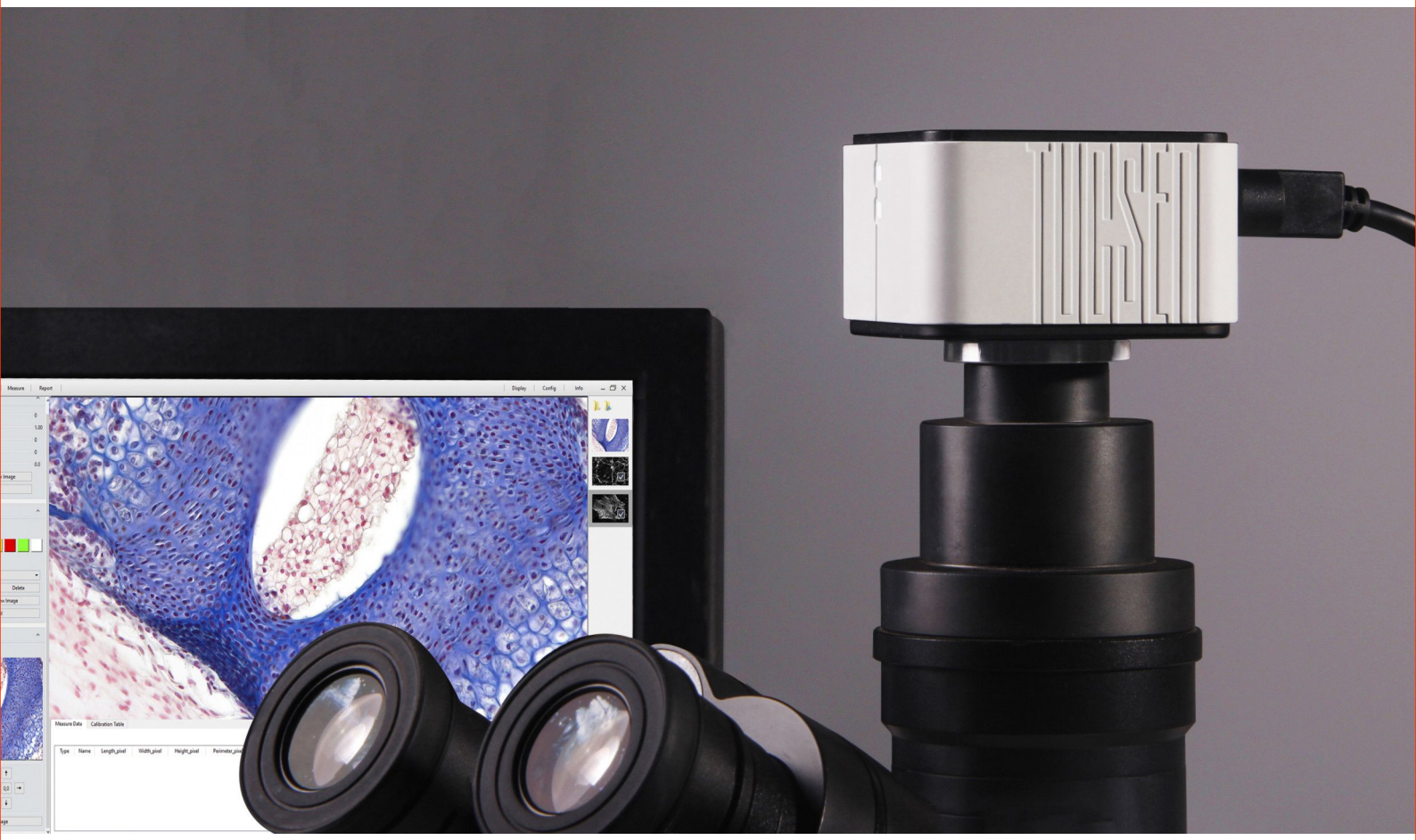


MIchrome

Revolutionary industrial and biological microscope camera

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

USB3.0 interface, Support OEM/ODM development

TUCSEN

ISO9001 CE RoHS

www.tucsen.com

Revolutionary PC Computing Imaging Software Mosaic V2

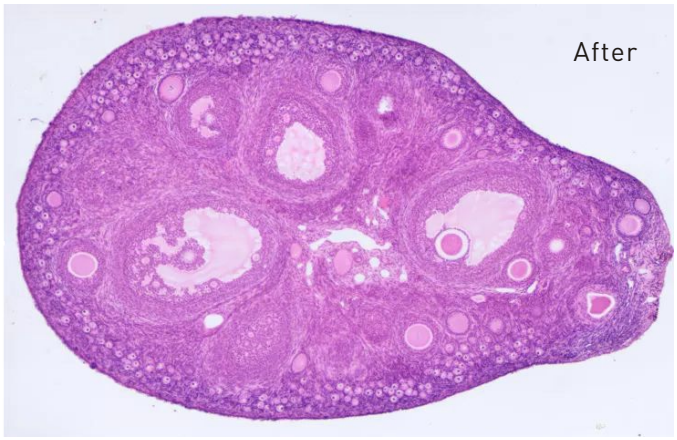
Unique from the cumbersome process of traditional technology to obtain images after processing, the revolutionary computing imaging software Mosaic V2 provides real-time image stitching and real-time depth of field fusion. This can automatically complete the image while the operator moves the stage -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

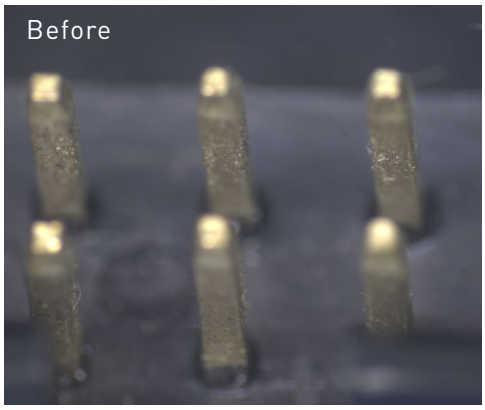
Before

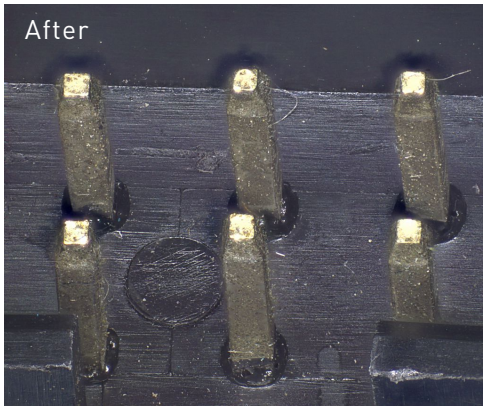


○ Real-time depth-of-field fusion

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 ▶





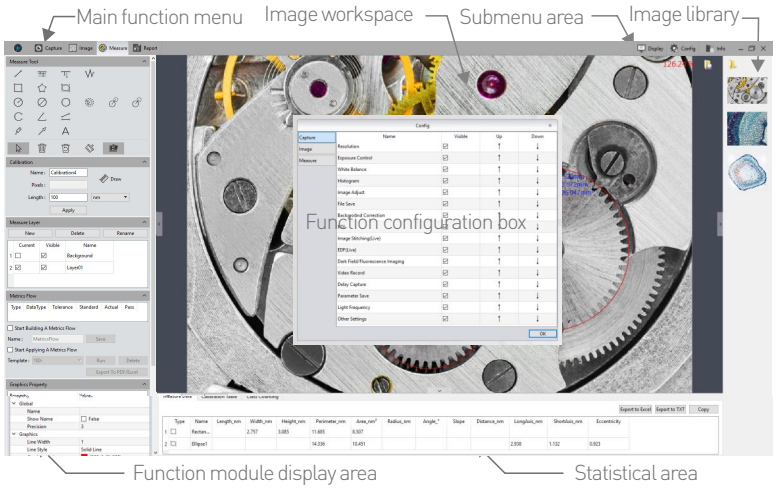
Minimalist Operation Mode, Work More Efficiently and Effortlessly

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.

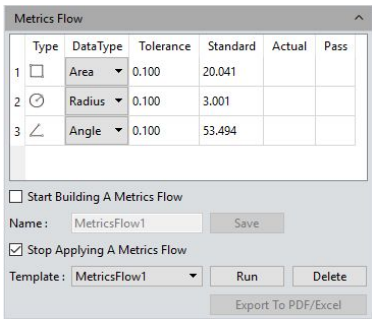
○ Mosaic V2

① Modular function configuration

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

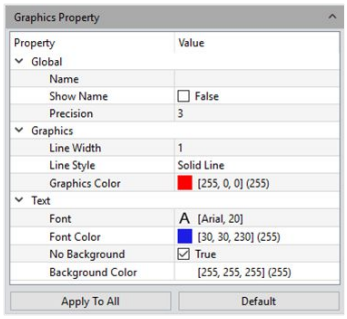


② Efficient measurement flow



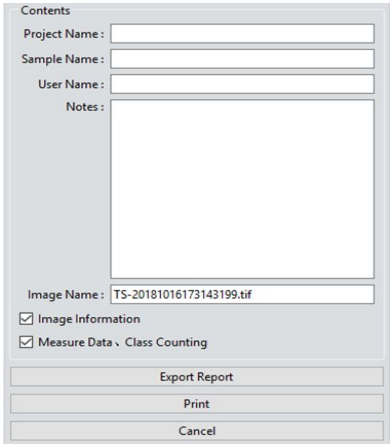
The measurement stream can be used to record repetitive measurement steps, making it easier for users to perform measurement tasks faster.

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



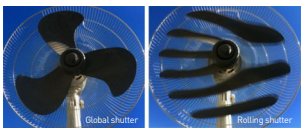
Support for project information input, then automatically generate experimental reports containing image, measurement and counting information.

Choose the Right MIchrome Camera for Your Application

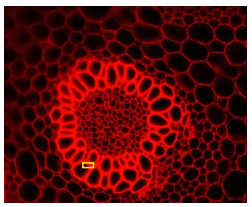
High-speed global shutter for fluorescence imaging

MIchrome 5 Pro

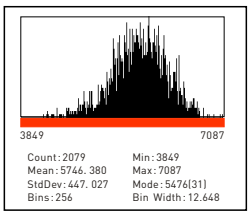
The MIchrome 5 Pro has many outstanding performance capabilities beyond those of CCD cameras. It not only has an obvious advantages in fluorescent applications, but its global shutter technology can help users get better and faster operation experience when performing "real-time image stitching " for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



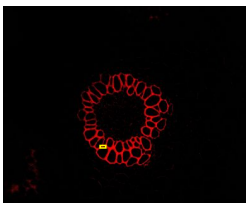
Note: Global shutters are ideal for capturing dynamic samples more accurately, avoiding the distortion of the moving object caused by non synchronized pixel exposure.



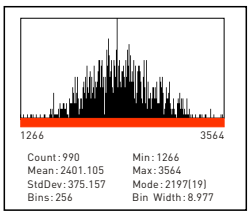
300x240 pixels, RGB:281K



▲ Camera: MIchrome 5 Pro
Exposure time: 200ms



300x240 pixels, RGB:281K

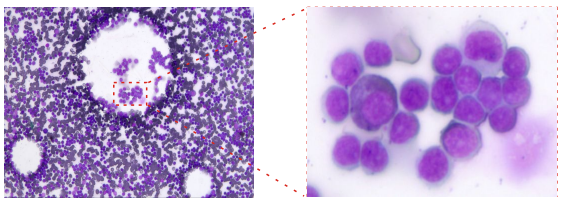


▲ Camera: 694CCD
Exposure time: 200ms

Large area array camera for high resolution imaging

MIchrome 20

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

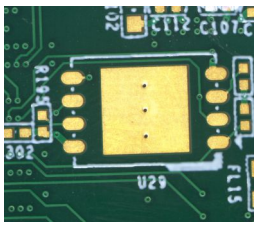


Sample name: Pathological section of chronic leukemia

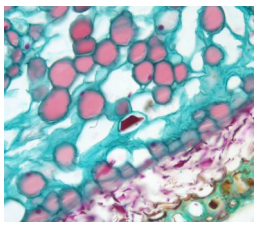
The economically popular 6 megapixel color microscope camera

MIchrome 6

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



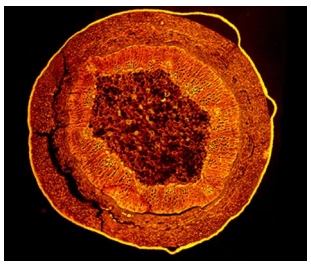
Sample: pine stem cross section

Quality within reach

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

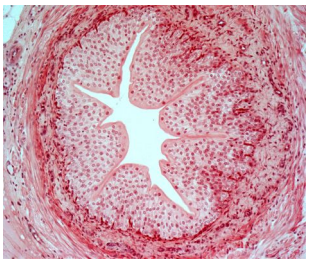
Sample >> Applications

Fluorescence microscope



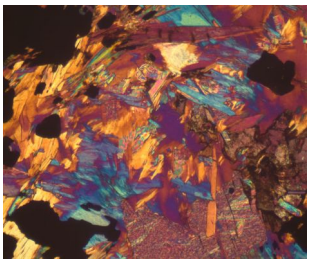
Plant stem section, 10X

Biological microscope



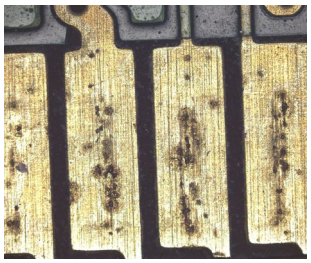
Blood vessel, 20X

Polarizing microscope



Rock section, 20X

Metallographic microscope



PCB board,5X

Stereoscopic microscope

Screw hole, 4.5X

Camera specification

Product Model	MIchrome 5 Pro	MIchrome 20	MIchrome 6
Sensor Model	IMX264LQR-C	IMX183CQJ-J	IMX178LQJ-C
Sensor Type	CMOS	CMOS	CMOS
Sensor Size	2/3"	1"	1/1.8"
Color/Mono	Color	Color	Color
Pixel Size	3.45x3.45(μm)	2.4x2.4(μm)	2.4x2.4(μm)
Resolution	2448(H)x2048(V)	5472(H)x3648(V)	3072(H)x2048(V)
Frame	35fps (2448x2048) 88fps (1224x1024)	15fps (5472x3648) 53fps (2736x1824) 67fps (1824x1216)	41fps (3072x2048)
Shutter Mode	Global	Rolling	Rolling
Exposure Time	0.13ms-15s	0.13ms-15s	0.13ms-12s
Auto Setting	Exposure Time, Color scale, White Balance		
Manual Setting	Exposure Time, Gain, Noise, Gamma, FFC		
Color Temperature	2000-15000K		
PC Software	Mosaic V2		
Picture Format	JPG/PNG/TIFF/DICOM		
Operating System	Windows , Mac		
PC Requirements	CPU: Intel Core i5 or better(Quad or more Core), RAM: 8G or more		
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		

Software functions

- **Real-time EDF**
- **Real-time image stitching**
- **Real-time sharpening**

Modular function configuration

Intelligent 12-bit ISP color reproduction

Real-time fluorescence image synthesis and editing

HDR image synthesis

Micro-imaging-based intelligent automatic exposure

Intelligent flat field correction based on dynamic calculation

Smart measurement workflow

Implements multiple iterations of workflow execution

Supports single shot, delayed camera

Automatic video and delay video generation

Output format selection

User parameter group save and load

Dynamic\static measurement

Layered measurement

Customize measuring gauges, layers, precision

Customize image naming, style, save location

Implements drawing: points, lines, rectangles, polygons, circles, arcs, angles

Data export as TXT or Excel

Report generation and printing

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