

Agilent BenchCel Microplate Handler

Data Sheet



Applications

1. Labeling and Sealing
2. Centrifugation
3. Replication
4. Screening and more...

Introduction

The Agilent BenchCel Microplate Handler is a compact system that rivals full-size automation platforms. The BenchCel Microplate Handler R-Series (or BenchCel R-Series) is a masterpiece of form, function, and flexibility in laboratory automation. In a class by itself, this robust, versatile, high-speed, ultra-compact benchtop automation platform continues to earn accolades, year after year.

The BenchCel Microplate Handler is a combination of automated microplate handling and storage that delivers the speed and precision of a full-sized automation platform. The BenchCel Microplate Handler features a high-speed robot that can access integrated microplate stacks and peripheral instruments. This customizable, modular design provides the flexibility and scalability required to meet the needs of the most diverse laboratory applications. Adding to the BenchCel Microplate Handler's versatility, the delidding function removes and replaces microplate lids as necessary. The BenchCel Microplate Handler is available in 2, 4, or 6 stack configurations, with options for rack capacity and style. The BenchCel Microplate Handler can be powered by VWorks Automation Control Software. VWorks intelligent scheduling software features icon-based protocol editing with straightforward interfaces for integrated devices. VWorks includes a labware database capable of managing most labware, including standard microplates, filter plates, deep well microplates, tip boxes, and tube racks.



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Features & Benefits

System Features

- High speed 8 second transfer times from stack to instrument
- 2, 4, or 6, stack configurations for a maximum of 360 standard microplates
- Storage and handling of most microplates, lidded plates, tip boxes and tube racks
- 66% more walk-away time than competitive systems
- Integration of multiple instruments into a single benchtop workstation

Benefits

- **Compact:** A benchtop platform with the speed and precision of a full-sized automated system.
- **Versatile:** Proven automated solutions for a range of simple and complex laboratory applications.
- **Easy to Use:** Powered by VWorks Automation Control Software for complete control that is easy to use for all levels of operators.

Additional Information

Application Details

Labeling and Sealing: Combine the BenchCel Microplate Handler with the Agilent Microplate Labeler and PlateLoc Sealer and label up to four sides of a microplate with a process time of 20 seconds. Seal, label, and stack over two microplates per minute.

Centrifugation: Combine the BenchCel Microplate Handler with the Agilent Microplate Centrifuge and have a walk-away solution for liquid leveling, liquid extraction and SPE. Users can spin 2 plates simultaneously and up to 360 microplates in a single run.

Replication: Combine multiple BenchCel units with the Bravo Liquid Handler, PlateLoc, Microplate Labeler and Microplate Centrifuge to create the most compact and versatile high-throughput benchtop microplate replication solution. 50 plates can be replicated into labeled and sealed daughter plates in one hour.

Screening: Integration of the versatile Bravo Liquid Handler or Vertical Pipetting Station with a variety of industry leading plate readers, washers, and incubators creates a compact benchtop solution for screening of enzymes, proteins, antibodies or cells. With VWorks Automation Control Software microplates can be processed simultaneously for the highest throughput. Additional accessories can be added to allow barcode tracking, temperature control, microplate shaking, and automated disposal of contaminated tips or labware to waste bins.

Other Applications Include: Bulk dispensing, plate reading, PCR setup and cleanup, CYP assays, SiRNA screening, cell based assays and more.

Specifications

Electrical: U.S.: 100–240 ~, 50/60 Hz, Operating AC Current 5A/120V or 2.5A/240V (typical), Inrush Current 20A/120V or 40A/240V (typical)

Environment: 4–40 °C, 10–90% RH, non-condensing

Air: 34 Lpm at 6.5 bar [1.2 cfm at 95 psi]

Software: VWorks benchtop software (contact Sales or Technical Support for the most appropriate software for your application); ActiveX control

Controller: PC using Windows XP or Vista operating system

Interface: 10BaseT Ethernet port, RS-232 serial port

Certification: CE certified

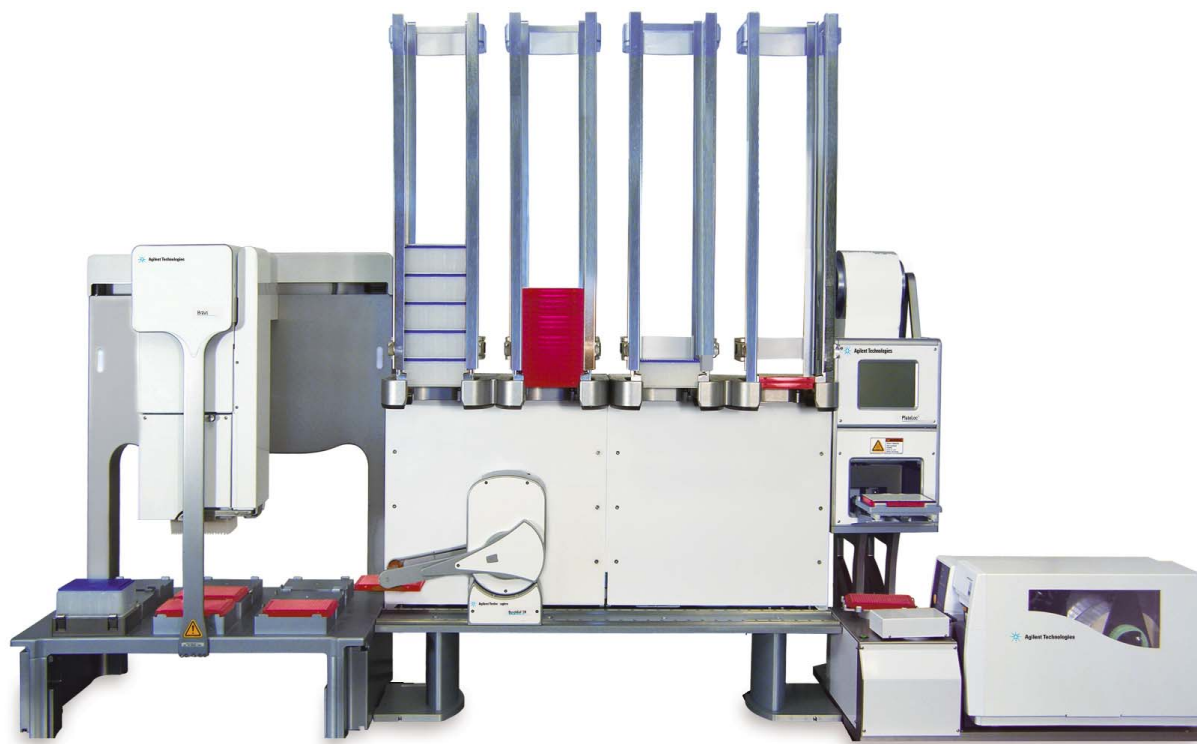
Labware Compatibility Microplates: ANSI-compliant microplates including PCR microplates, deep well microplates, filter microplates, and tube racks Tip boxes: All Automation Solutions tip boxes as well as other stackable third-party tip boxes

Dimensions

2 Stack Base Unit	4 Stack Base Unit	6 Stack Base Unit
Height: 45.1 cm [17.8 in]	Height: 45.1 cm [17.8 in]	Height: 45.1 cm [17.8 in]
Width: 43.0 cm [17.0 in]	Width: 86.0 cm [34.0 in]	Width: 130.0 cm [51.0 in]
Depth: 20.0 cm [8.0 in]	Depth: 20.0 cm [8.0 in]	Depth: 20.0 cm [8.0 in]
Weight: 21.8 kg [48 lbs]	Weight: 28.1 kg [55 lbs]	Weight: 32.7 kg [72 lbs]

Note: Height does not include rack height.

Part No.	Description
G5400A	Agilent BenchCel Microplate Handling Workstation – Integration with multiple instruments
G5410A	Agilent BenchCel Microplate Handler – Standalone Device



Example solution for RNAi sample preparation composed of the BenchCel Microplate Handler integrated with the Bravo Liquid Handling platform, Microplate Labeler, and PlateLoc Microplate Sealer.

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