INFINITY ANALYZE is a complete image capture and processing software package for advanced imaging in the life science, clinical and industrial research markets. Easily capture and process images with excellent reproducibility and accuracy. The combination of INFINITY ANALYZE and INFINITY USB 2.0 microscopy cameras create the perfect solution for all your imaging needs.

›Camera Control
INFINITY ANALYZE provides an intuitive camera interface containing advanced features to produce high quality images. The layout is customizable and has the ability to save unlimited unique user settings. It contains simple save features that allow you to easily manage and organize your images.

Features include:

Basic Controls
Real time preview, manual/auto exposure, white balance, gain, brightness, gamma, saturation, intensity, hue, image orientation, averaging, subsampling, light source selection, clockwise/counterclockwise, rotate 90, rotate 180, flip vertical, flip horizontal, flip diagonal, mirror, zoom preview, cascade, tile horizontal, tile vertical, INFINITY3-1 cooling control.

Capture Options
Single capture, time lapse, auto increment filename, single key capture.

›Image Processing and Archiving
INFINITY ANALYZE allows you to quickly and easily process images which can then be entered into an archive application or saved in a variety of formats. Measurements and annotations are easy to perform, highly reproducible and can be customized to your needs. Easily manage and retrieve images within this built-in database.

Measurement
Caliper, polyline, circle from 3 points, area, perimeter, polygon, counting, light density, micrometer, grid/circle overlay, manual calibration, drag and drop data to excel.

Annotation
Line, rectangle, round rectangle, ellipse, polygon, arrow, text.
Image Processing and Archiving Continued

**Advanced Image Processing**

Multiple image averaging, subsampling, flat field correction, denoise, unsharpen, adaptive edge emphasis, sketch, equalization, amplitude depletion, darkfield simulation, photometric transform.

**Combine Images**

Combine, max, min, average, split, subtract, divide.

**Stitching**

Stitch small images into a large seamless image along vertical or horizontal planes.

**Fluorescence Image Composition**

Create a composite image of fluorescent images captured through mono channel filters, and apply RGB Look-Up Tables (LUT).

**Database/Archive**

A custom database system has been built into INFINITY ANALYZE. The database is accessible whenever the software is running. All the information content of an image, together with its quantitative measurement results, date of creation, author and description may be archived.

**Advanced Features Module**

**Multi-Focus Enhancement**

Multi-focus enhancement creates depth of focus using multiple images from a stereo or compound microscope. The resulting image is focused from top to bottom and leaves no trace of the original images.

**Spherical Aberration Correction**

Spherical aberration correction reduces the blur caused by the increased refraction of light rays hitting a lens near its edge, in comparison with those that strike near the center.

Software Appearance and Help Menus

With INFINITY ANALYZE you can customize your workspace to your specific application through the addition or removal of icons and work spaces, as well as access help menus for each software feature. A field group menu provides a thumbnail worksheet to easily manage multiple images.

**Field Menu**

The field group menu in INFINITY ANALYZE is a buffer of images with a thumbnail displayed for each cached image. The field group can be the destination for captured images or it can act as the input for multiple image processing such as fluorescent combination or stitching.

**User Defined Interface**

Add/remove/customize tool icons.

**Help Section**

Active help boxes for each software function are provided.

Upgrading to INFINITY ANALYZE

Existing INFINITY CAPTURE users can quickly and easily upgrade to INFINITY ANALYZE for a nominal fee. Please contact Lumenera directly at support@lumenera.com or visit our website at www.lumenera.com for details.