

LEICA CM1860/CM1860 UV CRYOSTAT

For Routine
Histopathology Applications
with a Focus on Safety—
Because Frozen Sections
are Vitally Important



Advancing Cancer Diagnostics
Improving Lives

Confidence is Vital

Deliver diagnostic confidence

When you're preparing fresh tissue for a vital diagnosis, you need to know that your cryostat will reliably deliver quality sections. The Leica CM1860 cryostat has the precision to consistently cut thin sections and the reliability of an instrument that's ready whenever a patient needs a fast diagnosis.



CONSISTENT SECTIONING

Cut quality sections with consistent thickness, supported by the microtome's precision step motor.

THE CONTROL YOU NEED

Accurately align the block face to the blade edge, using the specimen orientation system with zero-position centering.

READY WHEN NEEDED

A fully encapsulated microtome reduces the time to clean the cryostat significantly. Quickly prepare the Leica CM1860 cryostat for the next urgent section.



Safety is Vital

Reduce your risk of infection and injury

When working with a cryostat, your safety is important. Potentially infectious tissue and sharp blades form a unique hazard. Therefore, the Leica CM1860 cryostat comes with a set of protective features and options.



REDUCE RISK OF TOUCH CONTAMINATION

Housing and handwheel handle are coated with the antimicrobial AgProtect. The nanosilver in AgProtect works by penetrating the membranes of microbes to prevent replication, thus reducing the risk of touch contamination.

PROTECTION THROUGH UV DISINFECTION

The certified UVC disinfection option is active against a broad variety of bacteria, fungi, and viruses, including SARS-CoV-2. When the cryostat is urgently needed during disinfection, simply open the glass door and commence your work.

REDUCE RISK OF CUTTING INJURIES

A designated finger guard on the Leica Premium Blade Holder covers the blade when you're not sectioning. The blade ejector and magnetic brush enable the user to safely remove the blade from the blade holder without touching it.



Efficiency is Vital

Streamline your workflow to achieve your goals

When it comes to in-surgery frozen sectioning, you want to be sure to have everything at hand to get your job done in time. The Leica CM1860 cryostat can help you organize your workflow and achieve your sectioning goals.

SAVE PRECIOUS TIME

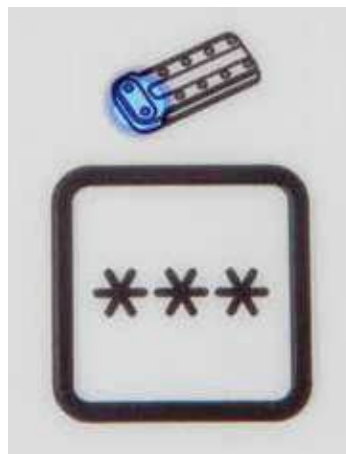
Quick freeze with freezing shelf and a Peltier element, providing additional cooling down to 17K below shelf temperature. To avoid frosting on the freezing shelf keeps, a cover helps to keep it clean and ready to use.

STAY FOCUSED

Single function keys and easily readable LED displays provide all relevant functions literally at the “push of one button”. No need to scroll through multiple long menus.

STAY ORGANIZED

With all critical items at hand, you can focus on your sectioning job. Freezing stage, tool trays, and an easily accessible storage area on top of the cryostat help you stay organized.



Single
function
keys



Spacious
cryochamber

Freezing
shelf with
Peltier
element

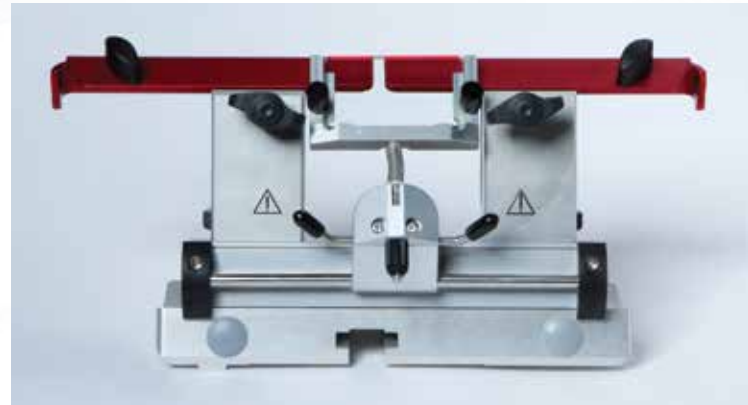
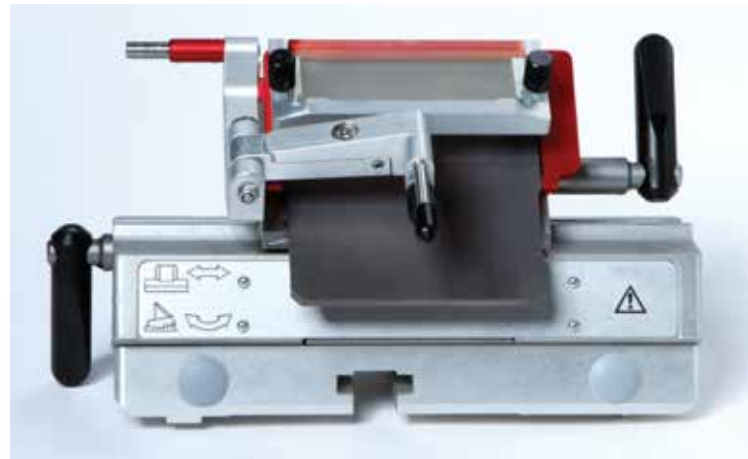


PREMIUM CE BLADE HOLDER

A blade holder is expected to contribute to section quality and provide protection against health risks.

Leica Biosystems Premium Blade Holder stands up to these expectations.

- › High stability for low- and high-profile blades
- › Lateral adjustment to optimize blade usage
- › Anti-roll guide or palm rest for brush technique to facilitate section flattening
- › Blade ejector and finger guard reduce injury risk
- › Levers with plastic handles protect against frost bite
- › Plastic touchpoints for frost bite prevention on blade holder base



PREMIUM CN KNIFE HOLDER

When using a knife for sectioning hard specimen, you do not want to compromise on section quality or safety.

Leica Biosystems Premium Knife Holder is designed with quality and safety in mind.

- › High stability design to avoid knife vibration
- › Finger guard reduces injury risk
- › Levers with plastic handles protect against frostbite
- › Plastic touchpoints for frostbite prevention on blade holder base



SPECIMEN DISC HOLDER

For quick sectioning, you may want to have pre-cooled specimen discs ready as well as temporarily store multiple samples. It is crucial to not mix up these samples.

- › Specimen disc holders expand storage capacity by up to 18 spots for pre-cooled discs or mounted specimen
- › Two-part design facilitates clear workspace organization
- › Colored rubber rings on object plates reduce frostbite risk and help with reducing the risk of specimen mix-up

The specimen discs are compatible with the Leica cryostat models CM3050 S, CM1520, CM1510 (no longer available) and CM1850 (no longer available).

Technical Specifications

Microtome

Section thickness selection	1 - 100 μm
Total specimen feed	25 mm
Vertical specimen stroke	59 mm
Maximum specimen size	55 x 55 mm or 50 x 80 mm
Specimen orientation	8° (x, y, z-axis)
Electric coarse feed, slow	600 $\mu\text{m/s}$
Electric coarse feed, rapid	900 $\mu\text{m/s}$
Refrigeration system	50 Hz/60 Hz

Cryochamber

Temperature setting range	0°C to -35°C (+3 K/-3 K)
Cooling time down to -35 °C	max. 6 hours, at 22°C ambient temperature
Defrost	Automatic hot gas defrost, 1 automatic defrost cycle/24 hours, time-controlled (duration 12 min.)

Quick-freeze shelf

Maximum cooling	-40°C (+3 K/-5 K)
Number of freezing stations	8
Defrost	Manual hot gas defrost, time-controlled (duration 12 min.)

Peltier element

Max. temperature difference	17K, at -35°C chamber temperature
Number of freezing stations	2
Defrost	In conjunction with the quick-freeze shelf

Dimensions and weights

Width (w/o handwheel)	600 mm/23.6 in
Width (with handwheel)	730 mm/28.7 in
Depth	730 mm/28.7 in
Height	1140 mm/44.8 in
Weight (incl. microtome, without specimen cooling)	approx. 135 kg/298 lbs
UVC surface disinfection (Leica CM1860 UV only)	30 or 180 minutes, user selectable

Technical specifications subject to change without prior notice.



CRYOSECTIONING SOLUTIONS

Leica ST4020 Linear Stainer

Easily stain surgical frozen sections with this compact linear stainer, that is small enough to sit close to your cryostat.

Disposable Blades

Choose the blade you need from Leica Biosystems' diverse range of coated, uncoated, high- and low-profile blades.

Slides

Many color and adhesive options make it easy to find the right slide for your application.

Embedding Media

Leica Biosystems can supply a range of embedding media including Tissue Freezing Medium, FSC22™ and Cryo-Gel.

Dr. Peters Cryoembedding System

Easily achieve proper specimen orientation and uniform embedding with the original Dr. Peters Face-Down embedding system for advantages in precision, speed and decreased tissue wastage (Journal of Histotechnology, 26:11, 2003).

Contact your Leica Biosystems representative today to learn more about our Core Histology solutions

[LEICABIOSYSTEMS.COM/CONTACT-US](https://www.leicabiosystems.com/contact-us)

Leica Biosystems is an international company with a strong network of worldwide customer services. For detailed contact information on your nearest sales office or distributor please visit our website:

[LeicaBiosystems.com](https://www.leicabiosystems.com)

Products included are intended for *in vitro* diagnostic use only.

Leica Biosystems is a global leader in workflow solutions and automation. As the only company to own the workflow from biopsy to diagnosis, we are uniquely positioned to break down the barriers between each of these steps. Our mission of "Advancing Cancer Diagnostics, Improving Lives" is at the heart of our corporate culture. Our easy-to-use and consistently reliable offerings help improve workflow efficiency and diagnostic confidence. The company is represented in over 100 countries. It has manufacturing facilities in 9 countries, sales and service organizations in 19 countries, and an international network of dealers. The company is headquartered in Nussloch, Germany. Visit [LeicaBiosystems.com](https://www.leicabiosystems.com) for more information.