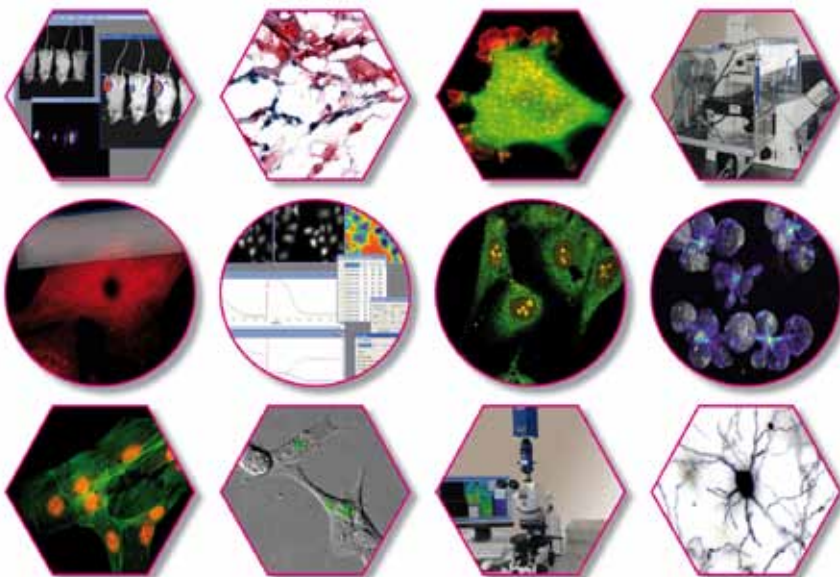


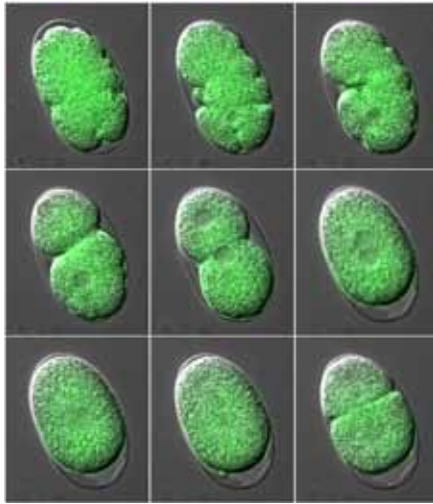


Imaging Software for Life Science Research

VisiView® is a high performance imaging software from Visitron Systems GmbH for Bioluminescence applications. It is specially designed to meet the needs for high-speed image acquisition and processing with ease of use. Our software controls complex automated microscopes and microscope equipment in combination with multidimensional acquisition and analysis. The multitasking operation supports simultaneous image acquisition and analysis. The VisiView® software represents the philosophy of simple operations and seamless integration of applied standards.

Flexible and
microscope platform
independent software





Time-Lapse Acquisition

Acquire changes in living specimen over time at defined intervals and display the image sequence as a movie to show cellular dynamics. The image sequence will be saved in single TIFF, multi-file stack or nd format.

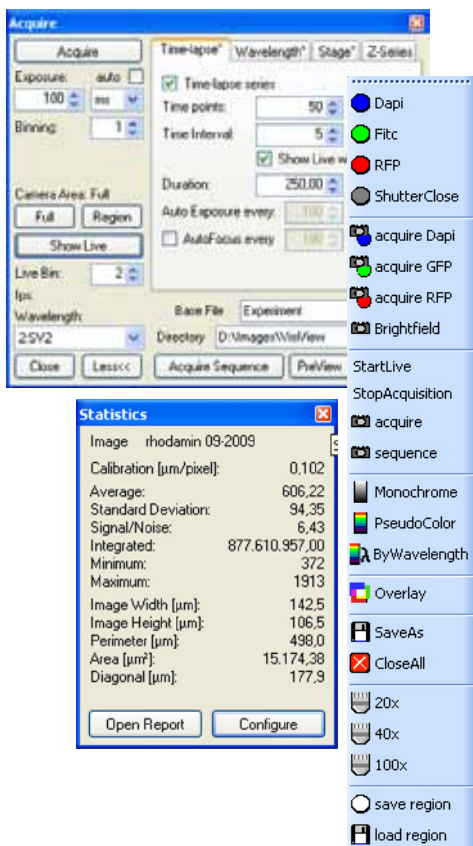
Device Stream Acquisition

Give your research a competitive benefit by speeding up your acquisition!

Our advantage is to control illumination devices e.g. high speed illumination systems, AOTF or z-piezo focus systems between the frame transfer or interline shift time of the CCD camera. The image sequences can be continuously acquired without time delay.

Acquisition of images, using automated microscopes and peripheral control

Image analysis begins with accurate acquisition. The VisiView® software supports a wide range of digital color or black/white scientific grade cameras, automated microscopes and other microscope peripheral devices. Display and scaling of high-dynamic images up to 16bit.



Single or Multichannel Acquisition

Don't miss a detail!

The MDA - Multi Dimensional Acquisition gives you a comprehensive view of your multi dimensional experiment. This means a free combination of z-stack (focus), different wavelengths (channel), time points and different xy stage positions in one sequence acquisition (6D-imaging).

Control of Automated Microscopes

No limits! Design your experiment for your needs.

The flexible control of complex microscopy equipment for e.g. single or multicolor fluorescence also includes the automated control of the microscope stage in X, Y, or Z direction including autofocus function.

Automate with Macro and Toolbar

Reproducible and easy to use!

The VisiView® software offers convenient customized toolbars and easy control of fix functions or macro functions. It is perfect for frequently performed operations. The macro menu covers all functions for automation of commands and command sequences.

Merge Color Channels

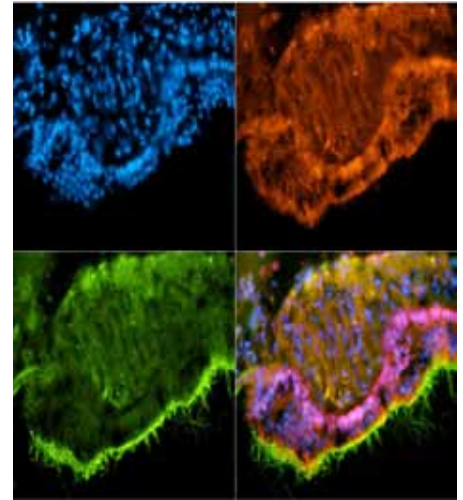
Discover co-localisations at the first glance!

The overlay module allows to merge multiple fluorescent, bright-field, phase contrast or DIC images into a color composite image. Up to 7 channels are available. If a channel is optically shifted, the xy pixel alignment compensates the shift.

Pseudo-Color or Wavelength Calibration

Enhance your image!

Each acquired image can be automatically calibrated wavelength dependent by the illumination control dialog. For the selected fluorescence filter an emission wavelength e.g. for FITC - 535nm will be chosen. The image will be automatically displayed in green and the overlay option will recognize the correct color.



Get more information from your image with the measurement, processing and analysis tools of the Visi-View® software. Calibrate the size and measure the brightness over time at individual regions. Align and calculate sequences of images to improve the result. Report the image values into a customizable spreadsheet format for further analysis.

Measure, process and analyse your images

Statistic

The statistics menu indicates image or region information within the active window. Features are: calibration size $\mu\text{m}/\text{pixel}$, average, standard deviation, signal/noise, integral, min/max., perimeter, area μm^2 and diagonal μm

Measurement

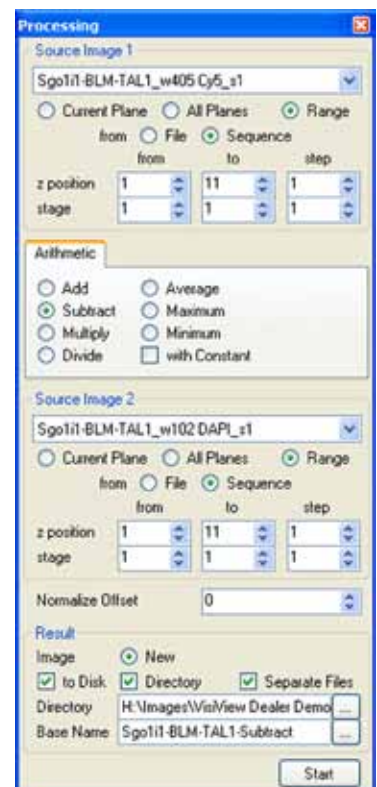
The measurement option offers comfortable evaluation of image data by statistic processing, line scan graph, intensity over time graph and histogram display.

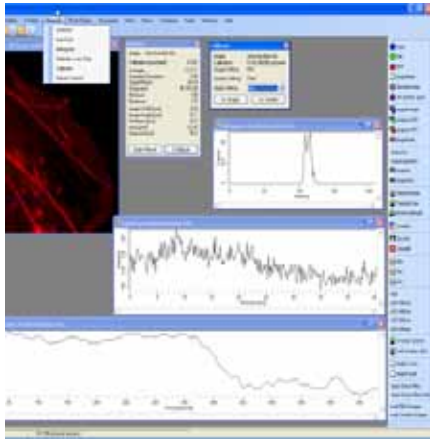
Processing and Analysis

The processing and analysis option offers comfortable processing of single or complex MDA image data, analysis and archiving of image sequences. All analysis values can be reported into a text file or directly into Microsoft Excel.

SplitView Analysis

Allows the on-line division of images acquired with optical image splitter, which is mounted in front of the CCD camera for simultaneous multichannel imaging of FRET or emission ratiometric applications.





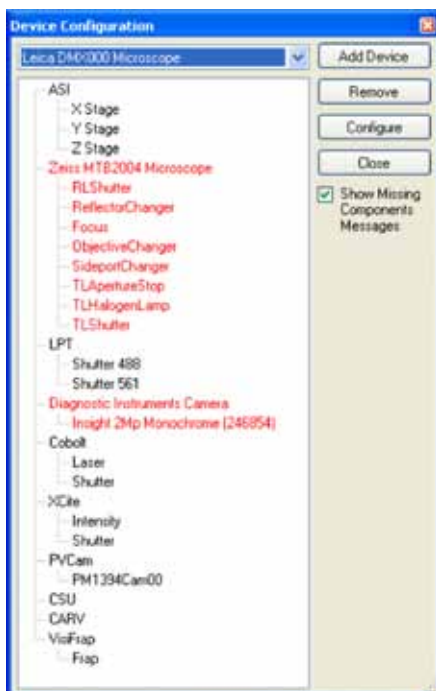
VisiView® Optional Plug-Ins:

- measurement
- processing
- illumination
- magnification
- z-axis / autofocus
- xyz stage control
- device streaming
- trigger protocol
- threshold measurement
- splitview (splitting of optical images)
- on-line ratio (Fura-2 and FRET analysis)

Modular VisiView® software with various plug-ins and device drivers for advanced microscopy imaging

Basic VisiView® Functions:

- realtime image acquisition under MS-Windows
- true color and up to 16 bit monochrome display
- time-lapse function and fast streaming
- handling of large movie sequences
- on-line overlay multichannel fluorescence
- merge up to 7 different images
- TTL shutter control
- one camera driver support
- customized toolbar and macro programming
- movie player and digital recorder
- context sensitive help function



VisiView® Hardware Support:

- camera driver: Photometrics, Hamamatsu, PCO, Diagnostic Instruments
- automated microscope: Zeiss, Olympus, Leica, Nikon
- shutter / filterwheel: Vincent, Ludl, Sutter and ASI
- xyz stage: ASI, Märzhäuser and Ludl
- z-stage: Piezo z-focus control
- autofocus hardware: Definit focus system
- illumination system: Xcite, HXP and PhotoFluor
- LED illumination: CoolLED and Colibri
- high speed illumination: DG4, Polychromators
- optical image splitter
- laser illumination: diode and solid state lasers
- AOTF intensity and channel control
- Confocal: CSU 22/X1, CARV-II and Infinity
- FRAP: 1D and 2D scanner
- structured light illumination: VisiGRID

Find free informations and application notes at www.visitron.de