

EntoVision System Software

Archimed Software with context sensitive integrated modules - Database, Real Time Video, Image Processing, Report, and Extended Focus with simple drag and drop movement of images between modules and retained calibration

Database - for efficient storage and retrieval of images, Creation of password-protected databases, Search by criteria and by keywords, Management by album, adjustable size of thumbnails, Image information: size, file path, calibration, format (Jpeg, Tiff, Bmp)

Real Time Video - for preview and rapid acquisition of images, Display in real time (NTSC : 30 images per sec - PAL : 25 images per sec - or maximum of camera), Calibration with imprinting of scalebars and annotations on live image, functions with Black and White cameras, 3CCD color cameras and Frame grabbers

Image Processing - for image adjustment, annotations and display of images from any module, Digital acquisition from any TWAIN compliant source, Image processing and improvement, merging, fixed magnification, comparison

Report - for quickly and easily integrating text and images into a printed document, Creation of report templates, saving to the database, exporting to PDF

Extended Focus - for building a sharp image from images acquired at different focal planes, extended focus processing algorithms with live preview developed specifically for entomological & biological samples with Position Compensation, Magnification Compensation, Brightness Compensation, Standard & Fast processing, Estimation area adjustment and Sharpness adjustment, ability to save entire stack of images as one file

Portfolio - temporary storage of an unlimited number of images, reports, and multi-focal stacks that are then available in all modules

Saisam Software - measurement of several types of objects simultaneously grouped into classes, the following measurements are available: position, length, width, aspect ratio, Feret, diameter, orientation, radius, equivalent, diameter, perimeter, surface and form factor

Cartograph Software - acquisition of multi-focal stacks with motorized z-axis control, image plane step distance automatically defined by depth of focus of optics

Annotations - full annotation capabilities in all modules including on live image, choice of lines, arrows, squares, circles, ovals, text, scalebars, date and time stamp with adjustment of color, background, justification, size and thickness

Camera controls - setting of exposure with integration, choice of light source, white balance with manual adjustment from color wheel, vertical shading waveform control, gain, master black, gamma correction, sharpness, noise reduction, monochrome conversion and negative image

Motorized focus controls - stepper motor and direct motor drive with control of acceleration, velocity, and ramp speed

Additional software features - ability to control an unlimited number of cameras with full remote control capabilities, manual and motorized objective turret selection, motorized XY stage control, definition, selection and control of filter wheels, diaphragms, lighting and temperature probes.

Extensible with optional software modules: Cartography - Manual construction of mosaics (assembling several XY images into one single image), Movie and Sequence - for creation and recording of time lapse sequences and movies

EntoVision System Hardware

Camera - C-mount, 4.35 megapixel 3CCD square pixel progressive scan 1/2" sensors, 1360x1024 resolution, 7.5 frames per second, HDC v1.3 subset of IEEE1394 for uncompressed data transmission,

Optics - plan apochromatic motorized zoom microscope with field of view range from 0.75mm to 24mm, depth of field range of 5.23mm to 0.025mm, repeatable magnification settings, iris diaphragm

Lighting - custom LED Diffuse Lighting Dome with articulating arm and bracket, includes controller for separate control of intensity of individual quadrants

Column and Stand - Motorized stepper motor zoom with feedback to software for selection and calibration, less than 2um resolution, large reflected light base with B/W stage plate, gliding and rotating specimen stage, completely integrated with mounting for all components (camera & optics, stage, lighting), four vibration damping feet, custom quick-mount attachment of column to base

PC - dedicated laptop computer with minimum 2GHz dual processor, 17 inch flat screen LCD with 1920x1200 resolution, CD & DVD burner, 100GB hard disk, 2GB RAM, Windows XP Professional, 256 MB High performance graphics card, ROHS compliant

Case - offering total protection for the equipment. It is made of Ultra High Impact structural copolymer that makes it strong and durable. Its exclusive 1/4" (6.4 mm) neoprene o-ring and ABS 'easy-to-open' latches seal perfectly and includes an automatic purge valve for quick equalization after changes in atmospheric pressure. It is equipped with heavy-duty wheels, a retractable extension handle and multiple fold down carrying handles. The equipment fits into the high-density foam and padded dividers for total subjection and protection against impact, vibration or shock. This case is NATO codified and tested to MIL C-4150J (Military Standard), IP-67 (Ingress Protection) and ATA (Air Transportation Association). You break it, we replace it... forever.

Additional EntoVision System Features

On-site installation and training of system with in-depth instruction on illumination of Entomological specimens, quick-start guide on extended focus imaging, 18% gray cards for proper white balancing procedure, all necessary items for illumination of specimens, printed and electronic copies of all manuals, unlimited lifetime telephone technical support