

#### DESCRIPTION

ACUCAL Research Microscope ACUBL-U5FL is specially designed for biological, medical or biotechnology applications, fluorescence microscopes are used to observe living cells or tissues with help of fluorophores, which act as biomarkers in the cells or tissues to be observed. When exposed to a fluorescence light source, excitation energy is absorbed and starts emitting so-called emission light that can be observed through the eyepieces of the microscope.



The state-of-the-art optics and mechanical components make suitable for routine and advanced fluorescence applications in Life Science, Biotechnical and Medical fields, experimental teaching, scientific research.

Stable and compact mechanical structure, ergonomic design, reasonable layout, comfortable to use. Using the infinity optical system, 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.

### TECHNICAL SPECIFICATION

#### Main Body & Optical System

- INFINITY CORRECTED 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, ergonomic design, Vibration free Aluminium alloy casting, Anti rust heavy metal stand, Anti-Microbial treated optics, Ergonomics shaped single mold Sturdy Design & Stable with kohler illumination.
- Low-hand focus mechanism, low-hand stage and other ergonomic designs to ensure the user can perform microscope operation in the most comfortable situation.
- All metallic parts are corrosion proof, acid proof, and stain proof.
- Conforming to Pathological IS: 4381 latest, Research IS: 5204 latest Indian Standards.

#### Observation Head- Binocular or Trinocular

- Sidentopf Binocular Head, Inclined at 30°
- Sidentopf Trinocular Head, Inclined at 30°, 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°~35°, 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. 22 & F.O.V.25 (Optional)
- Anti-fungal & Anti-reflection hard coated conforming to IS: 8275/1976 ( latest).
- Diopter adjustment Facility on 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 Revolving, ball bearing type with positive click stops.
- Nosepiece provided with rubber grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment.

**Objectives:** Flat Field High Resolution & High Contrast, Anti-fungal & Anti-reflection, Uniformly Centred, Interchangeable & Parfocal, Covered with standard cover glass thickness 017mm.

- Objectives have Suitable prominent marking for easy identification : Color coded ring, magnification, NA and nature of objective mentioned
- Provided with Immersion oil.

<b>Infinity Plan Achromatic for Bright field Applications</b>	<ul style="list-style-type: none"> <li>• ∞ PL 4x/0.10, W.D.30mm</li> <li>• ∞ PL 10x/0.25, W.D.10.2mm</li> <li>• ∞ PL 20x/0.40, W.D.6.4mm</li> <li>• ∞ PL 40x/0.65, W.D.1.5mm, Spring</li> <li>• ∞ PL 100x/1.25(Oil), W.D.0.2mm, Spring ,</li> </ul>
	<ul style="list-style-type: none"> <li>• ∞ PL 2x/0.06, W.D.7.5mm (Optional)</li> <li>• ∞ PL 60x/0.80, W.D.0.30mm (Optional)</li> </ul>

<b>Infinity Plan Phase Achromatic</b>	<ul style="list-style-type: none"><li>• ∞ PL PH 10X/0.25, W.D.10.2 mm</li><li>• ∞ PL PH 20X/0.40, W.D.6.4 mm</li><li>• ∞ PL PH 40X/0.65, W.D. 0.7 mm</li><li>• ∞ PL PH 100X/1.25 Oil, W.D. 0.23mm</li></ul>
---------------------------------------	---

<b>Infinity Semi APO Fluorescent</b>	<ul style="list-style-type: none"><li>• ∞N-PLN 4x/0.10, W.D.17mm,</li><li>• ∞N-PLFN 10x/0.3, W.D.10mm</li><li>• ∞N-PLFN 20x/0.5, W.D.2.1mm</li><li>• ∞N-PLFN 40x/0.75, W.D.0.70mm,</li><li>• ∞N-PLFN 100x/1.30(Oil), W.D.0.15mm</li></ul>
--------------------------------------	---

**Condenser :** Swing out Condenser NA 0.9/1.25 (2X-100X) with focusable with rack & pinion movement having Aspheric Lens.

### 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 190x152mm, Moving Range 78x55mm,
- Right hand control and equipped with Double specimen holder on left side for 2 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 on both sides having gear systems for smooth operations. Fine focusing scale: 0.002mm.
- With Safety Stop Screw(Upper Limit Stop) to prevent contact between objectives and specimen , Tension/Torque Adjustable

### Transmitted Illumination (For Bright Field & Phase Contrast)

- Transmit Built in Kohler Illumination, Brightness Adjustable,24V 100W Halogen External Lamp House OR Transmit Kohler Illumination, Brightness Adjustable,3W S-LED, Built-in Main Body
- ECO Function Support Auto Power Off After 15-30 Mins From Operator Leave To Save Energy.
- Life time more than 50,000 hours. Brightness control knob.

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

### Epi Fluorescent Attachment:

ACSU5LED6FP	3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 6 Filter Position, With Attachable UV Shield, B, G, U,V excitation Filters
ACSU5MER6FP	100W Mercury Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 6 Filter Position With Attachable UV Shield, B, G, U,V excitation Filters

### Fluorescence Filters (Standard)

- B ( EX460-490nm,DM500,EM520LP)
- G ( EX510-550nm,DM570,EM590LP)
- V ( EX400-410nm,DM455,EM460LP)
- UV ( EX330-385nm,DM400,EM420LP)

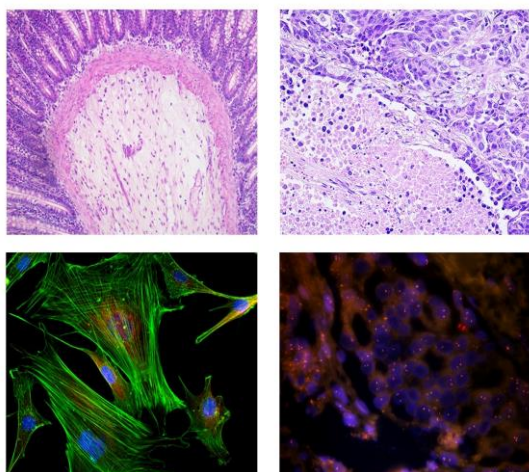
**Standard Accessories :** Operating & Service Manual, Dust Cover, Guarantee Card and Thermocole Molded packing & outer corrugated box.

**Optional Accessories :** Polarizer & Analyzer, Phase Contrast Unit, Dark Field, DIC, Photography, Full Auto Motorized Control.

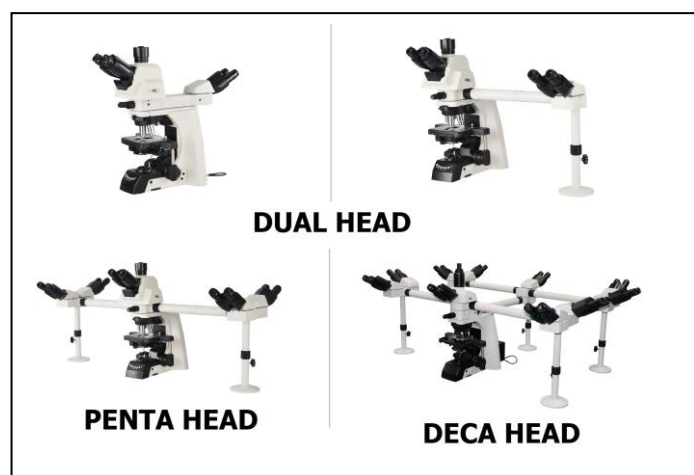
### FEATURES :

- 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 :



**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.

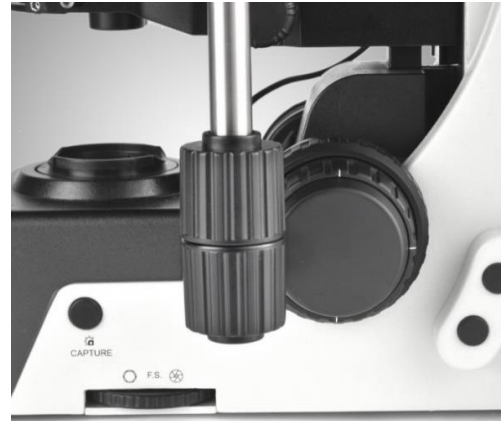
#### PRODUCT FEATURES :

**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 30 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](http://www.acucalservices.com)

