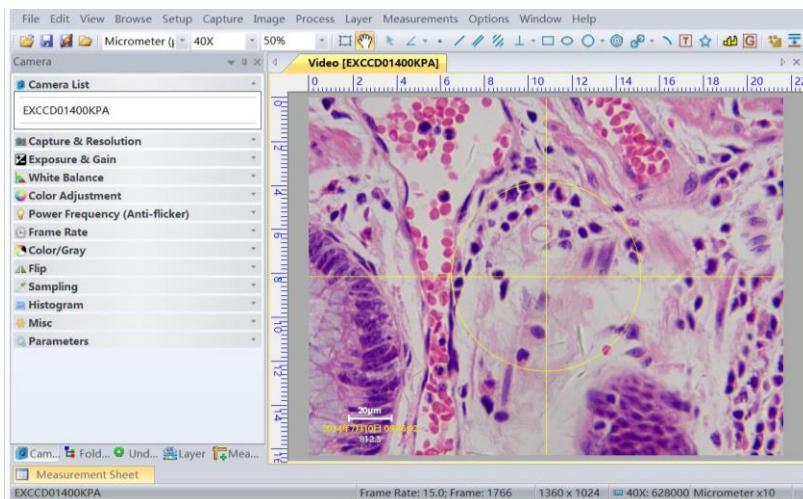


INTRODUCTION

ACUCAL offers IMAGE VIEW Software with all High Resolution Microscopy Cameras. It is the most efficient and flexible image processing software for all types of Microscopes (Stereozoom, Metallurgical, Biological, Research, Fluorescence, Polarising and Hardness Testers). It has intuitive user interface and simple to use navigation with a suite of image processing techniques, measurements and enhancement tools that set it apart from other mainstream softwares.



It is essential software for R & D and Analytic Study of Life Sciences, Material Sciences, Geology, Textile, Automobile, Chemical and other various components.

Image View Software comes with facility of Report Generation in excel and word file.

FEATURES

- Image View for all ACUCAM Series camera for Image Processing & Measurement.
- Windows XP, Vista, 2008, Win7, 8, 10 (32/64 bit)/, 11, MAC OSX10.9, Linux UBUNTU1604
- Ultra Fine color engine, Diversified useful tools.
- Management, visualization and printing of metadata and images
- Medical microscopic imaging, Industrial detection, Research Work.
- Support image capture(JPEG, BMP, TIFF, PNG, TGA, TFT, DICOM) & Video Recording (AVI).
- Software shows calibrated accurate scaling and actual magnification on the captured image & Live image

What's in the included software

User-friendly UI design

- Well-arranged menus and toolbars ensure quick operating with user experience customization.
- The unique design of 5 sidebars - Camera, Folders, Undo/Redo, Layer,
- Measurement are orderly classified.
- Convenient operating method (Double click or right-click context menu) as much as possible.
- Input via TWAIN, Detailed help manual.

- **Apply Measurements to Live Images** : Measure distances, angles and more on Online Live or Captured image.

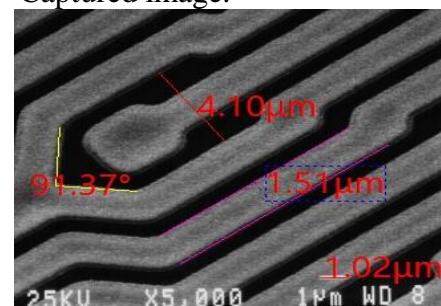


IMAGE CAPTURING & ANALYSIS SOFTWARE SPECIFICATIONS

Exposure & Gain (Auto & Manual)	Auto exposure (exposure target preset), and manual exposure (exposure time can be inputted manually); Auto Gain control Up to 10 times gain
White Balance(Auto & Manual)	Advanced single-click intelligent white balance setting, temperature and tint can be manually adjusted & ROI
Color Adjustment/Routine Filters	Hue, saturation, brightness, contrast, gamma RGB initialization adjustment on every image, Invert , Blur, Noise removal, etc.
Image Editing	Cut/Copy/Paste, selected copy by free hand AOL. Resize, Crop/Duplicate/restore, conversion to other format like BMP, JPG, TIF, Annotation like, free hand drawing, straight line, square, Circle, arrow, Text, highlighter etc, pointer, eraser.
Frame Rate Control	Adjustment of frame rate available for different computer configurations;
Power Frequency Setting(Anti-flicker)	Natural light/DC, AC 50 HZ, AC60 HZ switch function thoroughly eliminates video flicker;
Flip	Check the “horizontal” or “vertical” or “diagonal” option to correct the sample direction;
Skip and bin sampling	Bin mode can obtain low noise video stream; skip mode obtains sharper & smoother video stream. Support video stream histogram extension, negative & positive switching, gray calibration, clarity factor for focusing etc.
Edge Detection & Morphology Functions Parameters	Annotation, Load, save, overwrite, import, export self-defined parameters of camera control panel (including calibration Information, exposure and color setting information) Cross& Angle dividing rules on live & captured images, Negative mode to highlight hard-to-see details, Laplacing, sobel, Kirsch, Sclerotizing, pruning, histogram equalization, histogram smoothing etc.
Image & Video Capturing functions	Colour & Mono Image Single capture & time lapse acquistion, Reference scale, Real Time Video Preview, Various professional functions: Video broadcast; Record & Movie Play Back, Time lapse capture(0.1ms~10hrs interval); Video record; Video watermark; Move watermark; rotate watermark; Video stream grid; Video measurement; Video calibration, Gray calibration; ideo EDF; Image stitch; Video scale bar, date and etc.;
Image Processing and Enhancement	Zoom in/Zoom out, rotation 90°,180°,207°, horizontal flip/vertical flip, Redo/Undo, Control and adjust image by contrast, Hue, saturation, gain, contrast, brightness and gamma controls • Advanced image processing brightness, gamma, colors, smoothing, sharpening, geometric corrections, zoom upto 16x, denoise, all kinds of filtering image algorithm & arithmetic, and mathematical morphology algorithm; image rotate, image scale, Merge, Crop, image print, background compensation, Dark Flat Field Correction, Auto & Live Z Stacking, Auto & Live image stitching, Flat Field Correction, Parallax Correction, overlay multiple images, Manual Multiple image alignment(MIA), Background subtraction, contrast enhancement
Calibration & 2D Measurement (Live & Still Image Captured)	Image mosaic Large calibration, Interactive linear measurements distance (length, width, arc, radius, angle, Line ,Rectangle,2&3 point Circule ,polygon, point ,Distance b/w two parallel lines,Dree Hand line area/Ellipses ,3 point ,center to center distance ,Text Stamping ,Annotations) easy video or image calibration. various video and image measurement methods like area, perimeter, diameter, number of points, angle etc. through image stack measurement results can be hierarchical controlled according to characteristics or preferences with cross hair, digital grid, line profile display, arrow, line, quantity, linear, rectangles, circles, Point ellipse, polygon, irregular shape, circle-to-circle distance (graticule) and angle ruler, particle counting, pitch distance, perform measurements directly on the Online live image & Captured Images, data saving, Interactive measurement table, report creation arc, all measurements can be saved along with micron scale bar with accuracy of + 0.1µm and range as per FOV of Camera.
EDF(Extended Depth of Focus) or EFI (Extended focal images)	Aimed at generating a clearer image by combining a sequence of previously captured multi-focus images, Focus Stacking; Support video window, image window, browse window EDF operation. Provided with maximum contrast, weighted average, FFDSSD algorithms to meet with most applications. Consider image shift, rotation and scale in the EDF process to guarantee EDF accuracy & speed; instantly create Extended focal images (EFI), Edge detection

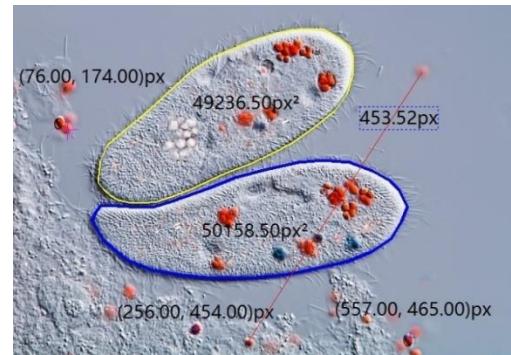
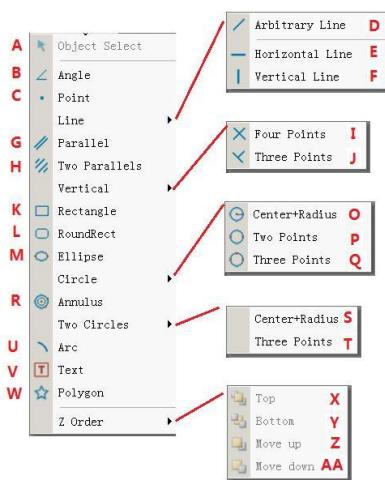
Professional Segmentation & Count function	Count and Measure Basic (Phases/ regions), Integrate the advanced 6 image segmentation and particle auto counting algorithm (Watershed (W), OTSU Dark, OTSU Bright, RGB Histogram, HSV Histogram and Color Cube). Manual segmentation function (Split objects) ensures the success of a complete segmentation.
Color Composite	HDR (High Dynamic Range) function, Color composite adds appropriate pseudo color to monochrome fluorescence images. fluorescence histogram, different fluorescence calculations, Fluorescence probe and color can be chosen from the pre-defined data-base. Dye database can also be easily created for special fluorescence probe, fluorescence image settings; fluorescence multi-color channel merge, fluorescence image merging, Fluorescent image composition including RGB Look-Up Tables (LUT), Capture multi wavelength,. Get maximum information out of your multi wavelength data with fluorescence unmixing and colocalization analysis tools
	Document groups for side by side image comparison, tile image, slice view for orthogonal plane viewing of 3D or time lapse datasets, snap/movie acquisition, Live deblurring , Dead pixel Correction .Experiment Manager, deconvolution, voxal viewer for iso surface and volumetric rendering of 3D and 4D data. Multichannel 5D, acquisition- The process Manger makes quick work of complex acquisition by coordinating Microscope, shutters, filter wheels, and Z devices.

- Supports 4 cameras simultaneously in SDK
- All the result can be exported to Microsoft Excel or Microsoft word for further analysis.
- REPORT Direct printout with original image tabulated results.
- Software shows calibrated accurate scaling and actual magnification on the captured image

IMAGE MEASUREMENT FUNCTION

The Measurements menu is mainly used for the image measurement application. With this menu items, you can measure the image with many geometrical shape at ease. The software use Layer technique to perform the measurement operations. This will never pollute the image pixels.

The Measurements menus and its submenus are shown below.



• Classify Measurement

Use different colors, shapes, and custom names to classify and organize your measurement data.

