ACUCAL

High Tech Quality Instruments

Multi Viewing Microscope
Type : ACUBL-X5C (Dual Head)

DESCRIPTION

ACUCAL Multiviewing Microscopes allow people to observe specimen at the same time. Pathological / Biological Microscopes are Compound Research Microscopes which is a complete System with illumination system for proper viewing and enumeration of individual cells, even living ones with high magnification using two eye lenses to reduce the eyestrain.

Compound Microscopes are primarily used to observe and study organism and microorganisms. These Microscopes are usually used to observe transparent and translucent objects, such as animal and plant cells , tissues, bacteria as well as various kinds of tiny particles by means of sectioning .



APPLICATIONS

- Suitable for use in educational, teaching demonstration, academic, agricultural, medical and Scientific Research.
- To Detect acid fast bacilli in sputum smear and other materials for use in Tuberculosis Control Programme.
- Widely used in Hospitals, Physiology Laboratories, Schools, Wastewater treatment plants, Veterinary, Histology and Pathology.
- To View blood cells, cheek cells, parasites, bacteria, algae, tissue, and thin sections of organs.
- To view samples that cannot be seen with the naked eye.
- For optimal visualization of biological specimens like spermatozoa, epithelial cells, hair and fibers etc.

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TECHNICAL SPECIFICATION

Main Body & Optical System

- Upright Modular Frame, Highly Rigid & Robust, Non Hinged Type, Vibration free Aluminium alloy Single die casting, Anti rust heavy metal stand, Anti-Microbial & fungus resistant treated optics for Tropical Use, Erogonomics shaped Sturdy Design & Stable with built in transmitted light LED power supply & Brightness Control, Built in window for easy carriage integrated in the base. All Critical Movements based on Ball Bearing & wire guides thereby ensuring smooth and precise manipulation.
- Infinity optical System, with Anti-fungal coatings & Chromatic free.
- Conforming to Pathological IS:4381 latest, Research IS:5204 latest Indian Standards.

Observation Head- Antifungal Coated Prisms

- Sidentop (Butterfly Design) Ergonomics Trinocular Observation Head Inclined at 30°, Rotatable 360° (01 Nos) 3 Level Light Split Switch Beam splitter with sliding E100:P0/E50:P50/E0:P100 or E100:P0/E20:P80/E0:P100 for eyes and Camera Port. (01 Nos)
- Sidentop (Butterfly Design) Ergonomics Binocular Observation Head Inclined at 30°, Rotatable 360° (01 Nos)

Eyepiece

- 02 pairs of Compensating High Eyepoint Wide field CWF 10X (paired) Bright Field Br, Focusable Foc., Field of view number F.N. 22mm. Eyepiece outer mounting barrel diameter or Inner diameter of ocular sleeve (eyetube) 30mm.
- Diopter adjustment Facility ±5 on both Eyepieces.
- Inter-pupillary distance adjustment from 47mm to 78mm.
- Anti-fungal & Anti-reflection hard coated conforming to IS: 8275/1976 (latest)
- 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.
- Compensating designed eyepiece provides relief from eye fatigue and renders colour-compensated wide-field image of utmost clarity.

Nose Piece

- Low position Inward Facing Quintuple/Sextuple Revolving, precision ball bearing type mechanism with positive click stops. Slot for Analyser or DIC Slider.
- Nosepiece provided with Knurling rubber grip on metal rim for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment.

Objectives: High Contrast DIN Size Infinity Plan Achromatic OR SemiApochromatic OR Apochromatic , High Resolution & Long Barrel, Infinity color Corrected Anti-fungal treated & Anti-reflection coated, Uniformly parcentred, Interchangeable & Parfocal , Covered with standard cover glass thickness 0.17

- ∞4 X N.A.: 0.10, WD 30mm
- ∞10 X N.A.: 0.25, WD 10.5mm
- ∞40 X N.A.: 0.65, WD 0.6mm spring
- ∞100 X Oil N.A.: 1.25-1.4, WD 0.2mm spring
- Objectives have Suitable prominent marking for easy identification : Color coded ring, magnification, NA and nature of objective mentioned.Provided with Immersion oil.
- ∞ 2x/0.06, W.D.7.5mm, (Optional)
- ∞20 X N.A.: 0.5, WD 6.4mm (Optional)

Condenser

- Bright field dual swing out achromat Centerable Abbe Condenser NA 0.9/1.25 (2X-100X) with focusable with rack & pinion movement having Aspheric Lens provides extra bright collimated & even illumination at all magnifications.
- Inbuilt Continuously variable circular Iris Diaphragm with removable frosted white filter or blue day light filter for high contrast, Anti-fungal & Anti-reflection coated.
- Rack & Pinion vertical movement on stainless steel guides over a range of 18mm by left hand placed knob.

Mechanical Stage

- Hard core anodized surface / Ergo stage ceramic surface Manual right hand, offering faster, Rackless smoother & safer movement on précised ball bearings. Scarchless Hard PU Painted Double Plate Stage with 2-Slide holder.
- Vernier scales reading 0.1mm, readable from the right.
- Wear resistant & Spill resistant, Coaxial stage with right hand low drive control with rotating mechanism.
- The stage is provided with spring loaded slide holder for exact positioning of specimen/ slide. With convenient sub-stage vertical coaxial adjustment for slide manipulation.
- Low positioned drive, right side movement.
- Double Layer Mechanical Stage Size187mmX167mm, Moving Range:78mmx54mm

Focusing Control

- Co axial Graduated Coarse and Fine focusing on both sides having multiple gear systems driven on roller guides for smooth operations.
- Coarse Stroke: 37.7mm, Moving Focus Range 24mm, Fine Stroke : 0.1mm, Fine Division 0.001mm.
- With Safety Stop Screw (Upper Limit Stop) to prevent contact between objectives and specimen, Tension/Torque Adjustable

Transmitted Kohler Illumination

- High Luminescent White LED 15W or Halogen 12V/100W Transmitted illumination with variable control. (Both have equally brightness)
- Life time more than 60,000 hours.
- LED class of complete device 3B, peak wavelength 440 nm, LED class 2, Warm White.
- Pre-centred & pre-aligned Homogeneous field, True Kohler Illumination.
- Visible Light Intensity Scale bar on both sides having sequence of lateral LEDs, on the left and right sides, to demonstrate light intensity.

Pointer

- Dual Color Green & Yellow LED Pointer.

Ambient Conditions:

- Storage: Permissible ambient temperature –10 to +40 °C max
- Permissible air humidity (no condensation. 75 % at 35 °C
- Operation: Permissible ambient temperature +10 to +40 °C max.
- Permissible air humidity (no condensation) 75 % at 35 °C

Electronics :

- Line voltage - Kohler Universal Input 100-240 V AC (±10 %) i.e. voltage setting of the instrument need not be changed, Line frequency 50 / 60 Hz.
- Power consumption (30-70) VA.

Standard Accessories : Operating & Service Manual, Dust Cover, Power Cable, Lens cleaning solution, Guarantee Card and Thermocole Molded packing & outer corrugated box.

Optional Accessories : LED fluorescence, Polarizer & Analyzer, Dark Field attachment, High Resolution Microscopy Camera, Zernike Phase Contrast Unit Centering Telescope 10X & Infinity objectives Positive PH Plan 10x/0.30, 20x/0.40, 40x/0.70 ,100x/1.25

FEATURES :

- All optical parts including objectives, eyepieces and prisms have anti-reflective coating for anti fungal property & High Transmission.
- All metallic parts are corrosion proof, acid proof and strain proof.
- All controls are in a position for comfortable and prolonged use.
- Color corrected infinity optical system.
- Ergonomic design, low location of control knobs makes user more comfortable.
- Mounting screws on all objectives to be sized to standards of the Royal Microscopical Society for universal compatibility.
- ISO & European CE Certified.
- **Fly-Eye Lens Design illumination** i.e. 2D array of tiny lenses to spatially transform light from a non uniform to uniform irradiance distribution at an illumination plane.

CONTACT US:

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