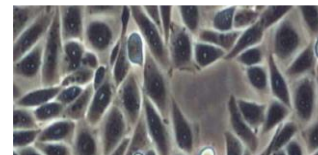


DESCRIPTION

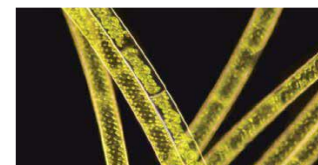
ACUCAL Biological Microscope ACUBL-U5 is specially designed for life science research and can meet the needs of various microscopic imaging in the laboratory. Stable and compact mechanical structure, ergonomic design & layout, comfortable to use, can operate the microscope in a natural posture.

Using the infinity optical system, it has excellent optical quality such as long working distance and strong chromatic aberration correction ability. It provides reliable imaging, high contrast, clear and bright images, and assists you in cutting-edge life science research. ***The microscope adopts a modular design and can realize observation methods such as bright field, dark field, differential interference, fluorescence, and polarized light.***

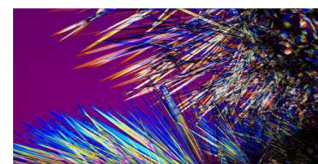
OBSERVATION METHODS



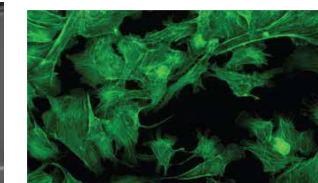
Phase Contrast



Dark Field



Polarisation



Fluorescent



DIC

The microscope offers excellent optical performance and ease of use, and is ideal for scientific tasks. It is an ideal tool for experimental teaching, scientific research, and medical inspection. It is the perfect laboratory microscope for life sciences, histology, microbiology etc.

TECHNICAL SPECIFICATION**Main Body & Optical System**

- UNIVERSAL UIS2/NIS60 INFINITY OPTICAL SYSTEM can provide high contrast and very flat image with sharp, excellent resolution and high signal-to-noise ratio imaging
- Upright Modular Frame, Highly Rigid, Vibration free Aluminium alloy casting, Anti rust heavy metal stand, Anti-Microbial treated optics, Ergonomics shaped Sturdy Design & Stable.
- Low-hand focus mechanism, low-hand stage and other ergonomic designs to ensure the user can perform microscope operation in the most comfortable situation.
- Conforming to Pathological IS: 4381 latest, Research IS: 5204 latest Indian Standards.
- Smart Documentation - Snap button on microscope body to minimize hand movements stands for easy image capturing without the need of computer. (Optional)
- Contrast Method Bright Field and onsite upgradeable to fluorescence, phase contrast, Dark Field, polarization with teaching head attachment for 2/5/10/20 persons including main observer, full stepwise motorization like motorized 7-position, DIC nosepiece, motorized 7-position universal condenser with motorized polarizer in/out movement, motorized 6-position fluorescence turret, motorized stage and DIC (Differential Interference Contrast) with Nomarski prism.

Observation Head- Binocular or Trinocular or Multihead (Upto 10 Observers)

- Sidentopf Binocular Head, Inclined at 30° / 35°/ 45°
- Sidentopf Trinocular Head, Inclined at 30°/ 35°/ 45°, 3 Level Light Split Switch Beam splitter with sliding 100:0, 20:80/50:50 & 0:100 (Standard) for video/digital camera.
- Ergo Tilting Trinocular Head, Inclination 0°~45°, 3 Level Light Split Switch Beam splitter with sliding 100:0, 20:80/50:50 & 0:100 **(Optional)** for video/digital camera. Tilting head provides eyepoint adjustment system to accommodate user height for comfort & flexibility.
- Inter-pupillary distance adjustment from 47mm to 78mm.

Eyepiece

- Compensating High Eyepoint Wide field 10X (paired) F.O.V./ F.N. 22 or 25 Or 26.5 (optional)
- Inbuilt pointer facility & Micrometer eyepiece (Optional)
- Eyepiece outer mounting barrel diameter or Inner diameter of Eyetube 30mm.
- Anti-fungal & Anti-reflection hard coated conforming to IS: 8275/1976 (latest)
- Diopter adjustment Facility (-5 to +5) & Eyeguard on Both Eyepieces.
- High Quality & Anti mould eyepieces to get the Image of object well defined over the entire field with good contrast rendition and practically free from spurious color effects.

Nose Piece

- Low position Inward Facing reverse Sextuple/Septuple Revolving with Slot for Analyser or DIC Slider, ball bearing type with positive click stops & with anti-collision mechanism.
- Nosepiece provided with rubber grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment.
- **U5LIM.A**: Coded Nosepiece with auto intensity manager. The LCD screen on the front of the microscope displays the use status of the microscope, including magnification, light intensity, standby status, lock for lighting-adjustment, time sleeping etc. **(Optional)**

Objectives: Infinity Plan Achromatic or Semi Plan Apochromatic or Apochromatic , High Resolution & High Contrast, Anti-fungal & Anti-reflection, Uniformly Centred, Interchangeable & Parfocal.

- ∞ 4x/0.10, W.D.30mm
- ∞ 10x/0.25, W.D.10.2mm
- ∞ 20x/0.45, W.D.6.4mm, Cover Glass 0.17mm
- ∞ 40x/0.65, W.D.0.7mm, Spring Loaded ,Cover Glass 0.17mm
- ∞ 100x/1.25(Oil), W.D.0.2mm, Spring Loaded ,Cover Glass 0.17mm
- ∞ 2x/0.06, W.D.7.5mm, (Optional)
- ∞ 60x/0.8, W.D.0.3mm, Spring Loaded ,Cover Glass 0.17mm (Optional)
- Objectives have Suitable prominent marking for easy identification : Color coded ring, magnification, NA and nature of objective mentioned
- Provided with Immersion oil.
- All objectives have high transmittance of >80% from 400-700 nm.

Resolution : 250 lines per mm

Condenser

- Bright field swing out achromat Condenser NA 0.9/1.25 (2X-100X) with focusable adjustment knobs with rack & pinion movement having Aspheric Lens & slit diaphragm.
 - Universal 5 Position Turret condenser for Bright field, Phase contrast & Dark Field NA 0.9/1.25 (2X-100X) with focusable with rack & pinion movement having Aspheric Lens. (Optional)
-

Mechanical Stage

- Hard core anodized surface / Ergo stage ceramic surface Manual right hand, Rackless, wire movement & Scratch less Round edge Double Plate Stage with 2-Slide holder.
 - Double Layer Mechanical Stage Full Size 302x202mm, Stage Table Size 185x142mm, Moving Range 77x55mm,
 - Right hand control and equipped with Double specimen holder with spring lever on left side for two slides.
 - Wear, scratch resistant & Spill resistant, Coaxial stage with right hand low drive control with rotating mechanism and torque adjustment.
-

Focusing Control

- Co axial Graduated Coarse and Fine focusing knob on gear systems for smooth operations.
 - The fine focus knobs are held in place magnetically and can be installed on the left or right side as desired.
 - Coarse Stroke: 37.7mm, Moving Range 25mm, Fine Division 0.001mm & 0.1mm per rotation.
 - Torque adjustment for focusing control. Coarse adjustment limit stopper.
-

Illumination

- Transmit Kohler Illumination, Brightness Adjustable, 35W or 12V100W Halogen, External Lamp House OR Transmit Kohler Illumination, Brightness Adjustable, High Intensity 14 W S-LED, Fly eye lens design, Built-in Main Body (Halogen & LED equally brightened)
 - ECO Function Support Auto Power Off After 15 Mins From Operator Leave To Save Energy.
 - Brightness control knob. Life time more than 60,000 hours.
 - Transmitted Light Manager/ Light Intensity Management feature (Optional)
-

Electronics: Kohler Universal Input (100-240) $\pm$ 10% V AC, 50/60 Hz.

Standard Accessories : Operating & Service Manual, Dust Cover, Guarantee Card and Thermocole Molded packing & outer corrugated box, spare bulb.

Optional Accessories : Polariser Analyser, Septuple (7 position) Nosepiece, Phase contrast unit with phase objectives, DIC Observation, Photography, Full Auto Motorized Control- Motorized Stage, Motorized 8 position universal Condensor, Motorized 8 position fluorescent turret for FISH applications

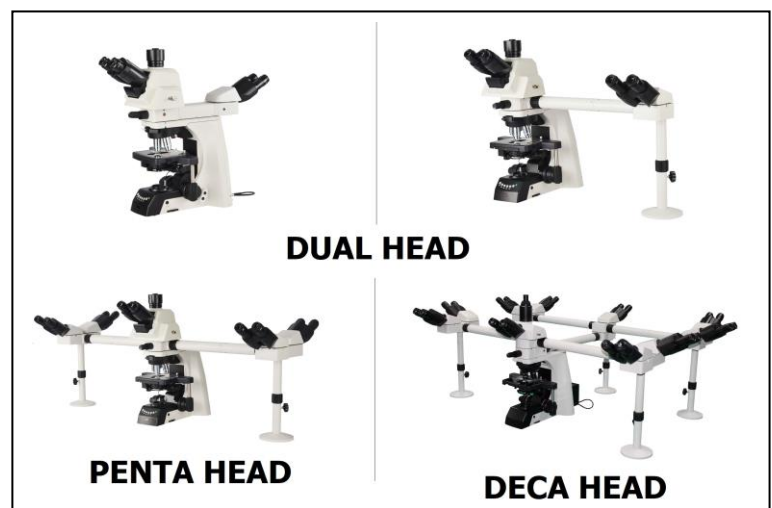
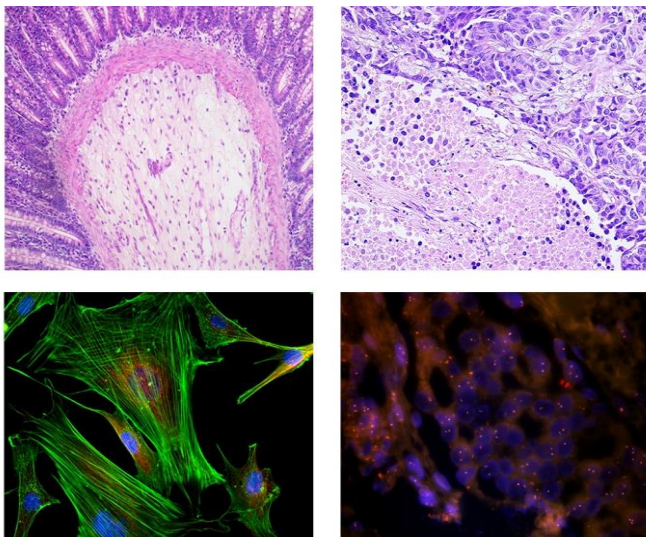
- Dark Field:
 - Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x,10x,40x Objective
 - Dark Field Condenser, Immersion, N.A.1.3, For 100x Objective
- Phase Contrast Unit & Objectives:
 - ∞ 10x/0.25, W.D.10.2mm PHASE
 - ∞ 20x/0.40, W.D.6.4mm, Spring Loaded , Cover Glass 0.17mm PHASE
 - ∞ 40x/0.65, W.D.0.7mm, Spring Loaded , Cover Glass 0.17mm PHASE
 - ∞ 100x/1.25, W.D.0.2mm OIL, Spring Loaded , Cover Glass 0.17mm PHASE
- Fluorescence:
 - Fluorescence filters B, G, V, UV; 6/8 Holes Disc Fluorescent Unit, 5W LED/ Halogen Lamp House, 5W LED Power Box, Ultraviolet Protection Barrier
- DIC Components
 - Universal Turret DIC Condenser with 10X DIC nomarski prism, 20X-40X DIC nomarski prism and 100X DIC nomarski Prism.
 - 10X-20X DIC Slider, 40X-100X DIC Slider, DIC module with polariser.

FEATURES :

- All optical parts including objectives, eyepieces and prisms have anti-reflective coating for anti fungal property.
- All metallic parts are corrosion proof, acid proof and strain proof.
- All controls are in a position for comfortable and prolonged use. Precise and ergonomic mechanics.
- Color corrected infinity optical system. (60 mm parfocal length, M25).
- Mounting screws on all objectives to be sized to standards of the Royal Microscopical Society for universal compatibility. 6x nosepiece, tilted backwards.
- Outstanding expandability for all common contrasting techniques, as well as fluorescence.

EXCELLENCE THROUGH EXPERIENCE

UPGRADATION :



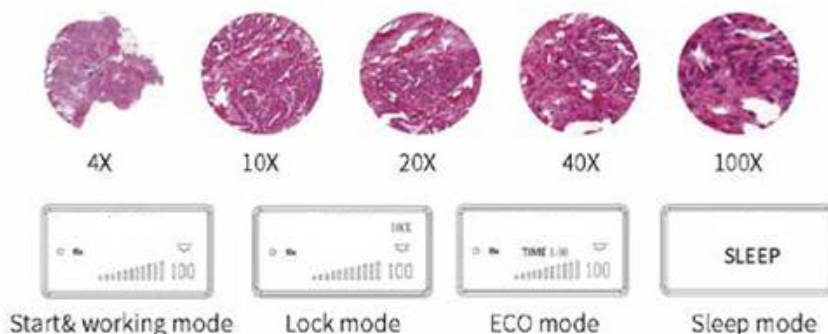
U5LIM.A: Status Display Screen

Optional

The LCD screen at the front of the microscope can display the use status of the microscope, including magnification, light intensity and standby status. It can remember the illumination brightness when each objective lens is used, and automatically adjust the light intensity when different objective lenses are converted to each other, thus reducing visual fatigue and improving work efficiency

LIM Option for Illumination Intensity auto adjustment with change of Objective

- Coded Nosepiece
- Show Objectives in use in Nosepiece
- Brightness Memorize & Restore Function
- Adjust Brightness
- Set the System



Automatic Brightness Switching

When the operator changes objectives, the intelligent controller switches the brightness to the last used setting.

INTELLIGENT OPERATING SYSTEM :

CODED NOSEPIECE

It can memorize the illumination brightness for each objective and automatically adjust the light intensity. This improves work efficiency and reduces visual fatigue.

The Liquid Crystal Display (LCD)

The LCD shows the usage status of the microscope, including magnification, light intensity, sleep mode and more.

Can be upgraded to a ten-person shared viewing microscope

The multi-person co-viewing microscope system is widely used in college teaching, experimental training and pathological diagnosis. Our Microscope can carry out 1-10 Human expansion, while ensuring that the microscopic image is not distorted and the brightness of the image is not lost. With the teaching head and built-in indicator needle, it is convenient for learning and diagnosis.

Middle Module : Middle module with LED Cursor, two colors red and green, intensity adjustable, 360° rotatable, moveable with joystick.

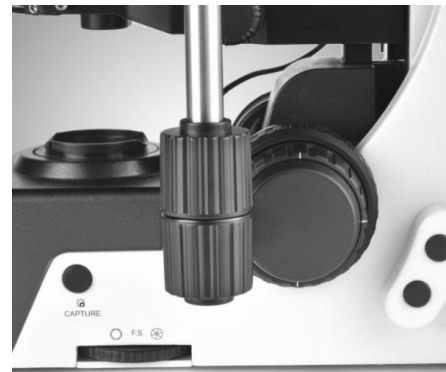
PRODUCT FEATURES :

Low hand operating handle:

&

Low hand focus mechanism

The Platform is ergonomically designed for maximum comfort., and the tension can be adjusted, so that the hand can be placed in a comfortable position and the stage can be moved easily.

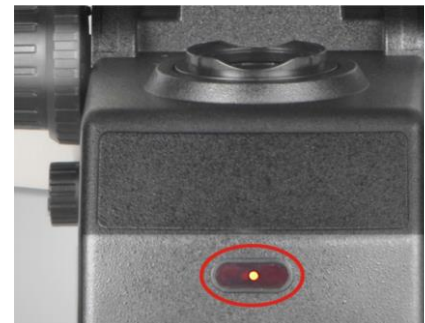


Slicing up/down with one hand

The platform bump guide mechanism is convenient for one-handed up sectioning and one-handed down sectioning, freeing hands during microscopic observation and operation, and improving working speed.

ECO lighting system

After the operator leaves for more than 15 minutes, the microscope will automatically turn off the transmitted light source. The energy-saving switch can save energy, protect the light source, and increase the service life of the light source.



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