

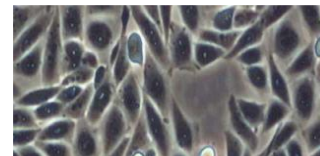
## Upright Advance Research Multiviewing Microscope Type: ACUBL-NX5 (Penta Head)

### DESCRIPTION

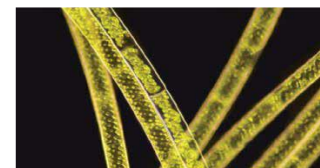
ACUCAL Multiviewing Microscopes ACUBL-NX5 is specially designed for life science research and can meet the needs of various microscopic imaging in the laboratory. Stable and compact mechanical structure, ergonomic design & layout, comfortable to use, can operate the microscope in a natural posture.

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.*

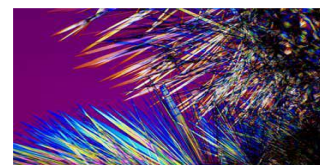
### OBSERVATION METHODS



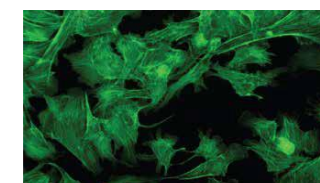
Phase Contrast



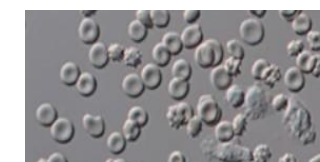
Dark Field



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 research, and medical inspection. It is the perfect laboratory microscope for life sciences, histology, microbiology etc.

**TECHNICAL SPECIFICATION****Main Body & Optical System**

- UNIVERSAL UIS/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.
- Contrast Method Bright Field and onsite upgradeable to fluorescence, phase contrast, polarization with teaching head attachment for 2/10/20 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)

**Observation Head- Antifungal Coated Prisms**

- Sidentopf Trinocular Head, Inclined at 25°/30°/ 35°, 3 Level Light Split Switch Beam splitter with sliding E100:P0/E50:P50/E0:P100 (Standard) for video/digital camera. (01 Nos)
- Ergo Tilting Trinocular Head, Inclination 0°~45°, 3 Level Light Split Switch Beam splitter with sliding E100:P0/E50:P50/E0:P100 (**Optional**) for video/digital camera. (01 Nos)
- Sidentopf Ergonomics Binocular Observation Head Inclined at 25°/30°/ 35°, Rotatable 360° (04 Nos)
- Inter-pupillary distance adjustment from 47mm to 78mm.

**Eyepiece**

- 05 Pairs of Compensating High Eyepoint Wide field 10X (paired) F.O.V. Or F.N. 22 or 25 (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 ( $\pm 5$ ) & rubber eyepiece shield on all 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.
- Nosepiece provided with rubber grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment.
- 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)

**Middle Module**

- Middle module with LED Cursor, two colors red and green, intensity adjustable.

## Upright Advance Research Multiviewing Microscope Type: ACUBL-NX5 (Penta Head)

**Objectives: NIS-60, Infinity N-Plan Achromatic or Semi Plan Apochromatic or Apochromatic , High Resolution & High Contrast, Anti-fungal & Anti-reflection, Uniformly Centred, Interchangeable & Parfocal.**

- $\infty$  4x/0.10, W.D.30mm
- $\infty$  10x/0.25, W.D.10.6mm
- $\infty$  20x/0.45, W.D.6.4mm, Cover Glass 0.17mm
- $\infty$  40x/0.65, W.D.0.7mm, Spring Loaded ,Cover Glass 0.17mm
- $\infty$  100x/1.25-140(Oil), W.D.0.2mm, Spring Loaded ,Cover Glass 0.17mm
- 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.
  
- $\infty$  2x/0.08, W.D.7.5mm, (Optional)
- Semi apochromat / plan fluor40x (N.A. 0.75,w.d. 0.66mm)spring loaded
- Plan Apochromat  $\infty$  40x/0.95, W.D.0.18mm, Spring Loaded with correction collar (Optional)
- Plan Apochromat  $\infty$  60x dry/air N.A. 0.9 or higher ,WD 0.2 mm with correction collar (Optional)
- Semi apochromat / plan fluor100x oil(N.A. 1.30,w.d 0.2mm.)Spring loaded
- Plan Apochromat  $\infty$  100x/1.45(Oil), W.D.0.13mm, Spring Loaded ,Cover Glass 0.17mm (Optional)

### 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 76x55mm,
- 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 focusing 0.01mm per revolution, min reading 1 micron.
- Torque adjustment for focusing control. Coarse adjustment limit stopper.

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### Illumination

- Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House OR Transmit Kohler Illumination, Brightness Adjustable, 14W 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.

**Electronics:** Kohler Universal Input 100-240 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

### 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.

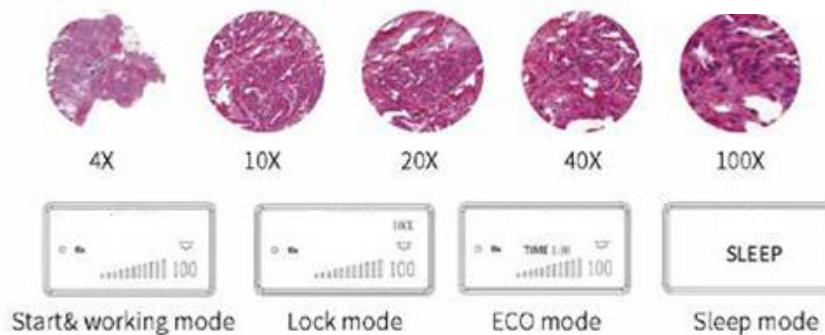
### U5LIM.A: Status Display Screen

**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.

### 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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