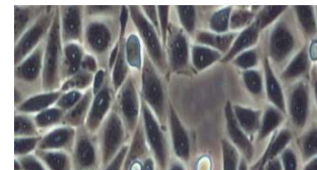


DESCRIPTION

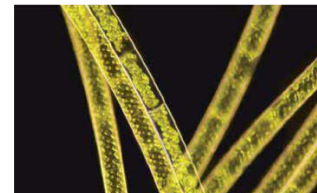
ACUCAL Biological Microscope ACUBL-U5B is specially designed for life science research and can meet the needs of various microscopic imaging in the laboratory. Stable and compact mechanical structure, ergonomic design & layout, comfortable to use, can operate the microscope in a natural posture.

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.*

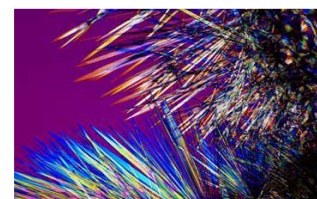
OBSERVATION METHODS



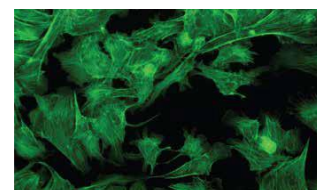
Phase Contrast



Dark Field



Polarisation



Fluorescent

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, microbiological quality control or diagnostics.

TECHNICAL SPECIFICATION

Main Body & Optical System

- UNIVERSAL 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 Aluminum 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.
- Contrast Method Bright Field and upgradeable to fluorescence, phase contrast, Dark Field, polarization with teaching head attachment for 2/5/10 persons including main observer.

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

- Sidentopf Binocular Head, Inclined at 30° / 35°
- Sidentopf Trinocular Head, Inclined at 30°/ 35°, 3 Level Light Split Switch Beam splitter with sliding E100:P0/E20:P80/E0:P100 (Standard) for video/digital camera.
- Ergo Tilting Trinocular Head, Inclination 0°~45°, 3 Level Light Split Switch Beam splitter with sliding E100:P0/E20:P80/E0:P100 (**Optional**) for video/digital camera.
- Inter-pupillary distance adjustment from 47mm to 78mm.

Eyepiece

- Compensating High Eyepoint Wide field 10X (paired) F.O.V. Or F.N. 22 or 25 (optional)
- Inbuilt pointer facility (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 & 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.

Motorized Nose Piece

- Low position Inward Facing Motorized Sextuple nosepiece with Slot for Analyser or DIC Slider, ball bearing type with positive click stops.
- Nosepiece mounted on a precision ball bearing mechanism for smooth and accurate alignment.

Objectives: NIS-60, N-Plan Infinity 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)
- 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.

Motorized Condenser

- Bright field swing out achromat Condenser NA 0.9/1.25 (2X-100X) with focusable with rack & pinion movement having Aspheric Lens.
- Universal 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 302x152mm, Stage Table Size 185x142mm, Moving Range 78x54mm,
- Right hand control and equipped with Double specimen holder 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.

Illumination

- Transmit Kohler Illumination, Auto Brightness Adjustable, 12V 100W Halogen, External Lamp House OR Transmit Kohler Illumination, Brightness Adjustable, High Intensity 14W S-LED, Built-in Main Body
- ECO Function Support Auto Power Off After 15 Mins From Operator Leave To Save Energy.
- Brightness control knob, automatic intensity reproduction i.e. brightness for each objective can be memorised and restored with objective.
- Life time more than 60,000 hours.

Electronics: Kohler Universal Input 100-240 V AC, 50/60 Hz.

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

Optional Accessories : Fluorescence Attachment-Halogen/LED (06 Position Turret), Polarizer & Analyzer, Dark Field, DIC Observation, Photography, Full Auto Motorized Control. Phase Contrast Unit & Objectives: ∞ 10x/0.25, W.D.10.2mm PHASE, ∞ 20x/0.40, W.D.6.4mm, Spring Loaded PHASE, ∞ 40x/0.65, W.D.0.7mm, Spring Loaded , PHASE

FEATURES :

- **LENSES** : The lenses ensure a flat field of view. The backwards-tilted, motorized 6x nosepiece is equipped with high-quality infinity lenses (4x, 10x, 20x, 40x, 100x oil). These feature an M25 thread and a parfocal length of 60 mm. The 40x and 100x lens has a spring-loaded protection mechanism.
- **EYEPIECES** : The ergonomic eyepiece head can be tilted between 0° and 35°. This allows the microscope to be adjusted to the user's seating position. The eyepieces' large 25 mm field of view allows you to view a very wide area. The high eyepiece head is ideal for spectacle wearers. A rubber edge provides protection upon eye contact. A dioptre compensation of -5 to +5 can be set individually for each eyepiece. The interpupillary distance can be adjusted between 47 mm and 78 mm.
- **Image Capture Button**: The Digital Camera Could Capture images just by pressing the Black Capture Button at the side of the bottom of the microscope body.
- **MECHANICS + AUTOMATION**

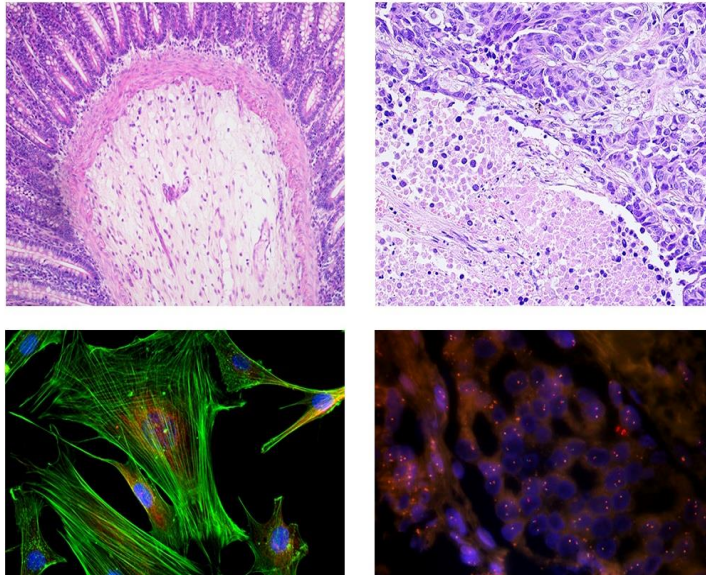
The large XY stage features a robust, chemical-resistant insert made from Gorilla Glass and is moved via a combination of a toothed rack drive and a wire rope hoist. This enables exact positioning for high magnifications. The height of the control knobs can be adjusted to ensure an ergonomic setup. The tension can also be adjusted. Specimens can be conveniently changed with one hand.

In addition to the coarse focus, the fine focus helps to render a very sharp image of the object. A full turn of the fine focus moves the table by 0.2 mm. The fine focus can be adjusted with one finger on the right-hand side. The table height limit helps to protect the specimens. The friction of the coarse focus can also be adjusted.

The fine focus knobs are held in place magnetically and can be replaced as needed.

The lenses are switched via a motor at the touch of a button. The next lens can be moved via a selection switch, or a specific lens can be selected on the front panel. The illumination and the position of the condensor is automatically adjusted to the selected lens. These features ensure ergonomic, fatigue-free and efficient performance. The exact reproducibility of the settings also offers advantages for photomicrography, as the images do not need to be recalibrated / flats do not need to be reproduced each time the lens is changed.
- 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 with Color corrected infinity optical system.
- Mounting screws on all objectives to be sized to standards of the Royal Microscopical Society for universal compatibility.
- Outstanding expandability for all common contrasting techniques, as well as fluorescence.

EXCELLENCE THROUGH EXPERIENCE



UPGRADATION :



DUAL HEAD



PENTA HEAD



DECA HEAD

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.



CONTACT US:

ACUCAL SERVICES
901 A/6, Ashok Vihar, Ambala City-134003
Haryana (India)
Website: www.acucalservices.com

