Mikrosize®

iBM-330c

Inverted biological microscope

Contact us

Mikrosize Precision Instrument Co.,Ltd
A-4035 RuiFeng Business Expo, Wuhu City, China , 241000.
Web:www.mikrosize.com
Email: mikrosize@mikrosize.com

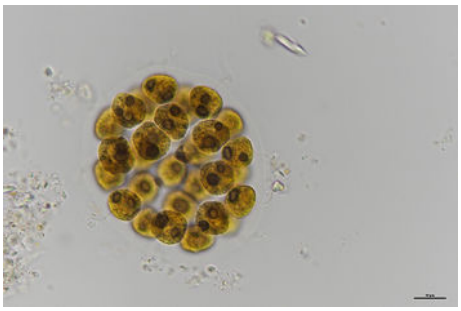
Mikrosize®

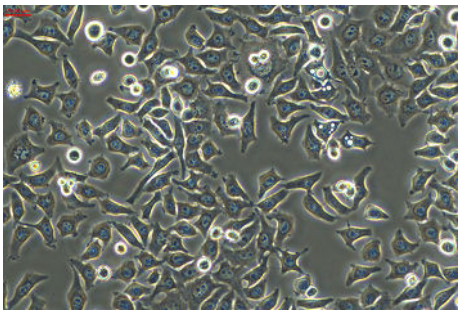
Features and Applications

The inverted biological microscope is equipped with a self-developed infinite-distance optical system. It supports phase contrast, bright field observation, and can be upgraded to dark field and oblique illumination modes. It is equipped with 4 international standard collimated infinite-distance flat-field semi-recessed phase contrast objectives, with excellent optical performance. It is equipped with intelligent dimming 10W wide-spectrum LED lighting, precise focusing, strong compatibility of the stage, and automatic dimming when switching objectives. It is paired with the same brand imaging system, which has rich software functions, supporting multi-dimensional measurement, image stitching and depth of field fusion, and can save a large number of parameters, suitable for diverse observation needs in biological experiments.

Product Features

- Equipped with the self-developed infinite-distance optical system, it is equipped with four standard collimated objective lenses. The optical imaging is clear. Phase contrast observation only requires a single ring plate, eliminating the need for repeated switching. The operation is more convenient.
- Equipped with 10W wide-spectrum LED intelligent lighting, the light intensity can automatically adapt to the objective lens magnification. The color temperature is stable and the color rendering is excellent. The service life is up to 50,000 hours, and the maintenance cost is low.
- The load-bearing platform adopts a toothless-barrel structure for wire transmission. It is compatible with various-sized petri dishes, slides and experimental plates.
- The movement is smooth and scratch-resistant, meeting the placement needs of diverse experimental samples.
- The focusing system is coaxial and adjustable in tightness, with a precise micro-adjustment value of 1 μm. It enables precise focusing of the sample and allows for easy capture of the sample's fine structures and changes.
- The imaging software features panoramic stitching and depth-of-field fusion capabilities. It can store a vast amount of experimental parameters and also has the ability to open ports for connecting with third-party software, making it suitable for various experimental research needs.





Features and Applications

Product Applications

- Suitable for cell biology research, it enables clear observation of the morphology, proliferation and movement status of living cells, and is compatible with various cell culture carriers such as petri dishes and multi-well plates.
- Applied in microbiological testing, it enables high-power observation and precise analysis of the morphological structure and growth characteristics of microorganisms such as bacteria and fungi.
- Suitable for biology teaching in universities, meeting the observation teaching needs of biological experiments such as cells and microorganisms, and adaptable to various sample observation scenarios in teaching.

Instrument Appearance

1.Eyepiece **2.Trinocular observation head** **3.Camera**
4.Adaptive lens **5.Light source control knob button** **6.Workbench**
7.Coarse and fine coaxial adjustment knob **8.Workbench control handle**
9.Converter **10.Objective lens** **11.Pre-assembled annular ring plate**

Product Details

Intelligent Light Intensity Management

- With traditional microscopes, increasing the magnification of the objective lens will make the image darker.

- The intelligent light intensity management system automatically adjusts the light intensity to the most suitable level when the objective lens magnification is changed.

- Halogen lamps have varying colors depending on the intensity of the light.

- LED light sources maintain consistent color under different light intensities, and are more vivid than halogen lamps.

Product Details

Easy To Use

- When switching the objective lenses between 4x and 40x, a high-contrast and clear image can be obtained without changing the phase ring; when conducting cell culture operations, observing cells becomes simpler and more efficient.

- Easily operate a variety of standard cell culture containers;
- The fixing rods of the specimen holder can be raised, making it convenient to place and move various large-sized culture containers.
- When the sample is particularly special, custom accessories for the stage can be provided.

- After removing the condenser, it can be used to observe multi-layer tissue culture flasks up to 190mm in height.
- If an IBPL4XPH objective lens is used, the upper 19mm can be raised, allowing the cells in the two layers below the multi-layer tissue culture flask to be observed.

Technical Specification

Observation Mode	Including contrasted and bright-field observations
Optical system	Infinite distance optical system
Observation tube	Hinged three-mirror observation tube, can be connected to the imaging system, 30° inclined, interpupillary distance 48-86mm, eye point adjustable, spectral ratio 100:0, 0:10
Eyepiece	Ultra-wide field of view eyepiece 10X (field of view Φ 23mm), with high eye point and adjustable diopter.
Objective lens	Infinite-focus half-complex phase condenser objective 4X, with numerical aperture ≥ 0.15 and working distance ≥ 16mm
	Infinity-focal semi-complex condenser objective 10X, with numerical aperture ≥ 0.3 and working distance ≥ 14.8mm
	Infinite-focus bicomatic objective lens 20X, with numerical aperture ≥ 0.45 and working distance ≥ 8.6mm

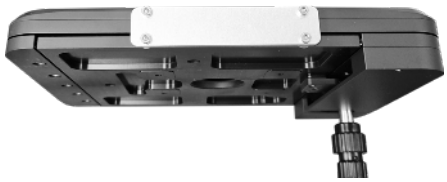
Technical Specification

Objective lens	Infinite-focus bicomatic objective lens 40X, with numerical aperture ≥ 0.6 and working distance ≥ 4.9mm
Objective lens converter	Five-hole encoded objective lens converter, USB data transmission
Transmitted lighting system	Pre-aligned phase ring plates are used for all objectives, and a single phase ring is employed for all, eliminating the need for repeated switching.
	Intelligent adaptive adjustment of light intensity, 10W wide-spectrum LED light-emitting chip, 50,000-hour
Focus adjustment system	Coaxial with coarse and fine adjustment, adjustable tightness, fine adjustment resolution of 1 μm
Workbench	Flat worktable 260*200mm, wire-driven moving scale; travel ≥ 110*75mm
Intelligent Management	When changing the magnification of the objective lens, the control circuit will automatically adjust the light intensity to the most suitable level.

Standard Delivery

Name		Qty	Photo
Host Machine		1pc	
Eyepiece		2pcs	
Objective lens	5X NA0.15 WD12	1pc	
	10X NA0.3 WD16	1pc	
	20X NA0.40 WD12	1pc	
	50X NA0.55 WD8.5	1pc	
Camera		1pc	
C-type camera interface		1pc	

Standard Delivery

Name	Qty	Photo
Camera Cable	1pc	
Converter	1pc	
Workbench	1pc	
Phase Ring	1pc	
Power Cord	1pc