

DESCRIPTION

Stereomicroscopes are useful for applications that require three-dimensional examination and when the perception of depth and contrast is significant to understanding the structure of the sample.



The 3-D image allows samples to be examined with greater clarity and permits the precise manipulation of samples during magnification in a big and comfortable working space. The broad field of view and variable magnification provided by stereomicroscopes is additionally helpful for biological research.

APPLICATION

These microscopes are also utilized in various disciplines such as education (biology, chemistry, botany, geology, and zoology), medicine, and pathology. Another application of this device is in the observation of opaque thick objects where the transmission of light is impossible for example rocks, coins, insects, etc. Stereomicroscopes are generally used in various industries like the semiconductor business, circuits, metallurgy, textiles, microsurgery, geology, and microelectronics and different enterprises that require assembly and assessment of miniature parts including the examination of circuit boards and microchips.

Stereomicroscopes are irreplaceable in countless numbers of applications ranging from the production business, quality control, and materials research to forensics research science, Drosophila research, Fly and zebra fish work, C elegans research work, Colony Morphology, food science, marine biology, embryology, environmental science biotechnology, genetic sciences, food science, marine biology, embryology, environmental science, and almost all fields of biomedical research. The microscope is also used extensively in zoology, botany, entomology, histology, geology, mineralogy, and archaeology and dermatology tools of research and anatomy. It can also assist the palaeontologists during the procedure of cleaning and studying fossils.

TECHNICAL SPECIFICATION

Optical System

- Greenough Optical Stereoscopic System provide true stereo viewing, allowing for a three dimensional view of samples.
- Excellent optical quality with high resolution, contrast and color fidelity, to provide clear & accurate images.

Observation Head : Binocular or Trinocular

- Observation tube inclined at 35°/45° rotatable at 360°.
- Inter-pupillary distance adjustment from 52mm to 75mm.
- In Trinocular Head : Vertical phototube for micro photography with built – in C-mount 0.55 x magnification lens. Light Distribution is 100:0/0:100 or 50:50% for simultaneous view on Microscope & Computer

Eyepiece : Mount 30mm

• Diopter adjustment facility ± 5 in both eyepieces suitable for both eyeglass and non eyeglass wearers.	
• Builtin Reticule Holder with 0.1mm least count (Optional)	
ACUSZMPEP10X22	• Extra Wide field 10X (paired) F.O.V.22mm, Field Number 22
ACUSZMPEP10X23	• Extra Wide field 10X (paired) F.O.V.23mm, Field Number 23
ACUSZMPEP15X16	• Focusable Extra Wide field 15X (paired) F.O.V.16mm, Field Number 16
ACUSZMPEP20X12	• Focusable Extra Wide field 20X (paired) F.O.V.12mm, Field Number 12

Zooming Range & Ratio

ACUSZMZRA	• Manual 0.8 X to 5.0/5.5X with Magnification Zoom Ratio 6.3:1, • Click stop at 0.8x,1x,2x,3x,4x & 5x
ACUSZMZRB	• Manual 0.67 X to 5X with Magnification Zoom Ratio 7.5:1 • Click stop at 0.67x,1x,2x,3x,4x & 5x

Objective (Thread Mounting Screw Type): Achromatic or PLAN Achromatic or PLAN Apochromatic Infinity-corrected, lead-free, Distortion- free

ACUSZMOBJ1XA	• Objective 1X (Inbuilt) , NA 0.16
ACUSZMOBJ0.5X	• Objective 0.5X (Optional)
ACUSZMOBJ1.5X	• Objective 1.5X (Optional)
ACUSZMOBJ2X	• Objective 2X (Optional)

Magnification Range

ACUSZMM850	• 8X-50X/55X with 10X eyepiece pair and inbuilt 1X Objective. • 4X to 300X with Combination of different eyepiece & objectives used. (Optional)
ACUSZMM650	• 6.7X-50X with 10X eyepiece pair and inbuilt 1X Objective. • 3.35X to 300X with Combination of different eyepiece & objectives used. (Optional)

Working Distance : Long working distance of 110-120 mm for viewing and manipulation of samples without interchangeable optics.

Mechanical Body

ACUSZM-MB1	• Track stand with fan type big base, column & Clip for holding specimen. • Base size is 285mm X 238mm X35mm (Or customized), Working Surface D195 x W160mm & Column 250 mm with drive and handle, lifting range 145 mm • D=76 mm for Stemi Mount, Load capacity 5kg • Base specimen plate size Φ125/84 mm (Glass & Black-White) ESD Compatible. • Focusing through large knob on both sides with tension adjustment facility.
ACUSZM-MB2	• Diascopic White LED illumination stand with special feature suitable for observing Embryo samples through brightfield, darkfield application & oblique illumination contrast by built in condenser and adjustable rotatable and slidable reflecting mirror for changing the light signal directions provides high relief observation for the colorless samples. • Transmitted light intensity and shutter controlled via external controller unit. Hand Rest Stand. RL Control – on/off/Dimming • Stand fitted with broad base D310xW200xH90 mm. Track stand with Integrated base with column with glass plate & Black and white plate. • Column 250 mm with drive and handle, lifting range 145 mm, easily accommodates Petri dish/Flask etc. • Large Focusing unit on both sides with tension & friction adjustable. Mount D=76mm for stemi mount/mount S-Interfaces.
ACUSZM-MB3	• Single Arm Boom Stand, Dual Arm Boom Stand, Articulating Arm Stand

Illumination System

- Built-in LED lamps for Incident/Reflected and transmitted light systems for brightfield/ darkfield.
- brightness range 25000 lx.
- Regulated power supply for both lights with separate brightness controls with 2x Sockets (RL control for on/off/dimming)
- Uniform and consistent illumination across the entire field of view.
- Incident Light : 3.3 Watt LED 30° oblique illumination.
- LED Service Life : Approx 50000 hours
- Light Quality: Homogeneous daylight (6500°K). Free of UV and IR emissions.
- Additional reflected illumination via LED Ring Light/ Quadrant LED Ring Light or Dual Gooseneck Arm with controller having multiple illumination options like mounted on the microscope body, Self-carrying, brightness upto 85000 lx.(Optional)

Performance Parameters: Resolution - 200Lp/mm with 1x front optics and 400 Lp/mm with inter changeable front optics.

Electronics : Universal Input (100-240) volts $\pm$ 10%, 50-60Hz, single phase AC supply.

Standard Accessories : Operating Manual, Dust Cover, Guarantee Card and Styrofoam Moldedpack.

FEATURES

- High quality optical components, providing sharp and striking contrast image and ensure flat image at big depth of field.
- Ease the tiredness with ergonomic design. ESD protection feature: Antistatic surface, grounding socket.
- Optics and accessories are made with Eco-friendly Lead & Arsenic Free material.
- With LED light for both incident and transmitted illumination, Providing even illumination.
- Tailored for industrial site inspection. Very Rugged, easy to use & simple to maintain.
- Anti-electrostatic for higher yields & Anti Fungus preventing contamination from dust, oil and water.
- With complete eyepieces, objectives and accessories it is an ideal instrument for industry assembling, inspection and teaching field.

- Highly durable made of made of High quality materials to withstand constant rough use and rough handling in a laboratory environment.
- Anti-mold Design to ensure protection from contamination while working in hot & humid environments.

OPTIONAL ACCESSORIES



Fibre Optics Illumination
LED or Halogen



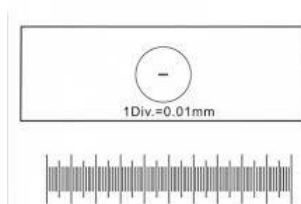
Ring Illuminator :
LED or Fluorescent



Polarizer/Analyzer



Dark Field Attachment



Calibration Slide



Micrometer Eye Piece

OPTIONAL ADDITIONAL OPTICS

Eyepieces : WF 15X/Ø16 & WF 20X/Ø12 Plan Auxiliary Objectives: 0.5X , 0.7X & 2X



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