part Number
Agilent pump module 2.0	G5498B/G #058
Agilent pump tubing kit	G5498B/G #001
Agilent weigh station	G5498B/G #030

Ready to order? Contact your local product specialist.



Agilent pump module 2.0 (A) with tip wash station (B) and weigh station (C).

Manual fill reservoirs

The Agilent manual fill reservoir is an open tray, made of polypropylene, which can be installed on a platepad in any position to supply reagents to 96- and 384-channel pipette heads.

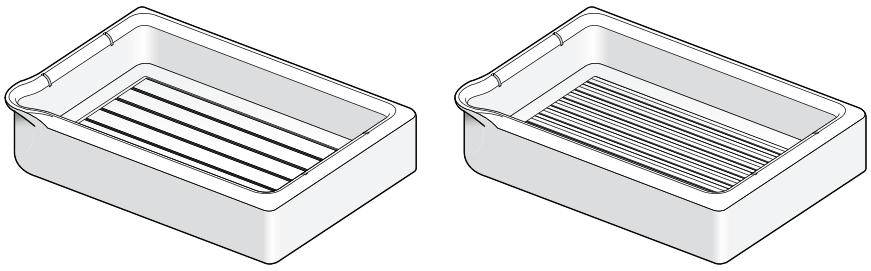
They have been optimized for use with 96-well or 384-channel pipette heads with grooved slots to minimize dead volume; capture and collect precious reagents; and minimize waste. You must manually refill and empty the reservoir.

Automation solutions reservoirs are approved for use with many reagents and solvents commonly used in life science applications. If you have questions on the use of a particular chemical or solvent in an automation solutions reservoir, contact automation solutions technical support before use.

- Both manual fill reservoirs hold a maximum volume of approximately 150 mL (actual maximum volume varies by application)
- Both manual fill reservoirs have been designed to minimize dead volume (liquid that cannot be aspirated); actual dead volume varies by application and is affected by tip size, and liquid characteristics
- Estimated field service engineer installation time is 1 hour (not included)

Description	Part Number
Agilent manual fill reservoir (96-well)	G5498B/G #049
Agilent manual fill reservoir (384-well)	G5498B/G #050

Ready to order? Contact your local product specialist.



Agilent manual fill reservoirs (96-well and 384-well).

Reservoir chemical properties

- Made of polypropylene
- Autoclaving and sterilization is not recommended, as warping may occur
- Offers good chemical resistance to water, DMSO, and many acids and bases at low concentrations
- Suitable for use with certain acids, bases, and solvents at room temperature (for example, acetic acid, and ethyl and methyl alcohol)
- Not recommended for use with concentrated acids or some bases at elevated temperatures

Contact automation solutions technical support for more information.

Vacuum filtration station

Agilent provides an array of components to make separations simple, quick, and productive. These components are assembled and tested to work with the Bravo liquid handling platform and VWorks automation control software.

The Agilent vacuum filtration station features a microplate-sized manifold footprint that can be used in locations 1, 2, or 3. It works along with an optional small, quiet vacuum pump under direct VWorks software control. It is compatible with both filter-to-waste and filtrate collection applications. Separations can be performed manually or in the fully automated mode using the Bravo gripper to stack and unstack the vacuum filtration station components. This device is also known as the custom Agilent/Millipore MultiScreenHTS vacuum manifold package.

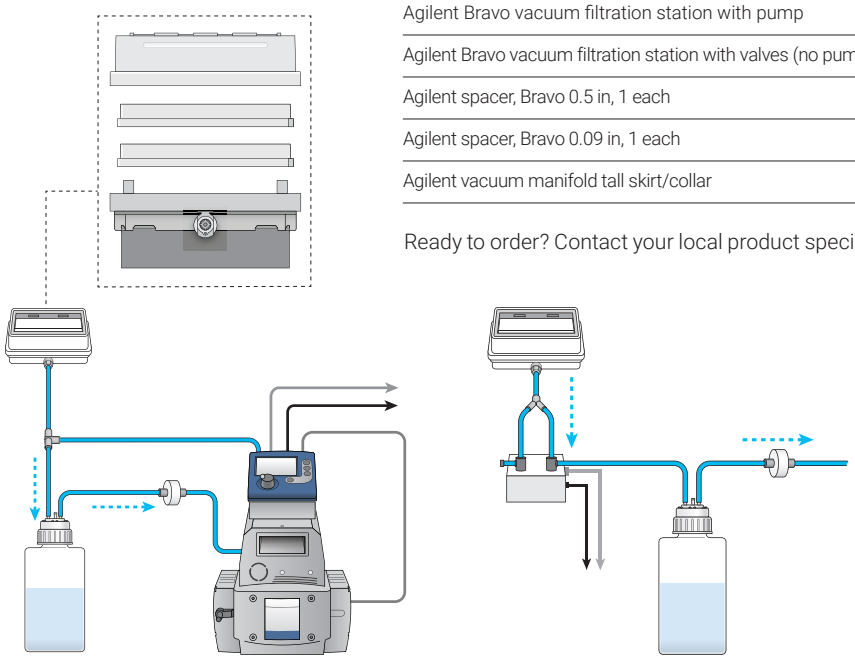
- Requires a vacuum source (not included)
- Two manifold kits are available to choose from, depending on vacuum source: Agilent vacuum pump or house/third-party vacuum pump
- Optional Agilent vacuum pump is quiet and is compatible with VWorks automation control software (11.2 or greater)
- Includes a 1 to 2 L vacuum trap bottle, a 1 to 2 L filter-to-waste bottle, one vacuum manifold kit, one teach plate, filters to protect the pump (10/pk), a short deck platepad, Tygon tubing, miscellaneous fittings, connectors, and fasteners
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Integration tips

- Requires vacuum source
- Agilent vacuum pump module is VWorks software controlled
- Ideal deck locations: 1, 2, or 3
- Requires Bravo gripper for automated assembly and disassembly
- Compatible with all Bravo and Bravo SRT models

Description	Part Number
Agilent Bravo vacuum filtration station with pump	G5432B/G
Agilent Bravo vacuum filtration station with valves (no pump)	G5432B/G #001
Agilent spacer, Bravo 0.5 in, 1 each	G5498B/G #062
Agilent spacer, Bravo 0.09 in, 1 each	G5498B/G #063
Agilent vacuum manifold tall skirt/collar	G5498B/G #069

Ready to order? Contact your local product specialist.



Agilent vacuum filtration station without valves (vacuum pump sold separately) and Agilent vacuum filtration station with valves.

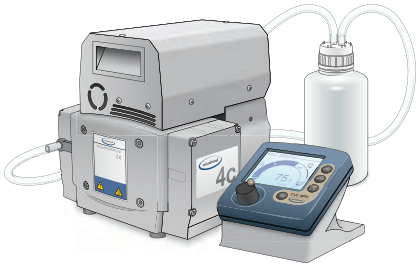
Vacuum pump

The Agilent vacuum pump offers quiet, efficient operation in a small footprint under direct VWorks software control. It is also known as the custom Agilent/Vacuubrand vacuum pump ME 4C NT VARIO.

- Compatible with VWorks automation control software (11.2 or greater)
- Features built-in vent valve and pressure transducer (gauge)
- Includes 0.91 m (3 ft) communication cable ME 4C NT VARIO vacuum pump, CVC 3000 controller with LCD panel, pump instruction guide
- Estimated field service engineer installation time is 1 hour (not included)

Description	Part Number
Agilent vacuum pump	G5498B/G #027

Ready to order? Contact your local product specialist.



Agilent vacuum pump and controller.

Magnetic bead accessory

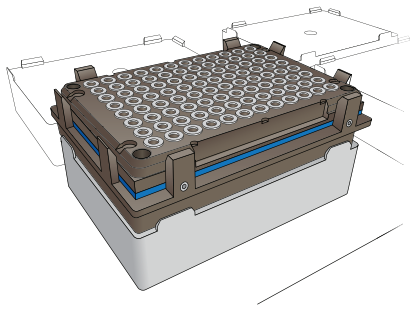
The magnetic bead accessory fits on a standard Bravo deck platepad and is designed to separate smaller volumes (up to 350 µL). It can be located in any deck position and is featured in all Agilent Bravo NGS Workstation packages. It is also known as the custom Alpaqua 96S Super Magnet Plate package.

The magnetic bead accessory is compatible with a range of common V- or U-bottom 96-well labware in standard, PCR, and deep-well formats.

- Estimated field service engineer installation time is 1 hour (not included)

Description	Part Number
Magnetic bead accessory	G5498B/G #008

Ready to order? Contact your local product specialist.



Magnetic bead accessory.

Orbital shaking station

The Agilent orbital shaking stations are designed to agitate liquid within microplates for typical life science applications. These inductive-drive magnetic shaker stations are wear free and require no maintenance. They are controlled from within VWorks automation control software but also include a control box for manual operation offline. The compact orbital shaking station replaces a standard deck pad, using the adapter pad (included), and may be located in any deck position.

Orbital shaking stations automatically return to their original start position to ensure safe, continuous, unattended operation. The automatic startup function ensures a gradual start to the shaking process to reduce sample splashing.

- Compatible with VWorks automation control software
- Input voltage: 115 V 50/60 Hz or 230 V 50/60 Hz
- Rotation speed range
  - Orbital shaking station: 100 to 2,000 rpm; amplitude: 2.2 mm
  - High-speed orbital shaking station: 4000 to 8500 rpm; amplitude: 0.1 to 1 mm
- Dimensions (L × W × H); weight
  - Orbital shaking station:
    146 × 103 × 39 mm (5.75 × 4.06 × 1.54 in); 2.0 kg (4.41 lb)
  - High-speed orbital shaking station:
    146 × 103 × 56 mm (2.56 × 3.94 × 2.20 in); 1.4 kg (3.08 lb)
- Includes orbital shaking station, control unit, teach plate, orbital shaking station integration plate for mounting to the Bravo deck, and communication cables
- Installation by a field service engineer is optional

Description	Part Number
Agilent orbital shaking station includes control unit	G5431B/H
Agilent orbital shaking station, high speed, includes control unit	G5431B/H #001

Ready to order? Contact your local product specialist.

Usage tips

- Rectangular sample wells provide better mixing performance than cylindrical or conical wells
- Orbital shaking station (2.2 mm radius) is best suited up to 96-well formats while high-speed orbital shaking station (0.1 to 1 mm radius) is best suited for 384- and 1536-well plates
- Maximum shaking frequency may not be attainable with filled plates weighing > 200 g
- Maximum shaker load is 500 g
- Compatible with all Bravo and Bravo SRT models

Agilent orbital shaking station with control unit and mounting plate.

Controllers for heating, cooling, and shaking devices

Many of the products featured in this section are customized Inheco devices that are controlled by Inheco TEC control units (temperature/rpm control).

TEC controllers are available in two versions: single TEC control (STC), which controls a single compatible device; and multi TEC control (MTC), which controls up to six compatible devices. TEC controllers are purchased separately for most devices, except where indicated.

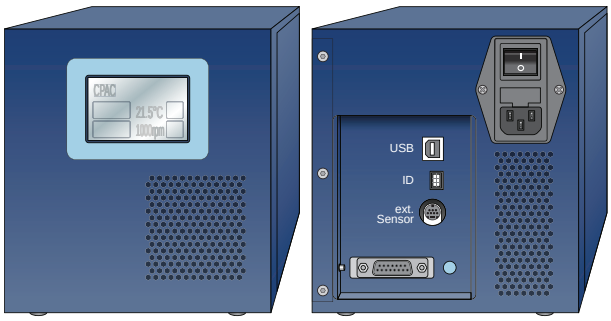
- USB communication with host PC running VWorks automation control software
- Universal input 100 to 240 VAC, 50/60 Hz
- Output: STC 1 × 24 VDC, 4.5 A; MTC 6 × 24 VDC, 4.5 A
- Dimensions (L x W x H); weight
- STC: 224 × 177 × 146.5 mm (8.82 × 6.97 × 5.77 in); 3.3 kg (8.9 lb)
  MTC: 255 × 248 × 185 mm (10.0 × 9.73 × 7.28 in); 5.5 kg (14.8 lb)
- Includes STC or MTC unit, USB memory stick with manuals, USB cable, and country-appropriate power cord
- Estimated field service engineer installation time is 2 hours (not included)

Description	Part Number
STC controller (one device)	G5498B/G #016
MTC controller (up to six devices)	G5498B/G #015

Ready to order? Contact your local product specialist.

Integration tips

- VWorks software control
- See individual devices for shaking/ temperature specifications
- Compatible with all Bravo and Bravo SRT models



Inheco STC controller.

Inheco MTC controller.

Heating shaking station

The Agilent heating shaking station replaces an existing platepad and can be located in any deck position. This combination heating and shaking station requires the use of an Inheco STC or MTC controller. It is also known as the custom Inheco Teleshake 95 AC.

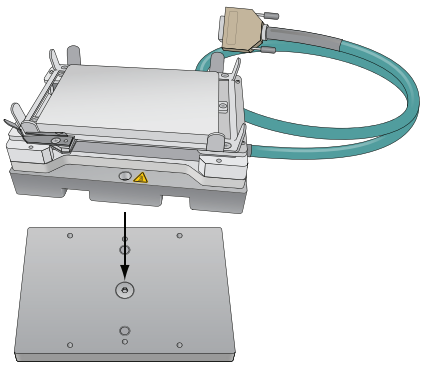
- VWorks automation control software compatible
- 24 VDC power is provided through the required Inheco controller (STC or MTC), which is purchased separately
- Heating capacity: 100 W
- Temperature range: ambient to +95 °C
- Maximum frequency: 2,000 rpm (varies with load); amplitude: 2 mm
- Dimensions (L x W x H); weight
  146 × 103 × 55 mm (5.75 × 4.06 × 2.17 in); 2.6 kg (5.73 lb)
- Communication card for controller not included and also required
- Includes heating shaking station, USB-to-serial adapter, teach plate, and orbital shaking station integration plate for mounting directly to deck
- Estimated field service engineer installation time is 2 hours (not included)

Description	Part Number
Heating shaking station	G5498B/G #009
Communication card required for controller (slot/shaker card)	G5498B/G #019

Ready to order? Contact your local product specialist.

Integration tips

- Requires Inheco STC/MTC controller and communication card
- Controller allows VWorks software control
- Compatible with all Bravo and Bravo SRT models

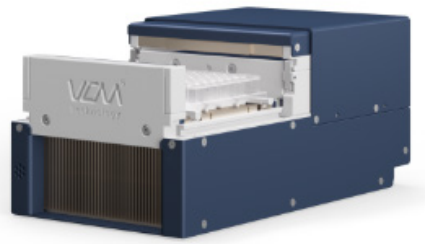


Heating shaking station and mounting plate.

On-deck thermal cycler

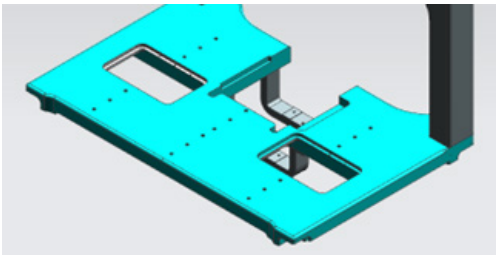
The Agilent on-deck thermal cycler (ODTC) is a critical tool in many automated genomics and molecular biology workflows. The ODTC is used for modifying and amplifying genetic material in library preparation and target enrichment steps in next generation sequencing (NGS) workflows. The cycler may also be used for end-point PCR and other molecular applications that use a 96-well, skirted microwell-plate format. The ODTC is compact and is integrated into the Bravo automated liquid handling platform. It is very convenient and is available for direct pipetting into the PCR plates while integrated onto the Bravo platform.

The ODTC is compatible with VWorks automation control software version 14.2 and above. To upgrade an existing Bravo and add an on-deck thermal cycler, you will need an ODTC-compatible deck. The ODTC Upgrade Kit includes both the compatible deck as well as the ODTC unit itself. The ODTC compatible deck is not sold separately.



The ODTC.

- Dimensions (H x W x L); weight
  124.3 mm x 156.5 mm x 248 mm; approximately 7.5 kg
- Maximum volume during PCR: 100 µL/well for 96-well version
- ODTC lid: opens and closes by horizontal move and is heated to avoid condensation. Running temperature profiles with open ODTC lid is possible.
- Temperature range:
  +4 to +99 °C [+39 to +210 °F][1]
- Temperature accuracy:
  ±0.30 K at +55 °C [+131 °F]
- Temperature uniformity:
  - ±0.20 K at +55 °C [+131 °F]
  - ±0.20 K at +72 °C [+162 °F]
  - ±0.20 K at +95 °C [+203 °F]
- Lid temperature: adjustable between ambient temperature
  +5.0 K to +115 °C [+5.0 K to +239 °F]
- Lid default temperature
  +110 °C [+230 °F]
- Estimated field service engineer installation time is six hours (changing deck included).



The ODTC-compatible deck.

Description	Part Number
ODTC (thermal cycler only)	G5296AA/GA
ODTC upgrade kit (compatible deck included)	G5297AA/GA
Bravo ODTC option without SW	G5563/G5573 #006
ODTC support option	G5563/G5573 #007
VWorks automation control software 14.2 standard NGS kit	G5573/G5574 #008
Ethernet hub	G5563/G5573 #009
ODTC install service	H5949A

Ready to order? Contact your local product specialist.

[1]Heat transfer to labware on heating, thermal, and Peltier thermal stations is achieved when inerts are used in conjunction with the custom nest described below

Heating station

The Agilent heating station is mounted on top of the deck, in any position. It has a footprint slightly larger than a microplate with a low, robot-friendly profile. When used with the required Inheco STC or MTC controller (bought separately), it can keep samples between ambient temperature and approximately 95 °C. (Contact surface may reach ~135 °C.) The heating station can control samples above ambient temperature only. A heating/cooling device is suggested for temperatures below ambient or for samples requiring rapid cooling. Agilent thermal insert plates (see platepads and inserts section) can be used to optimize heat transfer to labware. This item is comparable to the Inheco HeatPAC.

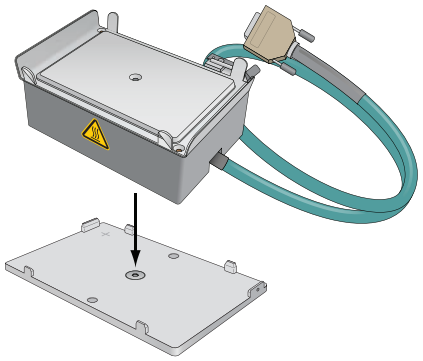
- 24 VDC power is provided through the required Inheco controller (STC or MTC), which is purchased separately
- At 37 °C, target temperature accuracy is ±0.5 °C, (uniformity ±0.5 °C)
- Convenient, practical channel built into the bottom of the device allows cable to be routed along short or long side of the device
- Dimensions (L x W x H); weight
  128 × 88 × 40 mm (5.04 × 3.47 × 1.58 in); 0.89 kg (1.9 lb)
- Includes heating station with metal plate nest, mounting frame for PCR adapter plate, teach plate, and short deck platepad (standard Bravo SRT) for aligning/positioning/holding device on deck
- Estimated field service engineer installation time is 2 hours (not included)

Description	Part Number
Agilent heating station	G5498B/G #018
Communication card required for controller (slot/shaker card)	G5498B/G #019

Ready to order? Contact your local product specialist.

Integration tips

- Requires Inheco STC/MTC controller and communication card
- Controller allows VWorks automation control software
- Compatible with all Bravo and Bravo SRT models
- The use of a custom plate nest is recommended (part number G5498B/G #017)



Agilent heating station and short deck platepad.

Peltier thermal station

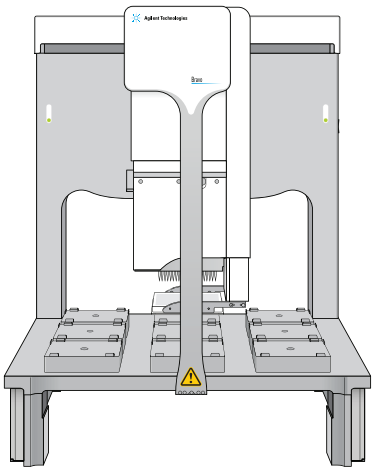
Able to provide temperature cycling within a range of approximately +4 °C to +100 °C, the compact Agilent Peltier thermal station has a footprint slightly larger than a deck platepad and is designed to fit through the deck in positions 4 or 6 only. It requires that the Bravo platform be used with the optional 146 mm risers (see identification and integration section).

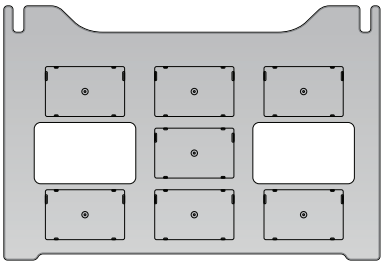
This device requires the TEC control model STC, which controls a single device, or the model MTC, which controls up to six. Temperatures are approximate and may reflect the temperatures provided by the device manufacturer. This device is also known as the customized Inheco CPAC Ultraflat HT 2-TEC.

- 24 VDC power is provided through the required Inheco controller (STC or MTC) which is purchased separately
- At 37 °C target temperature accuracy ±0.3 °C, uniformity ±0.5 °C
- Dimensions (L x W x H); weight
  128 × 88 × 80 mm (5.04 × 3.47 × 3.15 in); 1.0 kg (2.2 lb)
- Includes generic plate nest and adapter for standard microplates
- Both items below include part number G5498B#019 (communication card for controllers)
- Includes Peltier thermal station, teach plate, deck bracket, cover plate, flat bottom plate, adapter, and slot/shaker card and controller when ordered
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Description	Part Number
Agilent peltier thermal station (with STC controller)	G5498B/G #035
Agilent peltier thermal station (without controller)	G5498B/G #021
Agilent risers, 146 mm	G5498B/G #055

Ready to order? Contact your local product specialist.

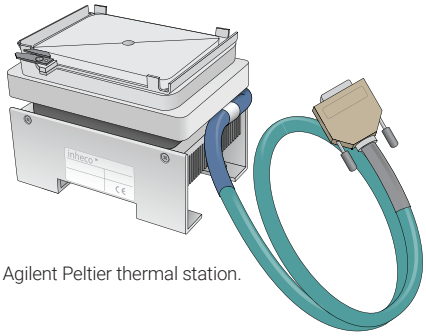




Installation requires Bravo platform risers (bought separately) that must be located in positions 4 or 6 on deck.

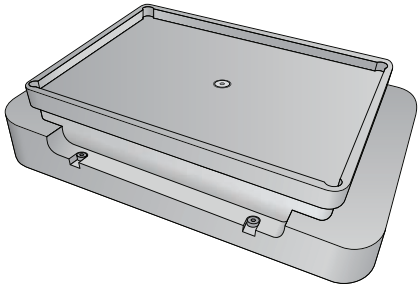
Integration tips

- Requires Inheco STC/MTC controller and communication card
- Requires Bravo platform on risers or hole in benchtop
- Is a through-the-deck accessory that must be located in position 4 or 6
- Compatible with all Bravo and Bravo SRT models
- The use of a custom plate nest is recommended (part number G5498B/G #017)



Agilent Peltier thermal station.

Plate nest and inserts—for heating and Peltier thermal stations



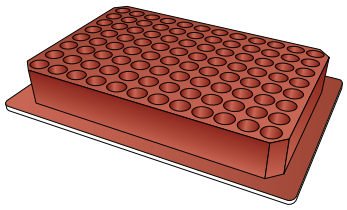
Agilent custom plate nest.

The heating station and Peltier thermal station is supplied with a generic Agilent plate nest suitable for standard labware microplates (14.4 mm tall).

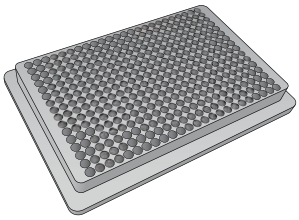
The Agilent custom plate nest can be used to replace the generic plate nest, to broaden the range of compatible standard or custom plate inserts. Thermal plate inserts are used to improve temperature transfer to microplate samples as well as to support/stabilize PCR plates. Full descriptions of the thermal inserts shown here can be found in the platepads and inserts section.

Description	Part Number
Agilent custom plate nest	G5498B/G #017
Agilent PCR plate insert, 96-well	G5498B/G #013
Agilent PCR plate insert, 384-well	G5498B/G #060
Agilent deep-well plate insert, Nunc 2 mL	G5498B/G #012
Agilent U-bottom plate insert	G5498B/G #126
Agilent deep-well plate insert, Abgene 1 mL	G5498B/G #127

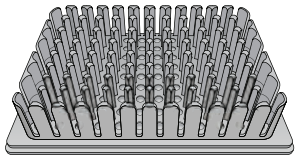
Ready to order? Contact your local product specialist.



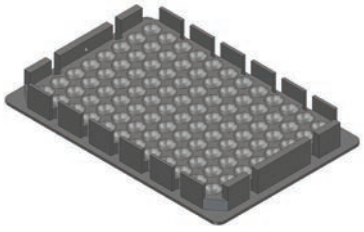
Agilent PCR plate insert, 96-well.



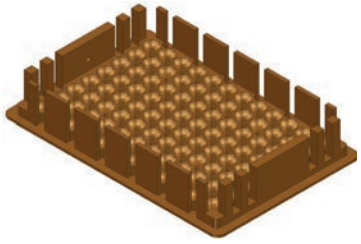
Agilent PCR plate insert, 384-well.



Agilent deep-well plate insert, Nunc 2 mL.



Agilent U-bottom plate insert.



Agilent deep-well plate insert, Abgene 1.2 mL.

Recirculating heater/chiller—for thermal station

Clean, compact, and quiet (<63 dBA), the Agilent recirculating heater/chiller is a Peltier-based unit that recirculates a temperature-controlled liquid. It is used with the Agilent thermal station, which is designed to be heated or cooled by recirculation, providing reliable temperature control of ±0.1 °C across an entire microplate. The operating range of the recirculating heater/chiller is –5 °C to +50 °C. However, temperatures are approximate and may reflect the temperatures provided by the manufacturer rather than achievable microplate temperatures.

The recirculating heater/chiller and the thermal station (sold separately) are standalone units that do not communicate with VWorks automation control software. Instead, all temperatures are manually set and fixed. This recirculating heater is also known as the customized solid-state cooling system ThermoCube 400 W.

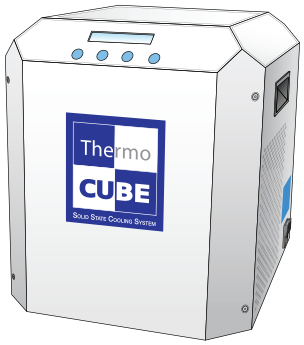
- Works in combination with Agilent Bravo thermal station (sold separately)
- Universal input 100 to 240 VAC, 5.4 A maximum
- Dimensions (L x W x H); weight
  32.4 × 27.9 × 32.4 cm (12.75 × 11.0 × 12.75 in); 11 kg (23 lb)
- Includes two standard 1.83 m (6 ft) lines
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Description	Part Number
Agilent recirculating heater/chiller	G5498B/G #024

Ready to order? Contact your local product specialist.

Integration tips

- Recirculating heater/chiller is used to heat and cool thermal station (sold separately)
- Standalone device offers manual temperature control (not VWorks automation control software adjustable)
- Compatible with all Bravo and Bravo SRT models



Agilent recirculating heater/chiller.

Thermal station for heating/cooling

The Agilent thermal station is a platepad designed for heating and cooling, and is compatible with the recirculating heater/chiller. Its operating range is from –5 °C to +50 °C, and its temperature control is controlled to ±0.1 °C across the microplate when using a recirculating heater/chiller (sold separately).

The thermal station is available in two configurations, with short-side connectors for deck positions 4 to 9, and with long-side connectors for positions 1 to 3. It is also available as a three-plate module for positions 1, 2, and 3.

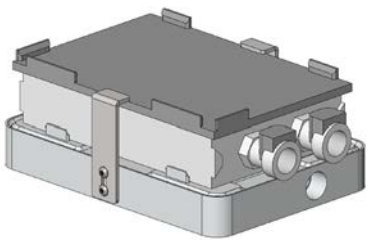
- Estimated field service engineer installation time is 1 hour 30 minutes (not included)

Description	Part Number
Agilent thermal station (short-side connectors)	G5498B/G #036
Agilent thermal station (long-side connectors)	G5498B/G #037
Agilent thermal station (three-plate)	G5498B/G #038

Ready to order? Contact your local product specialist.

Integration tips

- Plate insert may be required to ensure thermal uniformity across microplates
- Compatible with all Bravo and Bravo SRT models



Agilent thermal station (short-side connectors).

Deck position trash

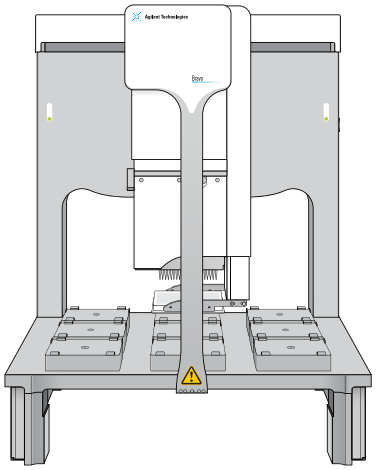
The Agilent deck position trash provides a convenient location for the disposal of consumables by replacing a deck platepad at through-deck positions 4 and 6.

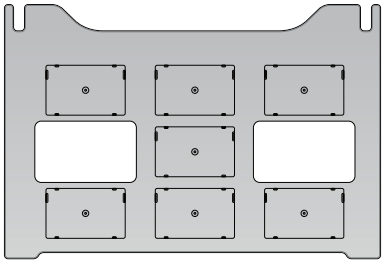
The device requires a customer-supplied through-hole in the table supporting the Bravo platform and a trash collection receptacle.

– Estimated field service engineer installation time of 30 minutes (not included). Based on standard deck platepad replacement only; does not include collection hardware or its installation.

Description	Part Number
Agilent deck position trash	G5498B/G #056
Agilent risers, 146 mm	G5498B/G #055

Ready to order? Contact your local product specialist.

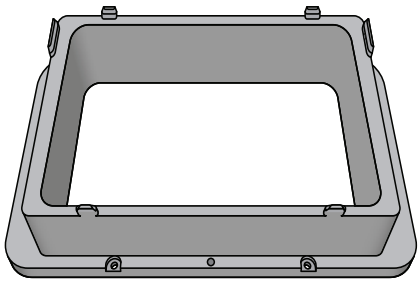




Installation requires Bravo platform risers (bought separately) that must be located in positions 4 or 6 on-deck.

Integration tips

– Requires through-deck mounting and Bravo risers
– Must be located in deck positions 4 or 6
– Compatible with all Bravo and Bravo SRT models



Agilent deck position trash.

Accessories for the Bravo automated liquid handling platform

Description	VWorks[1] Control	Available Deck Positions	Part Number
Liquid Handling Heads			
Disposable-tip heads (dispenses fluid into selected wells simultaneously: M x N array, single columns, single rows, or single wells)			
Agilent 384ST 384-barrel disposable-tip pipette head	Yes	NA[2]	G5056A/G
Agilent 96ST 96-barrel disposable-tip pipette head	Yes	NA	G5057A/G
Agilent 96LT 96-barrel disposable-tip pipette head	Yes	NA	G5055A/G
AssayMAP microchromatography			
Agilent AssayMAP upgrade kit (includes AM head)	Yes	NA	G5572AA
Agilent Bravo 96AM head with positive displacement syringes (for AssayMAP cartridges)	Yes	NA	G5058A
Identification and Integration			
Agilent mirrored barcode reader (requires serial port)	Yes	All	G5498B/G #031
Agilent light curtain, standard Bravo (safety)	Yes	NA	G5498B/G #022
Agilent light curtain, Bravo SRT (safety)			G5498B/G #522
Agilent wraparound light curtain, for standard Bravo and Bravo SRT platforms (safety)			G5598A
Agilent dust cover, for standard Bravo platform and standard light curtain			G5498B/G #122
Agilent risers, 146 mm	No	NA	G5498B/G #055
Agilent Bravo labware riser, 28.4 mm			G5498#061
Agilent gripper upgrade, non-RoHS Bravo	Yes	NA	G5199A
Agilent gripper upgrade, RoHS Bravo			G5597A
Platepads and Inserts			
Platepads for microplates			
Agilent deck platepad (standard on Bravo platform)	No	All	G5498B/G #004
Agilent deck platepad, short (standard on Bravo SRT platform)	No	All	G5498B/G #005
Agilent alignment station (passive; 384/1536 plates or ST tip boxes)	No	All	G5498B/G #028
Agilent Bravo platepad closed corners	Yes	All	G5498B/G #125
Platepads for tip boxes			
Agilent deck platepad, 96AM 250 µL tip loading station (AssayMAP Bravo platform)	No	All	G5409-20025
Agilent alignment station (passive; 384/1536 plates or ST tip boxes)	No	All	G5498B/G #028
Agilent tip loading station (Bravo SRT platform)	No	All	G5498B/G #029
Agilent 200 µL tip box (Legacy 200 µL tips Bravo SRT platform)	No	All	G5498B/G #007
Agilent 250 µL tip box (Bravo SRT platform)	No	All	G5498B/G #020
Inserts			
Agilent nested rack insert (required when nested tips are used with ST heads)	No	All	G5498B/G #003
Agilent teach plate, HW1 (included with all new Bravo platforms)	No	All	G5550-17692
Thermal inserts			
Agilent PCR plate insert, 384-well	No	NA	G5498B/G #060
Agilent deep-well plate insert, Nunc 2 mL	No	NA	G5498B/G #012
Agilent PCR plate insert, 96-well	No	NA	G5498B/G #013
Agilent U-bottom plate insert			G5498B/G #126
Agilent deep-well plate insert, Abgene 1.2 mL			G5498B/G #127

[1] *Agilent VWorks automation control software.*
[2] *NA = not applicable.*

Accessories for the Bravo automated liquid handling platform

Description	VWorks[1] Control	Available Deck Positions	Part Number
Reagent Reservoirs and Tip Wash Stations			
Autofilling (all use pump module, except where indicated)			
Agilent autofilling reservoir (reagent)	Yes	All	G5498B/G #053
Agilent tip wash station (MicroWash reservoir, 384-chimney)	Yes	1, 2, 3	G5498B/G #052
Agilent tip wash station (MicroWash reservoir, 96-chimney)	Yes	1, 2, 3	G5498B/G #051
Agilent 96AM tip wash station (MicroWash reservoir AssayMAP head)	Yes	1, 2, 3	G5498B/G #057
Agilent open bath tray (formerly open wash reservoir, open wash station)	Yes	All	G5498B/G #048
Peristaltic pump for autofilling reservoirs and tip wash stations			
Agilent pump module 2.0 (required for *all* autofilling reservoirs and wash stations; required for 96AM tip wash station)	Yes	NA	G5498B/G #058
Agilent pump module tubing kit	NA	NA	G5498B/G #001
Agilent weigh station (for precise liquid-level control)	Yes	1, 2, 3	G5498B/G #030
Manual filling (not recommended for tip washing)			
Agilent manual fill reservoir (reagent, 384-well)	No	All	G5498B/GG #050
Agilent manual fill reservoir (reagent, 96-well)	No	All	G5498B/G #049

[1] *Agilent VWorks automation control software.*
[2] *NA = not applicable.*

Description	VWorks[1] Control	Available Deck Positions	Temperature Range	Third-Party Components[3]	Part Number
Separation					
Agilent Bravo vacuum filtration station with pump (vacuum manifold options: tall collar, 0.5- and 0.9-inch spacers)	Yes	1, 2, 3	NA[2]	Millipore MultiScreen HTS vacuum manifold and Vacuubrand ME4C NT Vario	G5432B/G
Agilent vacuum filtration station with valves (for use with customer-supplied house or third-party vacuum pump; vacuum manifold options: tall collar, 0.5- and 0.9-inch spacers)	Yes	1, 2, 3	NA	Millipore MultiScreen HTS vacuum manifold	G5432B/G #001
Agilent vacuum pump (ME 4C NT VARIO)	Yes	NA	NA	Vacuubrand ME4C/ME4C NT Vario	G5498B/G #027
Agilent magnetic bead accessory	NA	All	NA	NA	G5498B/G #008
Shaking and Temperature Control					
Controllers for heating/cooling/shaking (requires heating/cooling/shaking platepad)					
Agilent controller, heating/cooling/shaking (for one device)	Yes	NA	NA	Inheco single TEC controller (STC)	G5498B/G #016
Agilent controller, heating/cooling/shaking (for up to six devices)	Yes	NA	NA	Inheco multi TEC controller (MTC)	G5498B/G #015
Platepad for shaking (with self-contained controller featuring VWorks speed control; does not require G5498B #019)					
Agilent orbital shaking station	Yes	All	NA	Inheco Teleshake 2 mm amplitude	G5431B/H
Agilent orbital shaking station, high speed	Yes	All	NA	Inheco Teleshake 1536 1 mm amplitude	G5431B/H #001

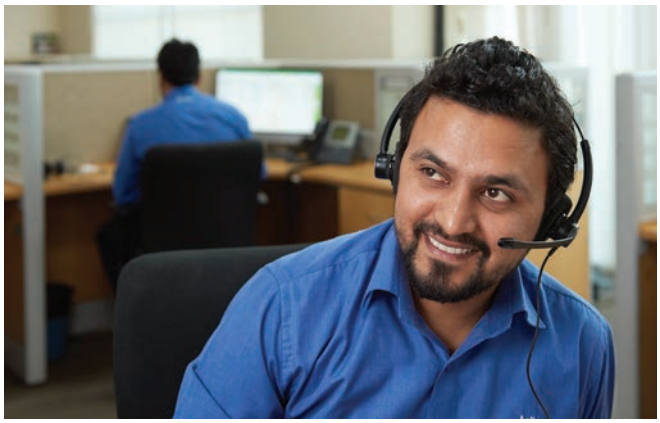
Accessories for the Bravo automated liquid handling platform

Description	VWorks[1] Control	Available Deck Positions	Temperature Range	Third-Party Components[3]	Part Number
Platepad for shaking and heating					
Agilent heating shaking station (requires p/n G5498B #016 or G5498B #015, and G5498B #019)	Yes	All	RT to 125 °C	Inheco Teleshake 95	G5498B/G #009
Platepad for heating					
Agilent heating station (requires p/n G5498B#016 or G5498B #015, and G5498B #019)	Yes	All	RT to 135 °C	Inheco HeatPac	G5498B/G #018
Platepad for heating/cooling (use generic nest for 14.4 mm tall plates and custom nest for specialized plates; requires 146 mm risers)					
Agilent peltier thermal station (includes generic nest, p/n G5498B #016, and G5498B #019)	Yes	4, 6	4 to 110 °C	Inheco CPAC Ultraflat HT2TEC	G5498B/G #035
Agilent peltier thermal station (includes generic nest and p/n G5498B #019; requires p/n G5498B #016 or G5498B #015)	Yes	4, 6	4 to 110 °C	Inheco CPAC Ultraflat HT2TEC	G5498B/G #021
Agilent custom plate nest for thermal station (use with p/n G5498B #12 or G5498B #013)	NA	NA	NA	NA	G5498B/G #017
Recirculating heater/chiller					
Agilent chiller, Peltier, 400 W (required for p/n G5498B #036, G5498B #037, and G5498B #038)	No	NA	5 to 50 °C	Solid-state cooling systems ThermoCube	G5498B/G #024
Platepads for heating/cooling					
Agilent thermal station (recirculator-based; short-side connectors; use with p/n G5498B #024)	No	4, 5, 6, 7, 8, 9	See chiller	NA	G5498B/G #036
Agilent thermal station (recirculator-based; long-side connectors; use with p/n G5498B #024)	No	1, 2, 3	See chiller	NA	G5498B/G #037
Agilent thermal station, three-position (recirculator-based; use with p/n G5498B #024)	No	1, 4, 7, and 3, 6, 9	See chiller	NA	G5498B/G #038
On-deck thermal cycler					
Agilent ODTC (thermal cycler only) (requires supplemental install service p/n H5949A, and risers G5498B/G #055)	Yes	2	4 to 99 °C	Inheco	G5296AA G5296GA
Agilent ODTC upgrade Kit (compatible deck included)	Yes	2	4 to 99 °C	Inheco	G5297AA G5297GA
Agilent Bravo ODTC option (does not include SW)	N/A	2	4 to 99 °C	Inheco	G5563AA #006 G5563GA #006 G5573AA #006 G5574AA #006
Agilent ODTC support option	N/A	2	N/A	Inheco	G5573AA #007 G5574AA #007
Agilent VWorks automation control software 14.2 standard NGS kit	Yes	N/A	N/A	N/A	G5573AA #008 G5574AA #008
Agilent ethernet hub	N/A	N/A	N/A	N/A	G5563AA #009 G5563GA #009 G5573AA #009
Trash, Disposable Tip					
Agilent deck position trash (requires customer-supplied collector)	No	4, 6	NA	NA	G5498B/G #056

[1] *Agilent VWorks automation control software.*
[2] *NA = not applicable.*
[3] *Agilent Bravo platform accessories may contain third-party components that have been customized and optimized for use with the Bravo platform and are supported by Agilent.*

Customer Service and Technical Support

Automation solutions customer service



Worldwide customer service portal

To reach your local product specialist and customer support teams by phone or email, please visit our customer service page: https://www.agilent.com/en/contact-us/page

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Email	service.automation@agilent.com

This technical support team is located within our Santa Clara, CA Automation Solutions headquarters and is happy to help route any automation inquiry related to customer service, technical support, instrument service/repair or connect you with your local product specialist.

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From Insight to Outcome

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