µScope Professional Features

Live Measurement and Overlay Settings: Measurements can be taken on a live preview image with crosshair orgrid masks. Calibration markers (or scale bars) can be placed on the livepreview images or automatically added to each image as they are captured.

Calibration (Auto or Manual): Before accurate measurments can be taken, an auto or semiauto calibration needs to be performed based on pixels-per-unit. Manual calibrations can be performed, saved and later referenced from a drop down menu. Password protection of the calibration files ensures their integrety for later use. Passwords can be utilized in the calibration menu or with the camera resolution option.

Time Lapse Capture: The time lapse capture feature creates a video from a sequence of still images. Images can be imported from TIF, BMP and JPG file formats. Videos can be exported as AVI, MPG, MPEG and MOV file formats.

Line Profiling: Single, multiple, parallel and Polyline commands provide Gray/Red/Green/Blue intensity values for specific lines within an image. The profile data of each pixel on the line can be exported to Microsoft® Excel.

Export to Excel®: Images, measurements, calibrations, annotations, statistics and charts can all be exported in Excel format for later review.

Report Generator: create, insert images and OLE objects

Fast and Perfect Focus Enhancement: Fast Focus Enhancement allows you to combine individual unfocused images into a single, in-focus composite image. Before you perform this command you need to select (enumerate) the unfocused images in the Context window. Perfect Focus Enhancement is used in the same way but will provide a better quality image, showing more detail.

Live Focus Enhancement: Live focus enhancement allows users to adjust focal depth or take measurments in a preview window without having to capture an image. Changes can be made while focused in on different target locations.

Image Editing: You can use one of these many commands while editing your image:

Undo	Redo	Copy	Paste	Paste	New	Delete	Delete All
Annotate	Image Info	Histogram	Clone	Crop	ROI	Resize	Rotate

Manual Measurements:

Distance	Straight Line	Circle by Radius	Circle by N Points		Circle by Diameter
Circle by 3 points	Rectangle	Polygon	Polyline	Splice Lines	Angle Lines
Perpendicular	Point Count				

More Great μScope Professional Features

Annotations: The following annotations are available.

Arrow	Polyline	Spline	Rectangle	Ellipse	Text	Difference Lines

Image Processing: Brightness, contrast, gamma, background subtraction, histogram, clone, crop, ROI, resize, rotate, split and image mode can all be adjusted manually. Images can be viewed in Grayscale, RGB, HSB, YUV Pseudo, 8bit and 16bit color modes. Filters asist with enhancement and morphology.

Region of Interest - ROI: When necessary a Region of Interest can be identified, selected and compared to samples in separate images. Several selection tools are available to isolate the ROI and those include; rectangle, elipse, arbritrary, polyline, spline and magic wand. After making your selection the area can be exported for comparison with separate images.

Magnification Control: Zoom In/Out   Fit to Window   Zoom in Window 1600% Magnification

Available File Formats:

TXT	IMG	JPG	JPEG	TIF	BMP	Gif	PCS	TGA	MPG	MPEG
AVI	MOV	IMG	RPT							

Window View Options:

Split Horizontal Classic	Split Vertical Modern	Cascade Dynamic	Tile Horizontal User	Tile Vertical	Arrange Icons

Time Lapse Sequence Control: You can show the progression of a sample by creating a video file from a sequence of still images. The resulting video can be shown forward, reverse. By utilizing a split screen option two different examples can be shown together.

Z-Axis Extended and Focus Imaging (EFI): When viewing a sample under higher magnification it often becomes difficult to focus on elements at various depths. This is even more pronounced with a stereo microscope, where the view is from an angle. To achieve a clear image that incorporates the z-axis, images with different focus depths can be combined, allowing all elements to be viewed in focus at the same time. This composite can be created manually or automatically and trace composites are eliminated.

3D Visualization: The 3D visualization feature takes a flat image and creates a 3D rendering based on variations in intensity. Adjusting the z-axis setting makes it possible to adjust the 3D effect. Rotating the sample 360° on all three axis, makes it possible to view it from any perspective. The image or a wireframe view can be saved in JPG, GIF and BMP file formats.

Image Stitching: As you increase magnification the field of view decreases. If an image of the entire sample is needed this can be accomplished by combining adjacent tile images into a single composite image. This process can be performed manually or automatically. Variations in brightness can be automatically adjusted to create a seamless image.

Live Image Comparison: Multiple images can be evaluated at one time to verify dimensions, perform QA testing or make Go/No-Go determinations.

Combining Image Planes: Fluorescence images and monochrome images can be merged into a single RGB composite.

Shading Correction: Images captured at low magnification often have a background shading near the edges. This shading can be removed with the shading correction function. Capturing an image without elements allows for the shading to be removed without affecting the color of the elemnts being viewed.