Agilent BenchCel Workstations
Automated Barcode Labeling Workstation
Application Bulletin

Features and Benefits

• High Speed: 8 second plate transfers, 3 second labeling
• Scalable System: Integrate to additional Agilent and 3rd party devices
• Storage Options: 2, 4, or 6 stacks handle up to 320 standard microplates

Rapidly print and apply barcode labels with walk-away convenience

Agilent Automation Solutions integrates a wide range of instruments with the BenchCel Microplate Handler to create flexible benchtop automation solutions. Ask your Agilent technical sales professional for the latest list of BenchCel Microplate Handler compatible instruments.

An Automated Barcode Labeling Workstation can be created using two Agilent instruments: a BenchCel Microplate Handler that feeds ANSI compatible unlabeled microplates to a Microplate Barcode Labeler. The Microplate Barcode Labeler uses a 400 dpi thermal transfer printer to print barcodes onto adhesive labels which it then applies to the microplate.

An optional barcode reader can be used to verify barcodes that are applied to labels, log barcode activity or clone barcodes if desired.
Specifications

Hardware
Process approximately three microplates/minute — the Agilent BenchCel Microplate Handler can provide transfer times of approximately eight seconds per microplate. Agilent Microplate Barcode Labeler cycle time approximately three seconds per microplate.

Up to 80 microplates per rack. BenchCel Microplate Handler with 2, 4, or 6 racks.

Thermal transfer printer provides 400 dpi resolution, can print and apply labels on any or all four sides of most ANSI compliant microplates.

Software
Powerful Agilent VWorks Automation Control software for importing data and creating custom labels.

Comma or tab delimited file, Excel spreadsheet or ODBC compliant LIMS compatibility.

Format up to five human readable fields and one barcode field.

Barcode Symbologies: Code 39, Interleaved 2 of 5, Code 128 and many others

Operating Requirements

Electrical: 100-240 VAC, 50/60 Hz, Operating AC Current (typical) 8.2A/120V 5.7A/240V, Inrush Current (typical) 40A/120V 80A/240V

Air: 98 LPM at 5.5 bar (≤3.5 cfm at 80 psi)

Software: ActiveX device drivers for both BenchCel and Barcode Labeler, VWorks Automation Control software for Workstation

PC System: Windows XP or Vista

Interface: 10 BaseT Ethernet Port, RS-232 Serial Port

Certification: Instruments CE certified

Labware Compatibility

Microplates: All ANSI compliant microplates including deep well plates, PCR plates and tube racks.

Performance

Cycle Time: Seal and stack plates at a rate of 3 per minute. Label up to four sides of a microplate and stack in 20 seconds

Printer Resolution: 400 dpi

Label Application: ± 0.5 mm horizontally or vertically

Dimensions

BenchCel 2R Base Unit
Height: 45.1 cm [17.8 in]
Width: 71.4 cm [28.1 in]
Depth: 61 cm [24 in]
Weight: 48.8 kg [108 lbs]

White Label Stock
Standard label size 6.35 mm x 50.8 mm (0.25 x 2 in)

DMSO and acetone resistant; withstand temperatures of -80 to 100 ºC

Consumables/Maintenance Items for Agilent Microplate Barcode Labeler:
P/N 09479-001 Label Roll, 5000 labels
P/N 09479-002 Label Roll, 10,000 labels
P/N 09479-003 Label Roll, 15,000 labels
P/N 13035-001 Microplate Barcode Labeler thermal transfer ribbon
P/N 06397-001 Vacuum Pads, Set of Six

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