M16.5850 Fluorescent Motorised Microscope Bf 2d Xyz

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE, Rohs
- Model Number: M16.5850
- Minimum Order Quantity: 1 pc
- Price: FOB $1~1000, Depend on Order Quantity
- Packaging Details: Carton Packing, For Export Transportation
- Delivery Time: 5~20 Days
- Payment Terms: T/T, West Union, Paypal
- Supply Ability: 5000 pcs/ Month

Product Specification

- XY Moving: 110x110mm
- Z Moving: 20mm
- Resolution: <0.05um
- Max. Speed: 50mm/s
- Repeatability: ≤20um
- Maxcope Software: 2D Standard Version, Detail See Software Table
- Name: M16.0910 Fluorescent Motorised Microscope Bf 2d Xyz
- Keyword: Motorised Microscope
- Highlight: **fluorescent motorised microscope**, **2d motorised microscope**, **2d motorized microscope**

Our Product

Product Description

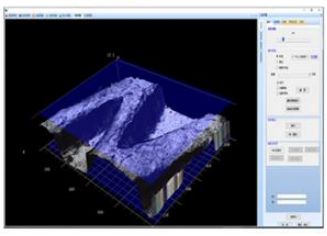
Motorized Biological Microscope, BF, XYZ Motorized

Infinity Plan Semi-APO 4x10x20x40x100x Objectives With 6 Holes Motor Nosepiece
X/Y/Z Motorized Stage Large Moving Range 100x100mm Resolution 0.05um
Full Auto 2D Scan Image Stitching With Quick & Precise Mode
Upgradeable to 2D Pro & 3D Version Software Enable 3D Image Stitching & Measuring

M16.5850

MAXCOP 3D Full Auto Fluorescent Microscope

The new M16.5850 Research-grade Fluorescent Microscope has upgraded to XYZ motorized working stage model, combined with the powerful Maxscope 2D/3D software, which integrates a number of firsts. From appearance to performance, it closely follows the international leading design trend. MAXCOPE will continue to provide customers with complete 3D industrial inspection solutions.



A12.0910 Biological -> A16.0910 Fluorescent

Modular Frame Improve System Compatibility

A12.0910 modularization design, separated cross arm and main body, improves the system compatibility of biological and fluorescence frame.

Multifunctional Reflection Fluorescent Illumination
In A16.0910 reflection fluorescent illumination, maximum 6 fluorescence filters can be assembled at the same time. Filters are placed in a rotary table for convenient switch. High precision and stable rotary table and high-performance imported filter ensures a drift-free image.

☆ There is a light shutter in front of the reflected illuminator. It is used to shut the fluorescent light to prevent fluorescence quenching of the slice.

☆ The light barrier can protect users from the harm of UV light.

☆ The use of ND attenuation filter, or aperture and field diaphragm rod can efficiently reduce the intensity of exciting light to protect the slide.

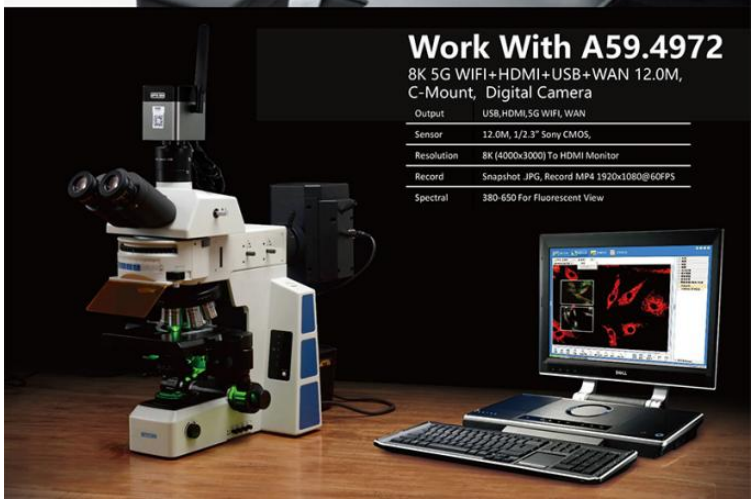
☆ After replacing the lamp, the centering objective helps users in adjusting the filament center to make sure a sufficient and uniform fluorescent illumination.

Power Control System for Mercury Lamp
New digital power control system with operating time and current value, clearly shows the working state of the mercury lamp.

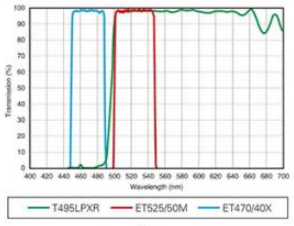
Two Power Supply Systems Provide Multiple Choices of High Quality Illumination
New developed 100W EHV DC mercury lamp house with improved thermal cycle greatly reduces the surface temperature of the lamp house and avoids the scald risk during operation. The filament center is easily adjustable.75W xenon lamp for option.

A12.0910 Biological Microscope

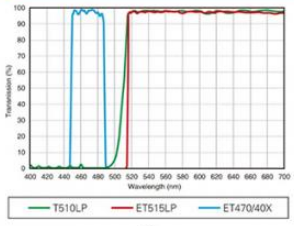
A16.0910 Fluorescent Microscope



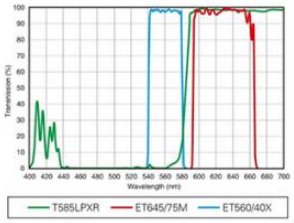
Fluorescent Filters Data Sheet



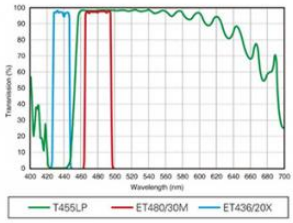
B1



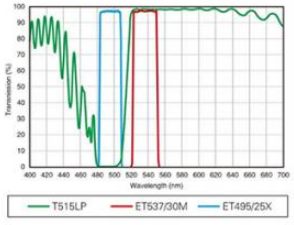
B2



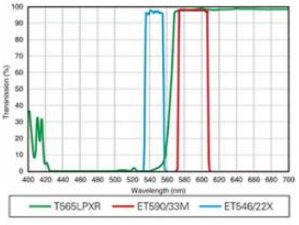
G1



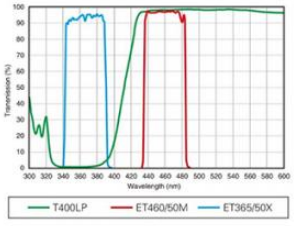
Spectrum Aqua



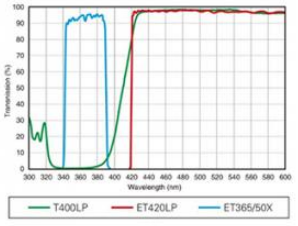
Spectrum Green



Spectrum Orange



UV1



UV2

Maxcope Software Version Table
2D Standard Verion (For XY Motorizded Model)

Opto-Edu (Beijing) Co., Ltd.
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XY Motorized Control	Control the motorized stage through software, support one-click set/return to origin point. three control methods: • Click the 8-direction arrow with the mouse to manually control the stage movement, and the step distance and move speed can be freely setted • Long press the mouse and drag in the camera preview window to control the electric platform to move in the corresponding direction • Double-click the mouse at any point in the preview window, you can control the electric platform to move the double-click point to the center of the window for display
2D Stitching	2 Standard 2D Stitching Modes: • Plane Scan Point by Point, high precision, slow speed • Plane Flying Scan, low precision, high speed Supports automatic scanning and stitching of 2D images at any magnification, with optional scanning accuracy and speed.
Free Stitching Area	Provides 6 stitching area modes, which can quickly set stitching areas of any shape: Polygon, 2-point rectangle, 3-point circle, 4-point ring, outline, free curve. • Outline mode can automatically detect the edge contour of the object as the stitching area. • Free curve mode can freely draw any shape as the stitching area.
2D Stitching Optimize	The built-in advanced algorithm can intelligently optimize and correct the grid phenomenon and shadow phenomenon caused by lens aberration, uneven lighting and other factors when scanning and stitching, so that the stitched image will be one high-definition, no offset, no grid, no shadow.
Calibration	It can do the necessary calibration before measurement, for different camera & objective lenses, user can add, delete, and manage the calibration list at any time
2D Measurement	2D plane measurement 10+ functions, including length, angle, radius, diameter, free curve length, parallel line distance, point-line distance, 2-point distance, multi-point distance, radius, diameter, arc length, RGB measurement, counting, etc.,and a variety of auxiliary lines and reference line tools are provided. Combined with these tools, various complex measurements can be achieved, and various measurable information of planar images can be obtained more efficiently.
2D Map Guide	After scanning and stitching to generate a panoramic image, it can be used as an electronic 2D map for navigation. Click the 2D map to control the motorized stage to quickly locate the specified position for high-magnification observation, avoiding the confusion of difficult positioning in traditional high-magnification observation.
Point of Interest	Click the mouse to freely set and save multiple points of interest on the image, you can select and quickly return to the point of interest at any time for repeated focus observation
Marco Camera Guide	The model with optional macro camera, the panoramic image previewed in real time can be used as an electronic 2D map for navigation function, one click can reach the point of interest for high-power observation
Motorized Nosepiece	Optional motorized nose wheel models, you can select different objective lenses in the software, and switch the magnification with one click
Motorized Illumination	The model with optional illumnation control, can be manually adjust light brightness in the software, or use the automatic lighting function to easily get the best lighting effect,
Screen Split	2, 4, and 9 split windows can be set to observe and compare multiple images at the same time
Free Comments	The comment information can be freely inserted and displayed in the microscope camera window and 2D map window. The annotation content, ruler, color, line, etc. can be freely set, and output to the experimental report with the image
Full Parameter Record	While taking pictures and videos, software can automatically records comprehensive information such as shooting date, objective lens, magnification, stage position, etc., which is convenient for outputting to experimental reports or for reproducing observation results later.
Extra Long Video Record	The longest 1 hour, the fastest 50PFS video recording, can comprehensively record the experimental detection process, or the long-term change process of the observed object, subtle movements and other information. The video results can be fast-forwarded or played frame by frame, and still images can be extracted and saved.
Customrize Report	Freely set Word and Excel report templates, including images and comprehensive shooting parameters, which is convenient for quickly outputting a complete inspection report in the later stage
Free Interface	The software interface and each submenu can be freely setted by dragging and dropping with the mouse, and can be saved, exported, and imported into the customized interface layout, and the default simple interface can also be restored easily by hot key Ctrl+G.
Multi Language	The software supports Simplify Chinese, Traditional Chinese, English, Russian, Korean, Japanese, Iranian, Dutch, French, German, Italian, and other language versions can be customrized.
2D Advanced Verion (For XYZ Motorizded Model) Standard 2D Included, Plus Below Functions	
Z Motorized Control	The software controls the Z-axis motorized lift, support professional functions such as manual focus/auto focus/super depth of field fusion • Click the up and down arrows with the mouse to manually control the Z-axis lift and focus • One-click autofocus, focusing speed & accuracy can be selected
2D Advanced Stitching	7 Advanced 2D stitching modes, combined with Z-axis motorized, can perform auto-focusing with various speeds and precisions on inclined planes and concave-convex surfaces to scan and stitch into a full-frame clear 2D images, especially suitable for complex industrial inspection, special slice observation, etc. • Bevel Scan Point by Point • Bevel Flying Scan_Manual Focus • Bevel Flying Scan_Auto Focus • Up/Down Fast • Up/Down Middle • Up/Down Fine • Up/Down Fusion
2D Manual Stitching	Support manual stage model to achieve Semi-Automatic 2D scanning stitching, only need to manually move the stage in XY direction, the software will automatically scan and take pictures and stitches to form 2D images, upgrade manual stage model to do Semi-Auto stitching work

Auto Focus	One click autofocus, as quick as 0.3-2 seconds for each focus, focusing accuracy and speed are optional
Depth Fusion	The innovative design of high-quality depth synthesis can easily do 200~500 layers of super depth of field superposition and fusion in a short period of time. The software makes intelligent judgment on abnormal high and low points, scans with full coverage, and obtains full-frame clear focus pictures
One Click Auto Measurement	Multiple measurement items can be saved as templates, the software intelligently matches similar shapes, removes redundant targets or separates overlapping targets, and automatically performs unified measurement, counting and analysis for multiple targets with one click
Max Area Measurement	Just use the mouse to specify the measurement range, the software automatically detects the edge of the object and selects the measurement area, you can add or delete measurement areas at will, and measure the largest area of any complex shape by automatic edge recognition instead of manual precise positioning
Auto Edge Selection	When the measurement point manually selected by the mouse is deviated on the screen, the software can automatically detect the edge of the target and automatically correct the measurement point to the edge to eliminate human error and improve the efficiency of measurement range selection
3D Verion (For XYZ Motorizded Model) Professional 2D Included, Plus Below Functions	
3D Stitching	3D stitching mode, which can automatically focus on uneven objects, take pictures at different heights, obtain a full-frame clear 2D image composed of all clearly focused images, and stitch all focused image together to form a 3D image, and retain all the 3D measurement data of the observed object • 3D Stitching
3D Image View	The saved 3D image can be opened at any time, controlled by the mouse to rotate freely, zoom in and out, open the ruler, color identification and other auxiliary tools, which is convenient to visually observe the 2D surface shape and 3D structure of the object from any angle, and thoroughly and clearly understand the observed object
3D Measurement	The 3D image also saves all the three-dimensional measurement data of the observed object, and supports any measurement of the observed object later, including the height, depth, length, roughness, convex area, concave area, convex volume, concave volume, etc.
3D Image Comparision	Two 3D images can be opened at the same time, synchronously rotated, zoomed in and out, compared and analyzed, and the comparison results such as height difference and shape difference can be automatically displayed through color identification
3D Manual Stitching	Support manual stage models, only need to manually lift the stage, the software automatically scans and takes pictures and stitches to form 3D images, upgarede manual stage model to do semi-automatic 3D scanning and stitching work.
Reproduce Observation	The conditions for extracting the analysis target are automatically saved in each file data. When analyzing different targets, the same analysis conditions can be used for extraction. No matter who extracts, it can be analyzed under the same conditions, which can eliminate human error in analysis.
Multi Files Comparison	Multiple files can be opened at once for cross-section, volume, area, flatness, roughness measurements, and more. Even if there are multiple evaluation samples, analysis can be performed instantaneously under the same conditions. It is possible to see at a glance where and what differences exist, such as changes in shape due to prototypes with different manufacturing conditions or wear. Not only can measurement work be significantly reduced, but evaluation errors caused by deviations in measurement conditions can also be prevented..
Optional Function Module For Speical Observation	
HDR	Acquires multiple ultra-clear images using a single wavelength of light and images with different shutter speeds, and turns them into 1 image with high grayscale data. Achieved unprecedented high-definition, high-contrast observation
DIC	The automatic turret of the six-hole objective lens, combined with the adjustment of the DIC prism, can make the height difference of the objective lens surface produce obvious relief effect, greatly improve the contrast of the image, and facilitate the user to analyze efficiently and accurately. Combined with polarized light observation, DIC can reflect the smallest surface morphology differences as brightness differences, and can display perfect images even for low-contrast, multi-phase samples and reflective materials.
Cell Count & Analysis	Through the automatic focusing acquisition method, high-definition scanning and splicing images of multiple areas are simultaneously obtained, and the number, concentration, diameter, and area of cells are statistically analyzed. The speed is fast and the identification is accurate.
Metallurgical Analysis	Using automatic image stitching, the image is analyzed through image enhancement, contrast adjustment, scratch processing, image correction, multi-region image segmentation, morphological processing, image annotation, and layer merging processing methods. It is easy to use and concise, and the measurement is accurate and reliable.
Cleanliness Analysis	Cleanliness analysis can be performed according to standards such as ISO Standard 16232, VDA 19.1-2015, ISO 16232, ISO4406 and ISO 4407. At the same time, it supports user-defined rating standard rules. Divide a large area into multiple areas to shoot and analyze them individually, and you can deal with a wide range of cleanliness analysis. The number of particles extracted and the cleanliness class can be displayed for each largest diameter class (B to K). Also provides height information for selected particles.
Vickers/Knoo Hardness Test Auto Analysis	Efficient and fast panorama scanning, diversified path planning, automatic continuous loading, focusing, and measurement are convenient for users to obtain accurate measurement results and greatly improve work efficiency.
Brinell Hardness Tester Analysis	One-Click automatic identification function is significantly ahead of the existing mainstream Brinell hardness tester software products.
Porosity Measurement	The system complies with VW50097, VW50093, VDG_P202 standards, and the whole image is obtained by panoramic stitching for analysis, so that the porosity measurement can obtain more reliable results in the entire analysis area.
Grain Size Analysis	According to JIS standard G0551 or ASTM standard E1382, the measurement line can select [vertical line], [horizontal line], [diagonal line], [multiple circles] to measure the crystals on test line.