

# ADVANCED RESEARCH MICROSCOPE

EXL

**Innovative design.  
Quality, Comfort  
and Ease of Use**



**Innovative,  
efficient, and  
versatile – delivering  
exceptional imaging  
and a seamless user  
experience.**

Equipped with an ECO energy-saving mode, the EXL features a front LCD display showing brightness, color temperature, and magnification— helping users monitor status and boost efficiency.

The ECO function offers customizable hibernation (5–60 mins) with manual override for enhanced control and energy savings.

Super endurance with Type-C support use portable batteries for power anytime, anywhere.

Built-in USB port also lets you charge your phone or tablet on the go.

Highly stable, low-radiation, and ultra-long-life LED fluorescence modules with flexible control : simplifying microscopy for safer, more efficient, and professional diagnostics.

Super-large rackless ceramic stage with a smooth, arc shaped design. Features a double-layer mechanical build, high-hardness ceramic coating for corrosion resistance, and damping clips for holding two slides—ideal for inspection and comparison.

User-friendly design for comfort and safety—EXL features a secure handle, concealed locks, and an ergonomic low-position focus system. Rear storage keeps accessories clean and enhances portability.

Multifunctional digital camera module with USB 3.0 and Wi-Fi output for high-quality, progressive scanning. Supports remote full-resolution capture, multi-device viewing, and features a contact-type power supply for added convenience.

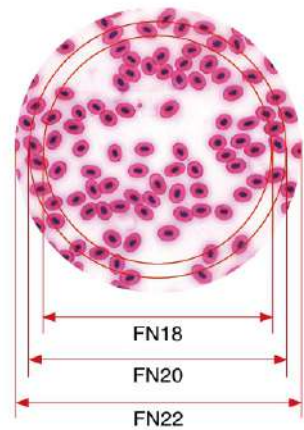


## Excellent Optical performance and practical design



### Outstanding Infinity color corrected optical system

Infinity color corrected system, professional plan achromatic objectives and cutting-edge microscopy technology, provide microscopic images with high resolution, high definition and high contrast.



### 22mm wide-field

- The EXL biological microscope can achieve a wide field of view range of 22mm under 10X eyepiece, which is more efficient and perfect for observation.
- Professional high eye point and wide field plan eyepiece can effectively correct edge distortion and chromatic aberration.



### Rotatable viewing tube

EXL viewing tube with gemel group 360° rotation function, adjustable pupil distance, eye point height, for different height of the operator to provide a more flexible and comfortable experience.



### Super endurance function

The body is equipped with a Type-c interface, which allows the microscope to use a portable battery as a power source. The microscope thus frees itself from dependence on power outlets, enabling easy use outdoors or in power outages. The body comes with a standard USB port, that allows the microscope to charge a phone or tablet.

### Rotatable viewing tube

Double-layer mechanical stage, large arc shape, no angular design; the stage surface adopts ceramic paint process, high hardness, corrosion resistance; Damping-type double clips can be placed two slices at the same time, for inspection and comparative analysis.



## Intelligent management of light intensity and ergonomic design

### With ECO energy-saving working mode

Build-in ECO function, no operation for 30 minutes, the system will automatically turn off and into the standby mode. Users can automatically wake up the light source by touching the dimming knob.



The EXL has a front LCD display, which displays the current lighting brightness, color temperature and magnification, so that the user can intuitively judge the working status and improve working efficiency.

At the same time, the EXL has ECO function which gives a prompt whether to hibernate. Users can manually cancel, saving energy and improving user experience.

The hibernation waiting time is 5-60 minutes.



ECO duration, lighting brightness, objective magnification, and color temperature are displayed on the working screen.



Long press the dimming hand wheel to adjust the color temperature interface 3000K-7000K.



Short press the dimmer hand wheel to enter ECO mode. You can set the ECO duration.



In standby mode, "Coffee cup" will appear one minute ahead of time to remind you of standby state.



### Brightness memory function

EXL can be equipped with code nosepiece, able to remember the illumination brightness of each objective. Users can freely adjust the light source brightness of each objective and the system automatically remembers, not only to improve efficiency, but also to reduce visual fatigue.



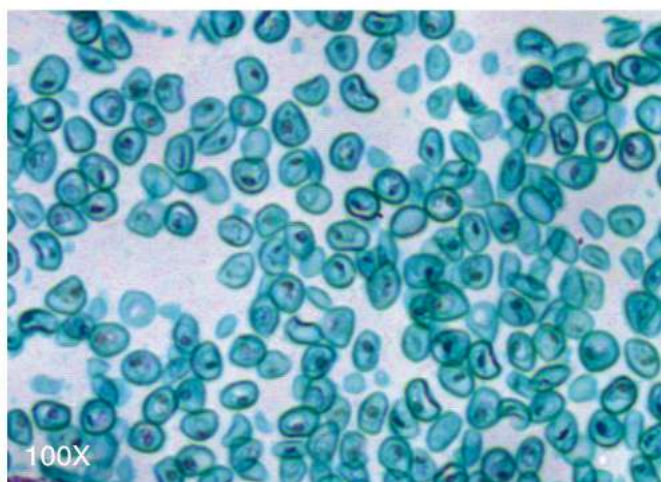
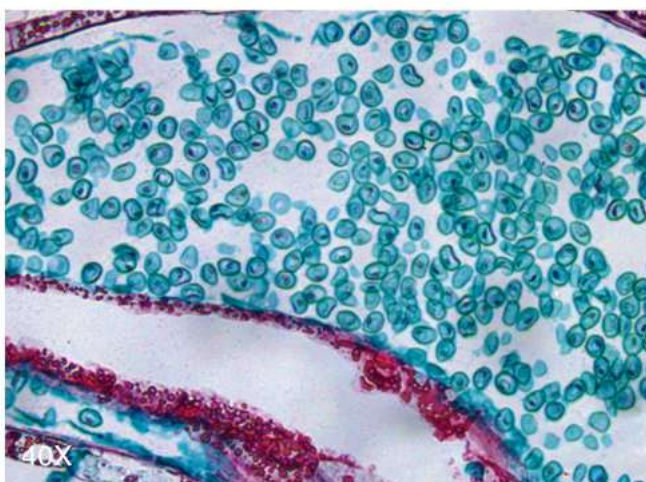
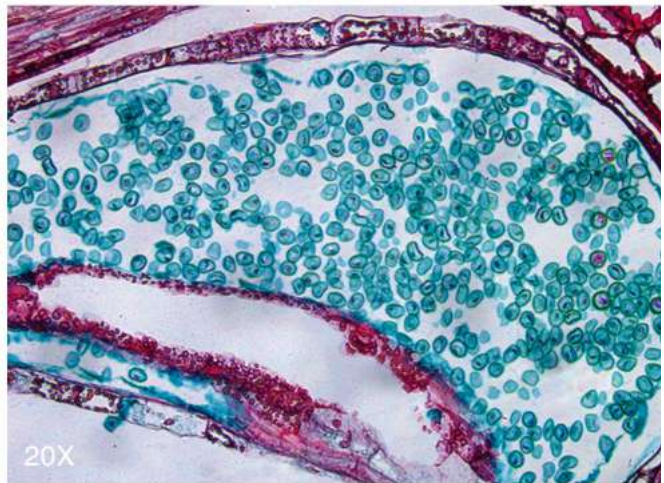
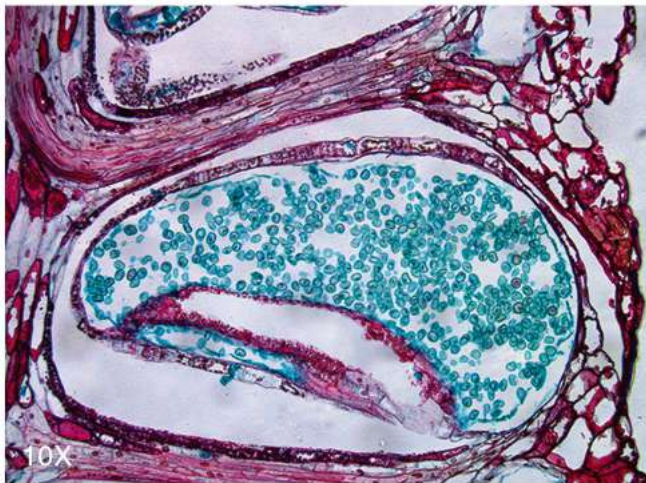
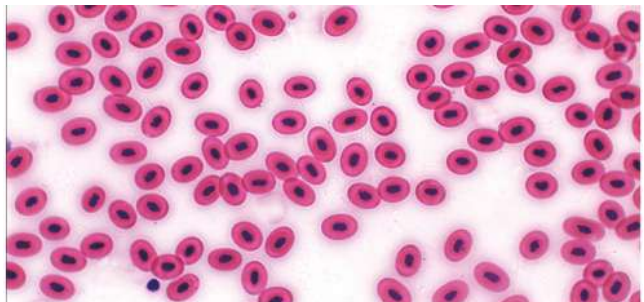
## User-friendly design increases comfort and safety

- The EXL is equipped with a secure handle for moving.
- Fully concealed locking design eliminates all sharp edges.
- Low hand coarse and fine coaxial focus system is ergonomically designed to give the user maximum comfort.
- There is a storage device at the back of the body to ensure the cleanliness, , saving storage space and improving portability.



## BRIGHT FIELD OBSERVATION

The professional plan achromatic objective, with the use of the Kohler illumination system, adjusts the image to the best condition by adjusting the aperture diaphragm and the field diaphragm. High-resolution, high-contrast microscopic images can be obtained whether at low or high magnification.



## Optical System

Infinity color corrected optical system

## Microscope Type

- Upright stand, factory-configured for both Brightfield and Phase Contrast observation.

## Upgradability

Microscope construction allows future integration of:

- Dual Viewing Attachment
- Dark Field Condenser
- Polarizing Accessories
- LED Fluorescence Module

## Optical System

Infinity-corrected, colour-compensated optical system for high-contrast and true-to-life imaging.

## LED Status Indicator

Real-time illumination status displayed on the microscope body for user convenience.

## Illumination

- High-performance 5 W white LED with a lifespan of  $\geq 100,000$  hours.
- Köhler Illumination with fly-eye lens ensures uniform field brightness.
- Auto-sleep/standby mode after preset idle period.
- Light intensity recall feature retains previous brightness setting upon restart.

## Nosepiece

- Reversed quintuple revolving nosepiece with 5 objective positions for rapid objective changes.

## Condenser

- Abbe Condenser, N.A. 1.25, centreable and height-adjustable.
- Integrated Phase Contrast slider or annular rings for seamless switching between modes.

## Observation Tube & Eyepieces

- Trinocular Head with simultaneous 100% light split to eyepiece and camera ports.
- Pair of 10× wide-field eyepieces with:
- Field of View (FOV) 22 mm
- Dioptre adjustment on both tubes
- Spectacle-compatible eye relief

## Mechanical Stage

- Rectangular mechanical stage with X/Y travel range of 75 × 50 mm.
- Coaxial controls with double slide holder for smooth and stable specimen navigation.

## Objectives (Plan Achromatic)

- 4× / 0.10, Working Distance (W.D.): 30.00 mm
- 10× / 0.25, W.D.: 7.00 mm (Phase Contrast)
- 40× / 0.65, W.D.: 0.65 mm (Phase Contrast)
- 100× / 1.25 (Oil Immersion), W.D.: 0.65 mm (Phase Contrast)

## Focusing System

- Coarse & fine coaxial focusing knobs on both sides.
- Adjustable torque control on coarse drive.
- Vertical stage movement with upper limit stop to prevent slide breakage.

## Optional Accessories

Frosted glass accessories, Dark-field accessories, phase contrast accessories, color filter, telescope (30), high precision type/general type micrometer with 0.01mm scale value, LED fluorescent module, Multi-functional digital camera module.