

Mlchrome

Revolutionary industrial and biological microscope camera

Two Core Technology: Real-time image stitching & depth-of-field fusion

USB3.0 interface, Support OEM/ODM development



ISO9001 CE RoHS

www.tucsen.com

Revolutionary PC Computing Imaging Software Mosaic V2

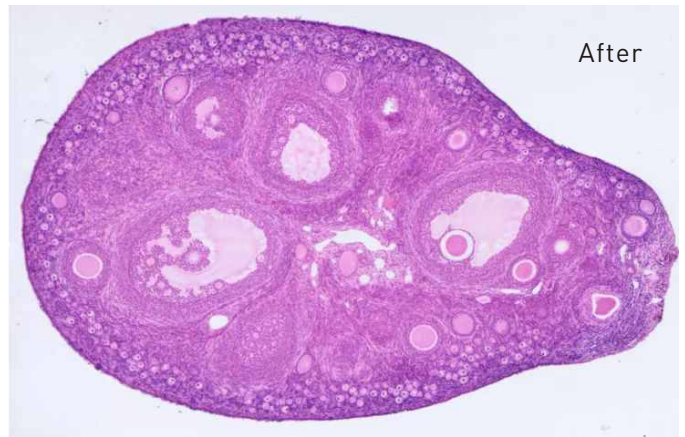
Unique from the cumbersome process of traditional technology to obtain images after processing, the revolutionary computing imaging software Mosaic V2 provides real-time image stitching and real-time depth of field fusion. This can automatically complete the image while the operator moves the stage - productivity at its best.

○ Real-time image stitching

Within a few seconds of moving the stage, Mosaic V2 can complete the whole process of panoramic stitching in real time, and it can be accurately and quickly stitched under different magnifications and arbitrary angles.

Sample: Mouse ovary section
Magnification: 10X ▶

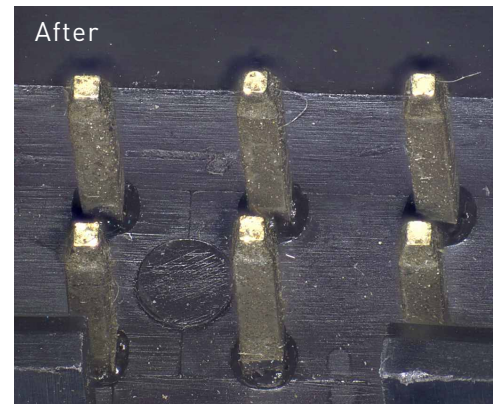
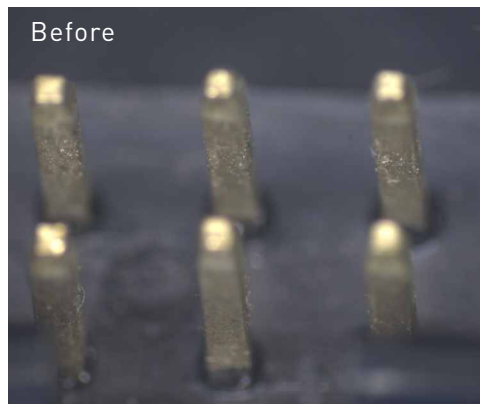
Before

○ Real-time depth-of-field fusion

Rotating the focus ring to image different depth of field points, Mosaic V2 can realize the depth of field expansion and full-length details at a glance, no more blurred images!

Sample: Circuit board pin
Magnification: 4.5X ▶



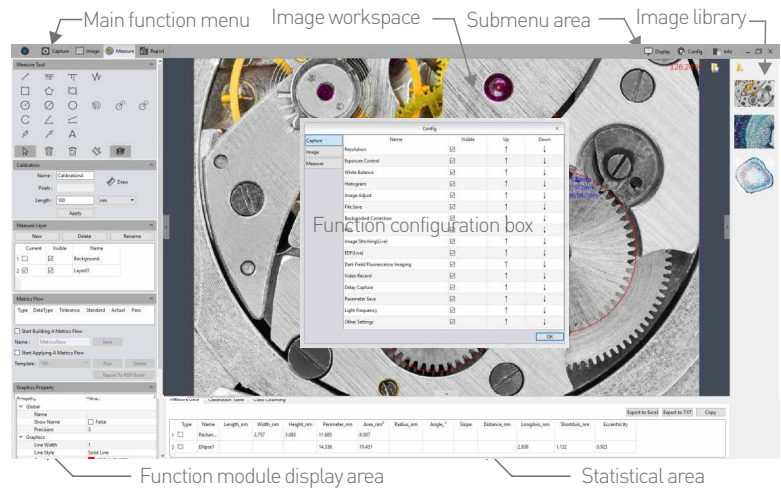
Minimalist Operation Mode, Work More Efficiently and Effortlessly

Fast, efficient and worry-free is the core design concept of Mosaic V2 software. It adopts a new image "shooting-processing-measurement-reporting" function, modular design, and integrates various intelligent image processing algorithms from Tucsen. It is dedicated to providing users with more simple operation modes and improve work efficiency in all circumstances.

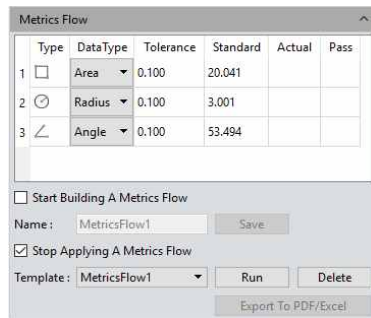
○ Mosaic V2

① Modular function configuration

Users can adjust all functions including exposure, processing and measurement according to different applications, and customize the exclusive working interface!

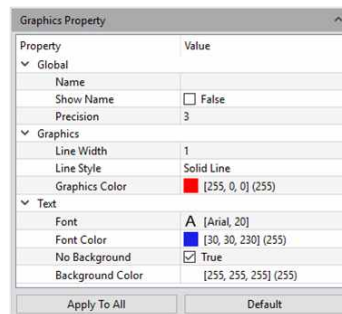


② Efficient measurement flow



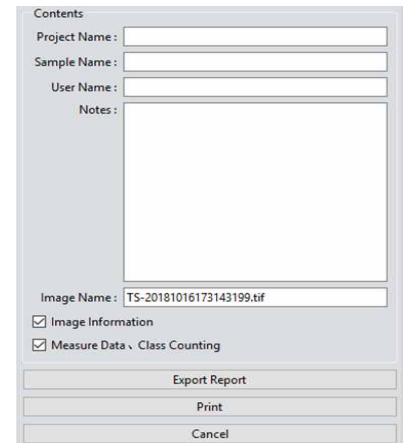
The measurement stream can be used to record repetitive measurement steps, making it easier for users to perform measurement tasks faster.

③ Visual property editing



During the measurement process, the user can modify the properties of lines, fonts, colors, etc. very intuitively.

④ Create an experiment report

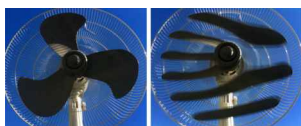


Support for project information input, then automatically generate experimental reports containing image, measurement and counting information.

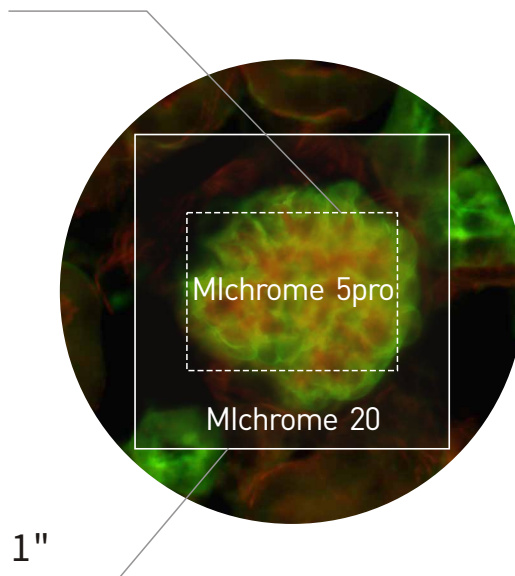
Choose the Right Mlchrome Camera for Your Application

Mlchrome 5 Pro High-speed global shutter

The Mlchrome 5 Pro has many outstanding performance capabilities beyond those of CCD cameras. It not only has an obvious advantages in fluorescent applications, but its global shutter technology can help users get better and faster operation experience when performing "real-time image stitching " for example.



2/3"

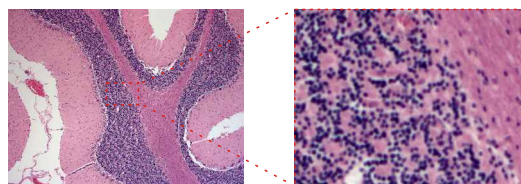


Mlchrome 20 Large area array camera

The Mlchrome 20's 1-inch sensor can achieve up to 20 megapixel resolution, giving users a better sensory effect and better image quality.

Mlchrome 16 16 MP color microscope camera

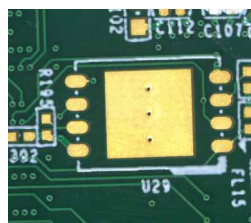
16 megapixel color microscope camera suitable for brightfield imaging applications, with real color rendition and more magnificent details, the Mlchrome 16 helps the user capture clear and high-quality images in brightfield.



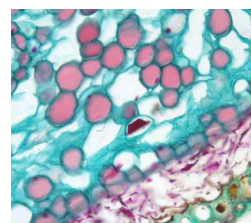
Sample name: Pathological section of chronic leukemia

Mlchrome 6 6 MP color microscope camera

The 6 MP meets the needs of most microscopic imaging applications, and its economical price positioning combined with the many features provided by Mosaic V2 gives users with a truly value-for-money experience.



Sample: circuit board



Sample: pine stem cross section

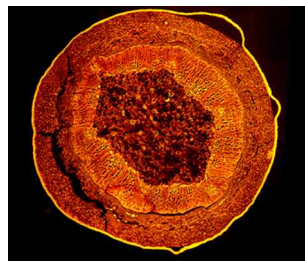
Quality within reach

- Meticulous CNC arc processing
- Environmental protection spraying
- Unique side decorative patterns
- Stainless steel C ring with no debris



Sample >>
Applications

Fluorescence
microscope



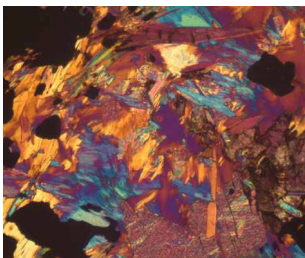
Plant stem section, 10X

Biological
microscope



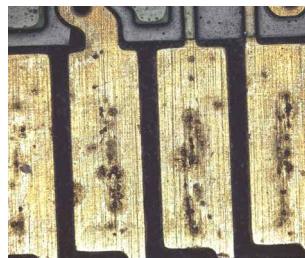
Blood vessel, 20X

Polarizing
microscope



Rock section, 20X

Metallographic
microscope



PCB board, 5X

Stereoscopic
microscope



Screw hole, 4.5X

Camera specification

Product Model	MI chrome 5 Pro	MI chrome 20	MI chrome 16	MI chrome 6
Sensor Model	IMX264LQR-C	IMX183CQJ-J	IMX 206CQC	IMX178LQJ-C
Sensor Type	CMOS	CMOS	CMOS	CMOS
Sensor Size	2/3"	1"	1/2.3"	1/1.8"
Color/Mono	Color	Color	Color	Color
Pixel Size	3.45x3.45(μm)	2.4x2.4(μm)	1.34 x 1.34(μm)	2.4x2.4(μm)
Resolution	2448(H)x2048(V)	5472(H)x3648(V)	4608(H)x3456(V)	3072(H)x2048(V)
Frame	36fps(2448x2048) 88fps(1224x1024)	15fps(5472x3648) 53fps(2736x1824) 67fps(1824x1216)	12fps(4608x3456) 15fps(4608*2736) 19fps(3648*2736)	41fps(3072x2048)
Shutter Mode	Global	Rolling	Rolling	Rolling
Multiple Cameras	Supports 4 Cameras Simultaneously in SDK			
Data Interface	USB3.0			
Optical Interface	Standard C Mount			
Camera Size	68*68*47mm			
Camera Weight	327g			

Mosaic V2 software features

Capture	Image	Measure	Report
Real-time EDF Real-time image stitching	HDR image synthesis	Customize measuring gauges, layers, precision	Report generation and printing
Real-time 3D noise reduction Real-time sharpening	Static EDF	Implements drawing: points, lines, rectangles, polygons, circles, arcs, angles	Data export as TXT or Excel
Intelligent flat field correction	Static image stitching	Visualization property editor	
intelligent automatic exposure	Real-time fluorescence image synthesis and editing	Dynamic measurement	
HDR	Binary zation	Static measurement	
Delay Capture	Histogram	Layered measurement	
JPG, PNG, TIF, DICOM	Smooth	Intelligent metrics flow is established, reused to improve measurement efficiency	
User parameter group save and load	Filter/Extract/Inverse Color		

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Specifications in this manual are subject to changes without prior notice.