

DESCRIPTION

Stereozoom microscopes are optical microscopes that give a threedimensional (3-D) view of a sample and generally operate at low magnification. The 3-D image allows surfaces to be examined with greater clarity and permits the precise manipulation of samples during magnification.



ACUPSZM-880 is a research level Stereo Zoom Microscope with infinite Parallel Galileo optical system. Based on Galileo optical system, it can provide real and perfect microscopic images on details. The excellent ergonomics and user-friendly operating system can truly allow users to experience a simple and comfortable work.

Stereozoom microscopes are used in a wide variety of fields like surgery, medical science, biotechnology, genetics, biological sciences, geology, mineralogy, archaeology, semiconductor industry, metallurgy, and textile industry, food science, marine biology, embryology, environmental science, and forensic science. In pharmaceutical and biotechnology labs, these microscopes are commonly used for magnifying biological samples such as plant tissues and organ samples. In Veterinary these microscopes are used for vitro tissue/embryo culture purpose. Wider industry applications include microsurgery, geology and microelectronics, including the examination of circuit boards and microchips.



TECHNICAL SPECIFICATION

Optical System & Design Principle

- Common Main Objective (CMO) & Parallel Zoom Optical Path telescope system based Stereoscope with Galilean optical system having Infinity Corrected & Lead Free Optics for Research.
- Bright Field Observation mode.
- Upgradable to Dark Field, Fluorescence, Polarization, Teaching Head & Drawing IntermediateTube Attachment, built in aperture diaphragm for increased depth range.

Observation Head : Binocular (ACUPSZM880B) Or Trinocular (ACUPSZM880T)

- Inter-pupillary distance adjustment from 50mm to 76mm.
- Vertical phototube by Beam Splitter for micro photography & documentation with C Mount adaptor (For Trinocular Head only).
- Trinocular Observation Tube having switchable split between eyepiece & camera for 100%:0, 0:100% or 50%:50% or 100%:100% light distribution between optical path.

| ACUPSZMBOH20 Binocular | • Fixed Binocular Observation head inclined at ergonomic viewing angle 20° for comfortable view, rotatable at 360°. |
|---------------------------|---|
| ACUPSZMBOH45 Binocular | • Fixed Binocular Observation head inclined at ergonomic viewing angle 45° for comfortable view, rotatable at 360°. |
| ACUPSZMTOH Binocular | • 5°~45° Tilting Binocular Observation head. |

Eyepiece

| Diopter adjustmen | t facility in both eyepieces suitable for both eyeglass and non eyeglass wearers. |
|---------------------------------------|--|
| Focusable Comper | nsating Lead Free, Distortion- free & adjustable with exchangeable eyecup. |
| Having proper pup | il aberration control and appropriate positioning in the eye point for comfortable |
| observation. | |
| Builtin Reticule He | older with 0.1mm least count (Optional) |
| ACUPSZMPEP10X22 | • Focusable Wide field 10X (paired) F.O.V.22mm, Field Number 22 |
| ACUPSZMPEP10X23 | • Focusable Extra Wide field 10X (paired) F.O.V.23mm, Field Number 23 |
| ACUPSZMPEP10X24 | • Focusable Super Extra Wide field 10X (paired) F.O.V.24mm, Field Number 24 |
| ACUPSZMPEP15X16 | • Focusable Extra Wide field 15X (paired) F.O.V.16mm, Field Number 16 |
| ACUPSZMPEP20X12 | • Focusable Extra Wide field 20X (paired) F.O.V.12mm, Field Number 12 |
| ACUPSZMPEP30X8 | • Focusable Extra Wide field 30X (paired) F.O.V.8mm, Field Number 8 |

Objective (Thread Mounting Screw Type): Achromatic or PLAN Achromatic or PLAN Apochromatic Infinity-corrected, lead-free, Distortion- free, Outer Dia 60mm

| ACUPSZMOBJ1XA | Objective 1X, Working Distance 78mm, Resolution 300lp/mm. |
|----------------|---|
| ACUPSZMOBJ1XB | Objective 1X, Working Distance 91mm, Resolution 300lp/mm. |
| ACUPSZMOBJ0.5X | Objective 0.5X, Working Distance 126mm. (Optional) |
| ACUPSZMOBJ1.5X | • Objective 1.5X, Working Distance 25mm, Resolution 500lp/mm (Optional) |
| ACUPSZMOBJ2X | Objective 2X, Working Distance 20mm. (Optional) |

Zooming Range & Ratio

| ACUPSZMZRH1 | • Horizontal Handle Knob system Zoom Drive with five Click stop for repeatable task & |
|-------------|---|
| | Manually adjustable Zoom 0.8 X to 8.0X with magnification ratio of 10:1 |

Magnification Range

| ACUPSZMM880 | • 8X-80X with 10X eyepiece pair and 1X Objective. |
|-------------|---|
| | • 2.4X to 480X with Combination of different eyepiece & objectives used. (Optional) |

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Mechanical Body

| ACUDSZM MD1 | Dista Tarahasta danidi fan tarahis hara 9 Olia fan haldina anasis |
|-------------|--|
| ACUPSZM-MB1 | • Plain Track stand with fan type big base & Clip for holding specimen. |
| | • Diascopic & Episcopic i.e. Transmitted & Reflected LED Focusing Stand with glass plate & White-Black plate. |
| | • Co-axial Coarse & Fine Focusing unit knobs on both sides with tension adjustable. |
| ACUPSZM-MB2 | • Large base with dimensions at least 250 x 300mm. The column movement should is 350mm and column length of least 450mm fine & Coarse focusing in the full length of the column. |
| ACUPSZM-MB3 | Dual Arms Heavy Base Boom Stand for better stability. |
| | • Freely moveable Arm and can be adjusted to any location i.e 90° left and right, and Up |
| | and Down. Vertical Column length: 450mm or better Horizontal arm length: 450mm or |
| | better |
| | • Large Focusing knobs on both sides with tension adjustable. |
| ACUPSZM-MB4 | • Dimension of base: 331X257mm, Height of base: 35mm adjustable focus torque |
| | • Large Focusing knobs on both sides with tension adjustable. |
| | • Diascopic & Episcopic i.e.Transmitted & Reflected LED Focusing Stand with glass plate & White-Black plate. |
| ACUPSZM-MB5 | • Manual Diascopic White LED transmitted light illumination stand suitable for brightfield, darkfield application & variable angle oblique illumination contrast by built in condenser and adjustable rotatable reflecting mirror for changing the light signal directions provides high relief observation for the colorless samples. |
| | • Coarse/fine drive with profile column of 450mm, min 10kg load capacity |
| | • Wide stand with dimensions of 322x373x42mm with transmitted light unit, Mount with |
| | 76mm diameter support |

Illumination System (Diascopic & Episcopic)

| ACUPSZM-I1 | High Power Incident/Reflected and Transmitted Light Base light systems with white LED lamps having lifetime of more than 30000 hrs. constant colour temperature at any intensity. Regulated power supply for both lights with separate brightness controls. ON-OFF switching possible separately for both reflected and transmitted illumination. |
|------------|---|
| ACUPSZM-I2 | Incident/Reflected and Encoded transmitted Light Base transmitted light systems with white LED lamps. LED illumination having lifetime of more than 25000 hrs and suitable for bright field as well as one side Rottermann contrast or /equivalent contrast and dark field. Additional Reflected multiple LED's based ring light illumination with switchable segments and integrated control panel. High performance diffusor to remove glares from reflected surface samples. |
| ACUPSZM-I3 | Incident/Reflected light systems with white LED lamps. Ring Light illumination for Reflected illumination having Colour Temperature 6100K with service life of 50,000 hours & high brightness. LED Dual GooseneckIllumination system |
| ACUPSZM-I4 | LED stand with incident and transmitted light, 6100K color temperature 4-point ring light for high brightness, Multi-point arc light for oblique illumination. Transmitted light with centered LED for contrast enhancing |
| ACUPSZM-I5 | Manual Diascopic White LED transmitted light illumination. Reflected illumination : 6200K color temperature min. 50,000operating hours, flicker free light, silent fan control of intensity and 6 memory cells by turn-push knob and LCD chuck with light-guide sensor of 1500 light guide filter slider for 2 mounted filters with free opening jack bush for on/off via optional foot button S, USB socket- country-specific mains cord, supplied with Gooseneck Light and Slit Ring Illumination. |

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Electronics : Universal Input 220± 20 volts, 50-60Hz, single phase AC supply.

<u>Standard Accessories :</u> Operating Manual, Dust Cover, Guarantee Card and Styrofoam Molded pack.

FEATURES

- High quality optical components, providing sharp and striking contrast image and ensure flat image at big depth of field.
- Distortion Free, Large Field of view and Extended Working distance.
- Ease the tiredness with ergonomic design.
- With LED light for both incident and transmitted illumination, Providing even illumination.
- With complete eyepieces, objectives and accessories it is an ideal instrument for industry assembling, inspection and teaching field.
- Efficient stray light suppression for crisp three dimensional images.
- User interchangeable front optics.
- Flexible with different digital cameras.
- Compatible with multiple types of illumination techniques.
- Designed for vibration free observation and heavy workloads, using durable and reliable mechanics.
- Continous variable zoom or in reproducible mode by activating click stops well balanced 3D impression.
- Protection Class II.
- Protection Type :IP20.
- Electrical Safety Acc. To DIN EN 61010-1 (IEC 61010-1).
- ISO, CE Certified.
- Sharply focused over the whole magnification range.



OPTIONAL ACCESSORIES



Fibre Optics Illumination LED or Halogen



Ring Illuminator : LED or Fluorescent



Polarizer/Analyzer



Dark Field Attachment



Calibration Slide



Micrometer Eye Piece



Fluorescence Attachment



High Resolution Microscopy Camera



Aperture Diaphragm

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