

DESCRIPTION

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



ACUPSZM is a research level Stereo Zoom Microscope with infinite Parallel Galileo optical system. Based on Galileo optical system and Apochromatic objective, 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. ACUPSZM can meet the research demands of life sciences, biomedicine, microelectronics, semiconductors, materials science and other fields of research needs.

TECHNICAL SPECIFICATION**Optical System**

- Common Main Objective (CMO) & Parallel Optics Zoom based Stereoscopic with **Galelion optics having Plan Apochromatic Infinity Corrected & Lead Free Optics.**

Trinocular Observation Head

- Observation head inclined at 30°, rotatable at 360°, tilting angle 30°.
- Vertical phototube for micro photography, binocular: trinocular=100: 0, 50:50
- Inter-pupillary distance adjustment from 50mm to 76mm.

Eyepiece

- High Eye Point Wide field 10X (paired) /Field Number F.N. 23 or F.O.V. 23mm with Diopter adjustment facility in both eyepieces, Rubber Eye shields/Guards, distortion- free, adjustable with exchangeable eyecup

Objective (Mounting Screw Type) & Working Distance

- Infinity-corrected, lead-free, Distortion- free Plan Apochromatic Objective 1X, Working Distance 60mm , Numerical Aperture N.A.0.15

Zooming Range & Ratio

- Horizontal Handle Knob system Zoom Drive with Click stop for repeatable task & Manually adjustable Zoom 0.7 X to 13.5X with magnification ratio of 18:1, click stop for 0.7/0.8/1/1.25/1.6/2/2.5/3.2//4/5/6.3/8/10/11.5,13.5x with built-in aperture diaphragm

Magnification Range

- 7X-135X with 10X eyepiece & 1X objective

Field of View

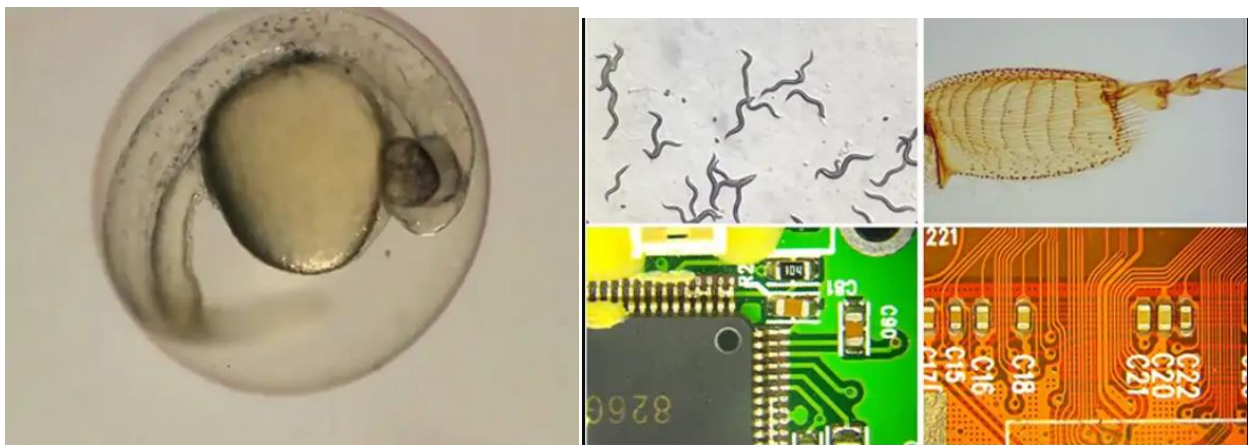
- 30.6 mm with 1.0 X objective (NA 0.15) and 10X eyepiece

Mechanical Body & Stand

- Ergonomically designed, Slim LED Quad position transmitted light illumination base and pillar with transmitted illumination, glass insert plate size: diameter 180mm, offers a huge space for sample holders, intuitive controls and an extremely low profile for easy access and reduced fatigue free body movement.
- Included Stage Glass Plate, Black and white reversible stage plate with ESD capability on black surface.

- The LED diascopic illumination is designed to achieve high overall contrast and includes the innovative OIC (Oblique Illumination Contrast) system.

What is OIC: An illumination method in which contrast gain is achieved by partial or complete coverage of the normal illumination beam path. For this purpose, a black OIC plate is brought into the beam path that can be moved via the OIC adjustment slider on the right-hand side of the stand base. The specimen is then radiated through at an angle, resulting in a shadow cast on the fine structures of the preparation. This enables the observation of colorless, transparent samples structures with relief and high contrast.



- Co-axial Coarse & Fine Focusing unit on both sides with tension adjustable, coarse range: 50mm, fine precision 0.002mm

Power Supply

- Operating Voltage 100-240VAC/50-60Hz, output 12V, Single Phase.

Illumination System

- LED transmitted bright field illumination, brightness adjustable
- White LED with average service life: about 60, 000 hours by rated use.
- AC- Adapter & Power cord
- Standard Cartridge for Bright field Standard Illumination & Oblique High Contrast illumination.
- Reflected Illumination through Dual Interlock Light Guide having LED Light source, LBA Filter, Dual light guide, Power cord & Collector lens.



Standard Accessories

- Operating Manual, Original Dust Cover, Guarantee Card and Styrofoam Molded pack.

FEATURES

- **Apochromatic objective:** The Plan APO 1x Apochromatic main objective design has significantly improved the color reproduction of the objective, provides high-resolution images at both low and high magnifications. Correcting the axial chromatic aberration of red/green/blue/purple, and converge them on a focal plane, the objective is able to present the real color of the samples.
- **Large zoom ratio : 18:1** zoom ratio puts it at the top of its class. The wide range of magnifications available coupled with a precise click-stop mechanism for working with reproducible zoom settings, makes it ideal for both low magnification observation and high-magnification screening and observation of small cell structures.
- **Aperture diaphragm adjustment:** Shift the aperture diaphragm lever in front of the microscope to adjust depth of field for high-quality image.
- Ease the tiredness with ergonomic design. The excellent ergonomics and user-friendly operating system can truly allow users to experience a simple and comfortable work.

APPLICATIONS

With complete eyepieces, objectives and accessories it is an ideal instrument, has great value in a variety of applications such as:

- life science and medical research, including dissection, IVF, biological experiment, chemical analysis and cell culture.
- Industrial areas for PCB, SMT surface, electronics inspection, semiconductor chip inspection, metal and materials testing, precision parts testing.
- Coin Inspection, Gemology and Gemstone setting, Engraving, repair and inspection of small parts.

EPI-FLUORESCENCE ATTACHMENT (OPTIONAL)

The EPI-Fluorescent Attachment is equipped with 6-hole turntable fluorescent modules, it can accommodate up to five fluorescent modules and one bright field module. Four band LED light source is used to change the light source color and adjust the brightness through the LED light source controller



It include parts:

- (1) Epi-fluorescent Attachment
- (2) Control Box
- (3) Light Source
- (4) Fluorescent Filter Cube
- (5) 1/4 λ Plate.
- (6) Light Shading Plate
- (7) Bright Field Filter Cube.

Fluorescent filters	Excitation	Dichroic Mirror	Barrier Filter
B Filter	BP460-490	DM500	BA520
G Filter	BP510-550	DM570	BA590
U Filter	BP330-385	DM400	BA420
V Filter	BP400-410	DM455	BA455
FL-FITC	BP460-495	DM505	BA510-550
FL-DAPI	BP360-390	DM415	BA435-485
FL-TRITC	BP528-553	DM565	BA578-633

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