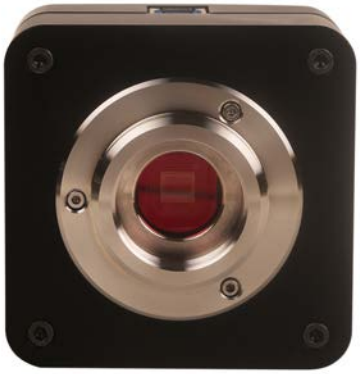
High Sensitivity Microscope Camera with Advanced Software 3DCxM8.3 - 8.3 Megapixels

High Sensitivity Camera

This microscopy camera was designed with high sensitivity and ultra low noise in mind. The **back illuminated color sensor** allows light to be easily absorbed in the active layer on the sensor, resulting in greater quantum efficiency.

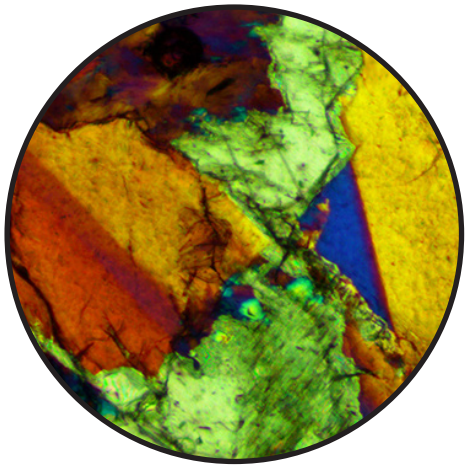
- 8.3 Megapixels
- High Sensitivity
- Low Noise
- USB 3.0 Fast Output



C. Elegans

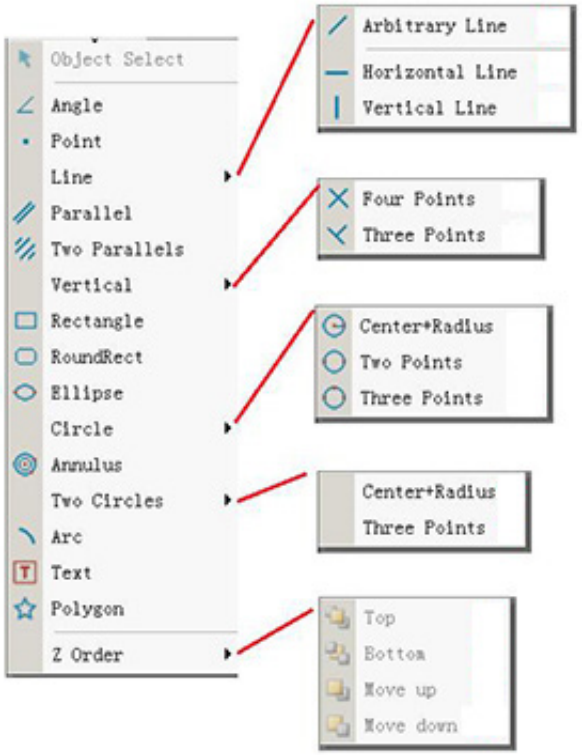
Applications

- Low Light
- Brightfield Biological
- Darkfield
- Phase Contrast
- Reflective Samples
- Industrial Samples
- Documentation



Polarization

Measurement Options



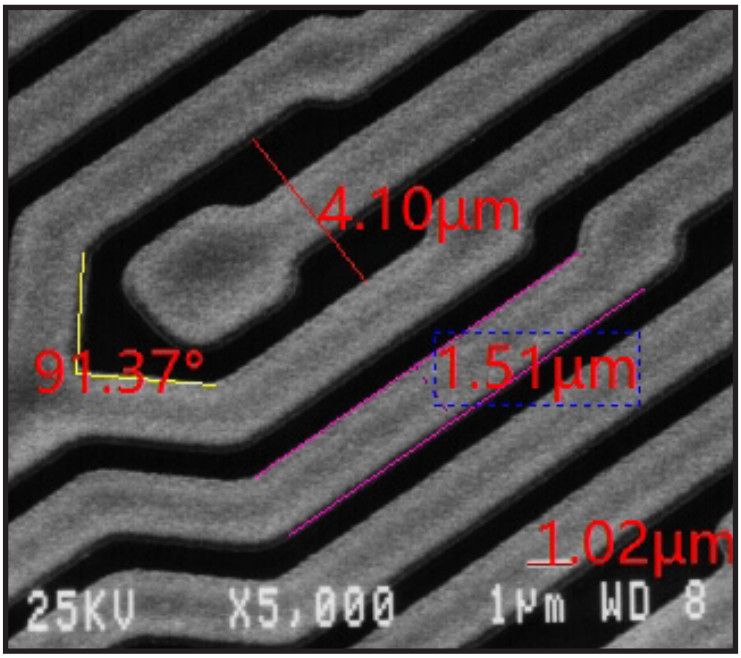
Choose from a large variety of measurement options and tools:

- Angle (3 or 4 points)
- Line
- Parallel
- Two Parallels
- Vertical (3 or 4 points)
- Rectangle
- Ellipse
- Circle
- Annulus
- Arc

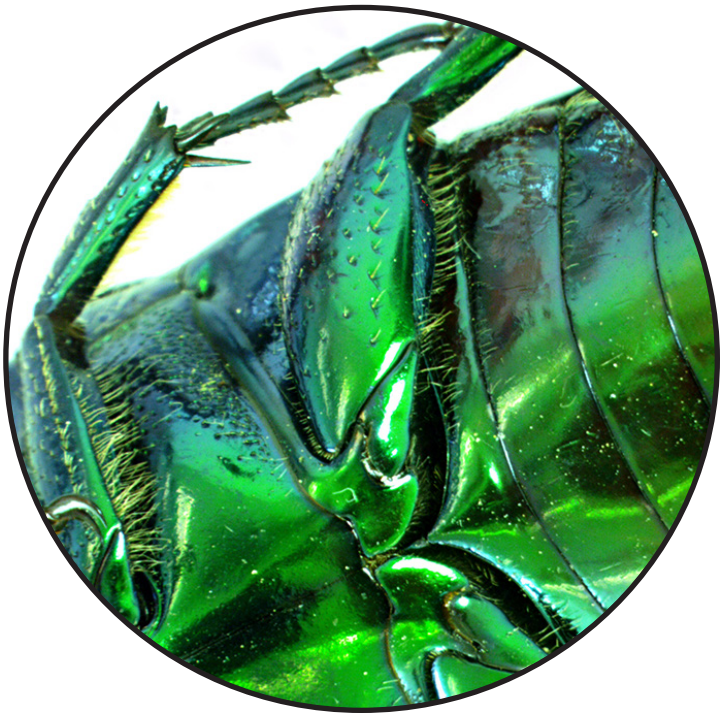
Calibration

Accurate calibration should be performed on each objective lens with a stage micrometer. If using a stereo microscope click stops are the only way to make accurate, repeatable measurements. Available calibration measurement options include:

- Inches (in)
- Meters (m)
- Centimeters (cm)
- Millimeters (mm)
- Microns (µm)
- Nanometers (nm)



Extended Depth of Focus

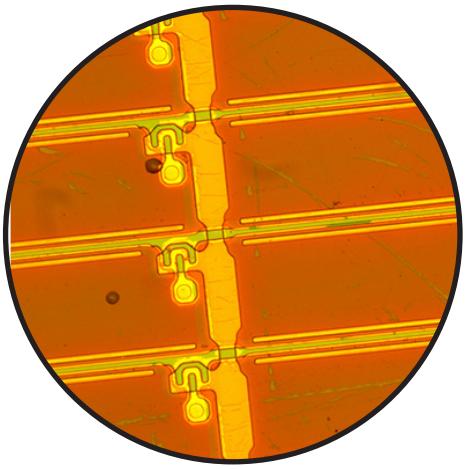


The extended depth of focus feature allows you to capture multiple images at different focal lengths and merge them into a single extended depth of focus image that appears to be three dimensional due to the increased details and crisp focus. This feature is especially useful when trying to capture images that are not flat and may have contours in them. These samples often need refocusing in order to capture the entire image under the microscope in clear focus.

Basic Settings

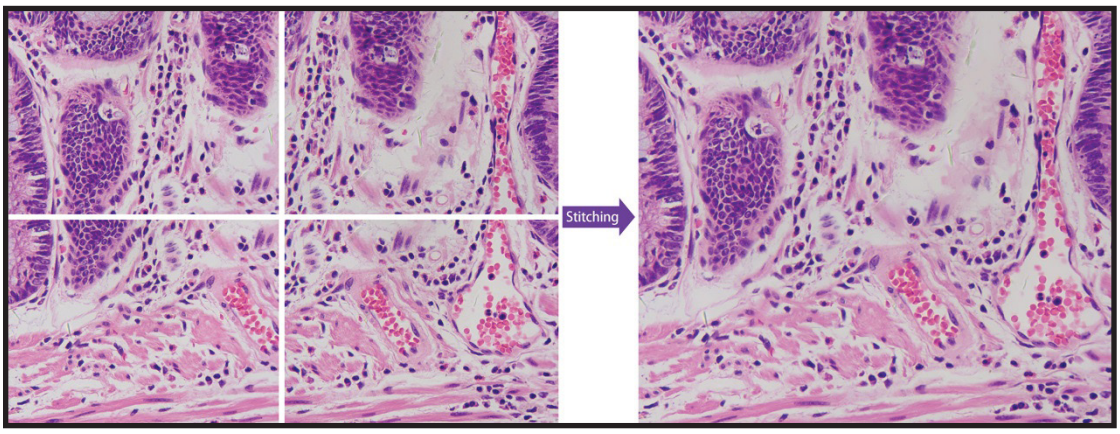
Some of the software's basic features include:

- Exposure, Gain, White Balance
- Saturation, Brightness, Contrast, Gamma
- Color Adjustment
- Power Frequency (anti-flicker)
- Frame Rate Setting
- Image Rotation
- Darkfield Correction
- Image Capture
- Video Capture



Printed Circuit
200x, Brightfield

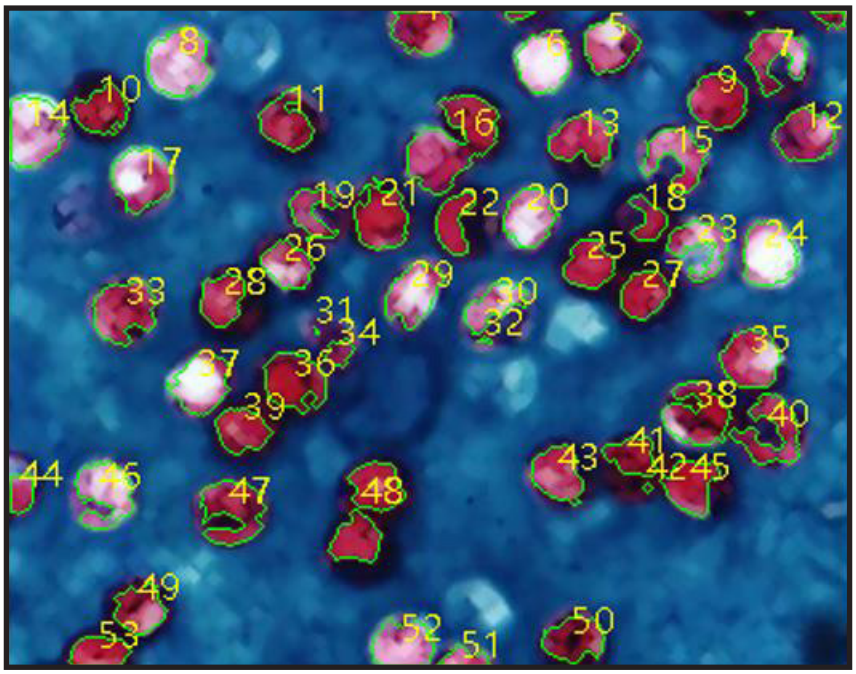
Image Stitching



If your specimen falls outside the field of view, but you wish to capture all of the sample in a single image, the image stitching option is a simple solution.

Segmentation for Color and Counting

The software allows for segmentation based on color. Once a sample has been segmented, a count can be performed. This count is a useful tool, but should always be used with a visual count as well since parts of a segment can overlap and only count as one segment. Take a look at number 48 shown below, this sample was counted as one segment, but in reality might be two depending on the test requirements. Therefore, a visual of the software count should always be performed prior to final reporting.



3DCxM8.3 Microscope Camera Specifications

Image Sensor	1/1.8" Sony Exmor Back-Illuminated IMX678(C) (7.68 x 4.32) CMOS, USB 3.0
Pixel Size	2.0 x 2.0µm
Resolution	3840 x 2160
Frame Rates	45fps @ 3840 x 2160
	70fps @ 1920 x 1080
Binning	1x1, 2x2
Exposure	0.02ms~15s
Output	USB 3.0
Spectral Range	380-650nm (with IR-filter)
Power	DC5V over PC USB Port.
USB Controls	White Balance, Auto White Balance
	Capture still images or motion video with software
	USB works with full use of software on PC or Laptop
Software Features	Image capture, still or motion video
	Adjustment of white balance, color, frame rate, exposure, gain, flip, sampling, bit depth, ROI, histogram, darkfield correction.
	Annotation
	Measurement and Calibration: angles, lines, diameter, polygon, etc.
Operating System for Software (USB)	Windows 10 and 11, Linux, Mac OSX. NOTE: with Mac OSX software only provides basic image management, no measurement or extended features.
PC Requirements (USB)	CPU equal or greater than Intel Core2 2.8GHz
	Memory: 2GB or more
	USB3.0
Operating Temp	-10~50°C
Storage Temp	-20~60°C
Operating Humidity	30-80%RH
Storage Humidity	10-60%RH
Size	68mm (2.7") W x 68 mm (2.7") D x 46mm (1.8") H
Connection	C-Mount Threads

info@feinoptic.com