

Accelerating discovery around the globe.

Optima MAX-XP Tabletop Ultracentrifuge

- Genomics
- Cell Analysis
- Particle Characterization
- Capillary Electrophoresis
- Lab Automation
- Centrifugation**
- Bioseparation
- Lab Tools



Global solutions to your separation challenges

Optima MAX-XP Tabletop Ultracentrifuge



Total System Design Delivers Exceptional Results

When your research demands a compact, versatile, power-packed ultracentrifuge solution, there's no better place to look than Beckman Coulter, the worldwide centrifugation leader.

Our Optima MAX-XP Tabletop Ultracentrifuge delivers the most comprehensive and flexible platform available today, with market-leading software in an array of native languages and an unmatched choice of rotors and labware. Unlike other tabletop ultracentrifuges, the Optima MAX-XP, its rotors, and its labware are designed, manufactured and tested as an integrated system to ensure optimal performance and safety for your lab, day after day.

More researchers turn to Beckman Coulter than any other supplier of tabletop ultracentrifuges. In fact, 95% of the published protocols citing tabletop or micro-ultracentrifuges reference a Beckman Coulter instrument or rotor*.

The Right Tools for Leading-Edge Discovery

With each advancement in life science research, the demands on your laboratory increase. For over 60 years, Beckman Coulter has led the way in technological advancements for centrifugation, delivering robust, reliable solutions that streamline and accelerate your discovery processes.

The Optima MAX-XP is no exception, bringing speed and versatility to your lab. The Optima MAX-XP represents the very latest in tabletop ultracentrifuge technology, delivering fast, efficient separations from samples as small as 175 μ L up to 32.4 mL, and at speeds up to 150,000 RPM and more than 1,000,000 $\times g$. And it's so quiet, you'll hardly notice it's there.



Easy to Use... in More Places

Every detail of the Optima MAX-XP is designed with the user in mind. Sophisticated capabilities, yet so simple to operate – it practically runs itself.

- Convenient touch-screen control with easy-to-read displays of real-time speed, time and temperature
- Easily switch between RPM and RCF modes
- Customizable user interface allows personalization of easy-to-identify icons for up to 12 individuals, as well as sound and volume options
- Software in multiple languages enhances usability around the globe
- Compact footprint provides ultimate placement flexibility, including in a biosafety hood
- Instant online help is always available



Unmatched versatility expedites your lab processes

Optima MAX-XP Tabletop Ultracentrifuge



Innovative Software for Maximum Functionality

From BioPharma and biotech to academia and government research, you'll find the Optima MAX-XP's advanced software puts the functionality you need to excel right at your fingertips.

The gold standard in tabletop ultracentrifuges, the Optima MAX-XP includes features that support compliance and regulatory requirements, including password-controlled access and audit trail documentation. The system monitors and records individual user and run data, rotor logs, and more. A USB port simplifies export of run histories and reports.

The Optima MAX-XP's software also provides highly flexible options, enabling users to specify up to five steps, set multiple programs or delay start time.

Ideal for Emerging Applications

The exceptional performance abilities of the Optima MAX-XP combined with our comprehensive selection of rotors, tubes and accessories make this centrifuge ideal for applications requiring high speed and g -forces with volume flexibility. Nowhere is this truer than for the newest applications at the forefront of discovery.

Viral Vector Gene Delivery

Optimize your processes with an array of titer possibilities, miniaturization options that can reduce run time by up to 50 percent, and extensive biosafety features.

Non-viral Gene Delivery/Nanoparticles

Expedite results and increase productivity with high-throughput, fast sample preparation and effective concentration of the drug carrier while minimizing aggregation.

The unmatched efficiency and versatility of the Optima MAX-XP meet the needs of a wide variety of time-tested laboratory applications, including:

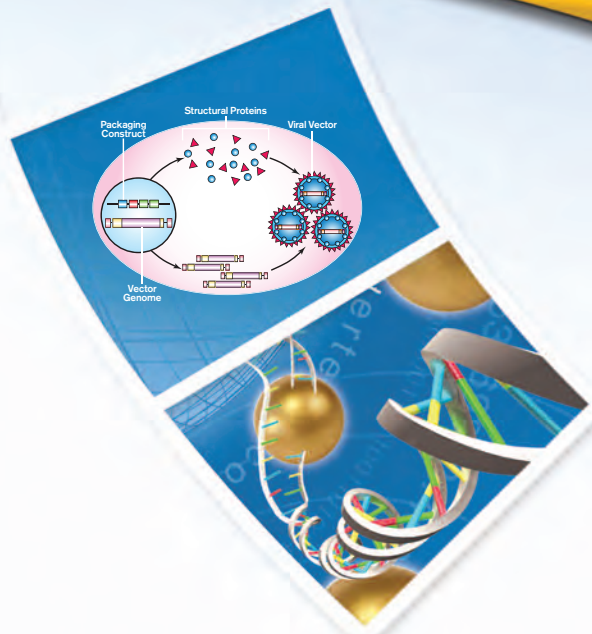
- Subcellular particles
- Protein purification and isolation
- DNA and RNA pelleting and gradients
- Lipoprotein isolation

Multi-Level Safety Options

We take safety seriously. The Optima MAX-XP employs a multi-level approach to BioSafety** for reliable protection you can count on. This includes:

- BioSafe** tubes
- Fluid containment annulus rotors
- Available HEPA† filtration
- Fits in standard biosafety hood
- Remote operation possible with available cabling kit

The Optima MAX-XP's rotors also include an overspeed protection system that uses magnetic sensors to ensure the maximum permitted speed is not exceeded.



**BioSafe and Biosafety are terms intended to describe the enhanced biocontainment features of our products.
† High Efficiency Particle Arresting (HEPA)

Exclusive resources expand your possibilities

Optima MAX-XP Tabletop Ultracentrifuge



Unrivaled Rotor Options

Our comprehensive library of Beckman Coulter ultracentrifuge rotors allows you to fine-tune your research and deliver fast, accurate results. Our complete system approach tests hardware, rotors and labware together to ensure optimum performance for your applications.

The Optima MAX-XP is fully compatible with this extensive line of fixed-angle, swinging-bucket and unique near-vertical-tube (NVT) models. Beckman Coulter's patented NVT rotor technology is ideal for the separation of plasmid, mitochondrial or chromosomal DNA, proteoglycans, and lipoproteins. And each rotor is geometrically designed with lower k Factors than comparable rotors for faster run times.

Innovative Tube Technology

Exclusive design features in Beckman Coulter labware and accessories enable you to tailor your Optima MAX-XP to your specific needs. We offer four patented tube designs that maximize productivity for a vast range of applications.

- OptiSeal** Offers easy, one-finger sealing without tools
- Quick-Seal** Provides secondary biosafe containment with fast heat sealing
- konical** Concentrates small sample pellets for easier recovery
- g-Max** Adapts small samples to larger rotors without sacrificing *g*-force, shortening separation times by up to 50 percent



Tabletop Ultracentrifuge Rotor Selection by Application^{††}

Bioseparation	Specific Application	MLA-150	MLA-130	TLA-120.2	TLA-120.1	TLA-110	TLA-100.3	TLA-100	MLA-80	MLA-55	TLA-55	MLA-50	TLS-55	MLS-50	TLN-120	TLN-100	MLN-80
Separation of Subcellular Particles	Largest Volume for Pelletting					■			■	■		■		■			■
	Fastest Pelletting	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■
	Largest Volume Rate-Zonal Separation					■			■	■		■		■		■	■
	Fastest Rate-Zonal Separation	■	■	■			■						■		■	■	■
Separation of Viruses and Viral Particles	Largest Volume for Pelletting					■			■	■		■		■			■
	Fastest Pelletting	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■
	Largest Volume Rate-Zonal Separation					■			■	■		■		■		■	■
	Fastest Rate-Zonal Separation	■	■	■									■		■	■	■
Rate-Zonal Separation of Proteins in Sucrose Gradient	Fastest Separation	■	■	■			■								■	■	■
	Largest Volume					■			■	■		■		■			■
	Largest Number of Samples		■	■							■						
	Greatest Interband Distance					■			■	■		■	■	■			
Separation of Lipoproteins	Fastest Differential Flotation				■			■									
	Largest Number for Differential Flotation				■			■									
	Largest Volume for Differential Flotation					■			■	■		■		■			■
	Greatest Interband Space					■			■	■		■	■	■			■
Pelletting RNA Through a CsCl Gradient	Fastest Separation	■	■	■		■	■		■	■		■		■	■	■	■
	Largest Volume					■			■	■		■		■		■	■
Isopycnic Separation of Plasmid DNA	Fastest Separation	■	■	■		■	■		■	■		■		■	■	■	■
	Greatest Interband Distance					■			■	■		■		■		■	■
	Largest Volume					■			■	■		■		■		■	■

^{††} Selected rotor has the capability (*g*, volume, labware) to accommodate the application, but may not be the most optimal, efficient choice for the specific application.



Trusted Customer Service Around the World

For over 75 years, Beckman Coulter has maintained an unwavering commitment to service excellence worldwide. This includes personalized telephone and online support as well as on-site and on-call assistance to keep your facility running efficiently. Our ISO 9001-certified field service organization and knowledgeable customer service team stand ready as your partners for long-term success.

Beckman Coulter's unique Field Rotor Inspection Program (FRIP) embodies our commitment to our customers and quality. These periodic on-site inspections assess rotor safety and track repair data, protecting your investment by ensuring the full, useful lifetime of your rotors. FRIP visits are available to all owners of Beckman Coulter rotors and may be augmented to include training on proper rotor care and handling.

**For more information on the Optima MAX-XP Tabletop Ultracentrifuge,
please contact your local Beckman Coulter representative
or visit beckmancoulter.com/maxxp**



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