

# DESIGNED FOR YOUR EVOLVING WORKFLOW PRIORITIES

Biomek i-Series Automated Workstations



**ACCELERATED WORKFLOWS.** Faster Discovery.

# YOU TALKED. **WE LISTENED.**

**Your priorities continue to evolve; ours never change.  
Because our priority is you.**

Your input and our experience led to the engineering of a liquid handling platform that enables you to get the trusted, reliable results you need from your application workflows.

From your input, some recurring themes appeared. And from those themes emerged a common foundation—for hardware, software, accessories, consumables and support—that's built-on:

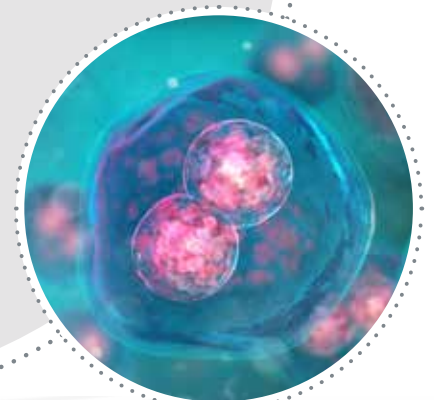
- **Simplification**, so you can focus more on science and less on managing your tools
- **Efficiency**, to help you optimize productivity, increase walk-away time and learn more—faster
- **Adaptability**, so the technology you invest in can grow with you, not grow obsolete
- **Reliability and support**, to help maximize instrument uptime so your research is always moving forward

On that customer-driven foundation, we're building the future of laboratory automation.



The benefits of an automated workstation from Beckman Coulter Life Sciences come from more than just an instrument. They're realized thanks to synergy between:

- Hardware
- Software
- Accessories
- Consumables
- Service and support



# ADVANCING SCIENCE BY ACCELERATING A **WIDE RANGE OF APPLICATIONS**

## **Automation drives acceleration.**

This is true for pharma, biotech, academia and government-sponsored research—virtually any lab focused on genomics, cell biology, proteomics, drug discovery, forensics and related research areas.

## **A sampling of drug discovery and basic research application areas that can benefit from Biomek automation:**

- Cell-based assays
- High-throughput screening
- High-content screening
- Cell line development
- Cell culture
- Transfection
- Continuous cell culture
- Biologic bioanalysis
- Proteomics, lipidomics, metabolomics
- Synthetic biology
- 3D cell models
- Compound handling

## **A sampling of genomics application areas that can benefit from Biomek automation:**

- Next-generation sequencing sample prep
  - Whole genome sequencing
  - Transcriptome sequencing
  - Target/exome capture
  - Amplicon sequencing
  - Cancer panels
  - HLA typing
- Microarray sample prep
  - Genotyping
  - Gene expression
- Nucleic acid sample prep
  - DNA/RNA isolation
  - DNA/RNA clean-up
  - DNA size selection
  - Plasmid prep
- Sanger sequencing
  - Big dye clean-up
- qPCR/PCR setup

Many fields of research continue to accelerate at a rapid pace.

Our commitment is to provide the innovative technology you need to maintain that pace—by simplifying your workflows, improving efficiency, increasing walk-away time and decreasing downtime.

**The most recent example of this commitment: Biomek i-Series Automated Workstations<sup>1</sup>.**





# EXPLORE THE **BIOMEK i-SERIES** AUTOMATED WO

Representing the best of what has made Biomek workstations an industry leader—combined with enhancements suggested by customers around the globe—Biomek i-Series Automated Workstations have been designed to optimize dependability and walk-away time in mid- to high-throughput labs.

## **Simplicity so you can focus more on science**

- 1 Bright, multiple color- and pattern-coded status light bar alerts you to the instrument's current mode, even from across the room.
- 2 Light Curtain provides key safety feature during operation and method development.
- 3 Internal LED light illuminates the instrument deck for easy access and monitoring of your workspace status.

## **Efficiency to help deliver higher productivity**

- 4 Rotating gripper with unique offset finger design optimizes access to high-density decks, enabling more efficient workflows.
- 5 Linear motion control increases positional accuracy for pipetting access to high-density labware.
- 6 Large-volume, 1 mL multichannel pipetting head expedites sample transfers and enables more efficient mixing steps.



Biomek **i7** Automated Workstation

# WORKSTATIONS

## BIOMEK i-SERIES WORKSTATIONS ENABLE “4D INTEGRATION”

With access from 4 directions—right, left, back and below—i-Series workstations make it easy to integrate a growing menu of devices, components and accessories. Your Beckman Coulter team can help you with standard integrations.



### Adaptability to extend scale and reach

- 7 Grid-based deck with simple accessory installation enables quick workflow changes.
- 8 Spacious, open-platform design enables access from all sides to enable integration of adjacent-to-deck and off-deck processing elements (e.g., analytical devices, external storage/incubation units, and labware feeders).

### Trusted reliability and support to reduce downtime

- 9 Safeguard sample and reagent integrity from air particulates with enclosed versions of the Biomek i-Series Automated Workstations.
- 10 Vertical sliding door on enclosure provides front access without aisle obstruction.
- 11 Onboard cameras enable live broadcast and on-error video capture to expedite response time and system diagnosis.
- 12 Span-8 pipetting with independent probe calibration for volume transfers from 0.5 to 5,000  $\mu\text{L}$ .

# ACCESSORIES TO ENABLE **YOUR APPLICATIONS**

Build a system to suit your needs. Choose the accessories you need to maximize the efficiency and reliability delivered by a Biomek i-Series Automated Workstation.

## Multichannel heads

In addition to Span-8 pipetting, three multichannel head options are available:

	RANGE
MC-384, 60 $\mu$ L	0.5 $\mu$ L - 60 $\mu$ L
MC-96, 300 $\mu$ L	1 $\mu$ L - 300 $\mu$ L
MC-96, 1,200 $\mu$ L	5 $\mu$ L - 1,200 $\mu$ L

For more information on compatible tips, request a copy of Beckman Coulter's Biomek Tips and Labware catalog.

## Automated Labware Positioners (ALPs)

Designed to fit seamlessly onto the deck of any Biomek workstation, ALPs from Beckman Coulter Life Sciences perform application-specific tasks, such as:

- Tip washing
- Shaking
- Heating/cooling
- Reagent reservoirs
- And a host of other options depending on your application





Biomek i5 Automated Workstation



## Device integrations and customization services

To further enhance the capabilities of your Biomek i-Series Automated Workstation, you can choose from a list of device integrations or ask for our customization services.

Your support team will include experts who've integrated hundreds of third-party devices to meet a large variety of workflow needs.

## Additional components

- Fly-by barcode reader for positive sample ID, process and tracking of microplates
- Labware feeders
- Instrument carts (pictured) and tables
- And a host of others depending on your specific needs



# INDUSTRY-LEADING BIOMEK SOFTWARE FOR i-SERIES THAT **DELIVER**

The latest version of customer-acclaimed Biomek software, Biomek i-Series software maximizes ROI by giving you unprecedented control over your liquid handler.



## Method authoring

- Sets the standard for method authoring with a point-and-click interface; no advanced software expertise required.
- Saves time and consumables with Biomek's visual editor, which validates your method in real time as you create it, and Biomek's 3D simulator, which demonstrates exactly how your method will execute.
- Provides full control over movement of the tip in the well to match even the most complex manual pipetting motions.



## Ease of operation

- Improves accuracy and reduces errors by giving operators step-by-step guidance for placing labware on the deck.
- Makes it easy for lab technicians to launch/monitor methods by providing a simple point-and-click user interface.
- Lets you "lock down" the instrument and protect validated methods from being altered inadvertently by operators.
- Supports regulated laboratories and multi-user environments by controlling access using electronic signatures.
- Enables remote instrument monitoring using any device with a Google Chrome browser.



## Data management

- Captures the data you need to validate your processes and help ensure reproducible results.
- Integrates with LIMS systems to import work orders and export data.
- Seamlessly transfers data between methods so you can easily generate run, labware and sample reports at any time.
- Data-driven methods select appropriate actions during execution based on sample data generated in real time.



# ERS WORKFLOW INTELLIGENCE

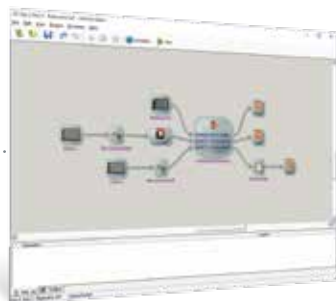


## Additional software solutions include:



### **Simplify data management with DART**

Automation systems generate large quantities of data to manage. DART simplifies workflow data by transforming it into powerful information to inform your research decisions.



### **Streamline workflows with SAMI EX**

Automate full workflows with a process control supporting a wide variety of applications. Use the power of a planning scheduler and sample data drill-down to manage your assay.



### **Easily automate your most complex workflows with SAMI Process Management**

This calendar-format tool enables the addition, monitoring and planning of SAMI EX methods and other events as part of user-defined processes.

# BIOMEK PIPETTE TIPS: THE MOST CRITICAL POINT OF CONTACT

All Biomek workstations are optimized to perform as complete systems. That's why only Biomek pipette tips from Beckman Coulter Life Sciences are validated and approved for use with our workstations.

Biomek pipette tips, racks and rack covers are molded from premium-grade, virgin polypropylene to provide chemical resistance during sample preparation, and to ensure the highest performance and quality control for your most exacting applications.

To make setup, method writing, and operation easy and efficient, Biomek software already includes point-and-click options for Biomek tip definitions, pipetting techniques and templates, and color-coded Biomek tip racks.



Only Biomek pipette tips are validated and approved for use with Biomek workstations.



Biomek pipette tips from Beckman Coulter are certified to be:

- **RNase- and DNase-free**  
Ensures high-quality nucleic acid purification and reliable nucleic acid testing results.
- **DNA-free (human & mouse)/PCR inhibition**  
Confirms the absence of both human and mouse DNA contaminants that result in erroneous results and interfere with the PCR.
- **Endotoxin-free**  
Addresses endotoxin-sensitive applications, such as cell transformations and preparative protocols that use extracted biological material for in vivo experimentation.
- **Trace metal-free**  
Testing of the base, polypropylene tip resin reduces interferences due to chelation and denaturation.

For more information on Biomek tips and accessories, request a copy of Beckman Coulter's Biomek Tips and Labware catalog or visit [beckman.com](http://beckman.com).



# WORLD-CLASS TRAINING, SERVICE AND SUPPORT ARE INSTRUMENTAL TO SUCCESS

From online classes or instructor-led training, to on-site application support – we're committed to doing everything possible to ensure that you can operate your Biomek workstation with confidence.

In addition, when you choose a Biomek i-Series Automated Workstation from Beckman Coulter Life Sciences, you can expect support and maintenance from an organization that's rated higher for technical support than any major competitor.

Further building on our commitment to world-class service, the PROService Remote Monitoring System is now available to help maximize system uptime by shortening service calls and expediting repair times.



Instructor-led training or on-line classes help ensure that you can operate your i-Series workstation with confidence.

Our customer support center directs a team of engineers with extensive product knowledge who can troubleshoot issues quickly and efficiently.

To help maximize instrument uptime, the PROService Remote Monitoring System can use built-in cameras to show our support team a secure view of your i-Series workstation.



# SYSTEM SPECIFICATIONS FOR BIOMEK i-SERIES AUTOMATED WORKSTATIONS

ITEM	WITHOUT ENCLOSURE	WITH ENCLOSURE
<b>Dimensions for Biomek i5 Base Unit</b>	Width: 112 cm (44") Depth: 81 cm (32") Height: 104 cm (41")	Width: 112 cm (44") Depth: 81 cm (32") Height: 112 cm (44")
<b>Dimensions for Biomek i7 Base Unit</b>	Width: 170 cm (67") Depth: 81 cm (32") Height: 104 cm (41")	Width: 170 cm (67") Depth: 81 cm (32") Height: 112 cm (44")
<b>Maximum Height w/Door Open</b>	N/A	147 cm (58")

## **Weight: Biomek i5 Base Unit**

Multichannel	155 kg (341 lbs)	181 kg (399 lbs)
Span-8	146 kg (322 lbs)	172 kg (379 lbs)

## **Weight: Biomek i7 Base Unit**

Multichannel	199 kg (439 lbs)	234 kg (516 lbs)
Dual Multichannel	234 kg (516 lbs)	269 kg (593 lbs)
Span-8	190 kg (419 lbs)	225 kg (496 lbs)
Hybrid (Multichannel + Span-8)	225 kg (496 lbs)	260 kg (573 lbs)

Introducing the i-Series to our family of Biomek Automated Workstations is just the beginning of our journey together. Biomek hardware, software and our growing applications portfolio will continue to evolve with your priorities in mind.

Visit [biomek.beckman.com](https://biomek.beckman.com) or speak with your Beckman Coulter representative to learn more.