

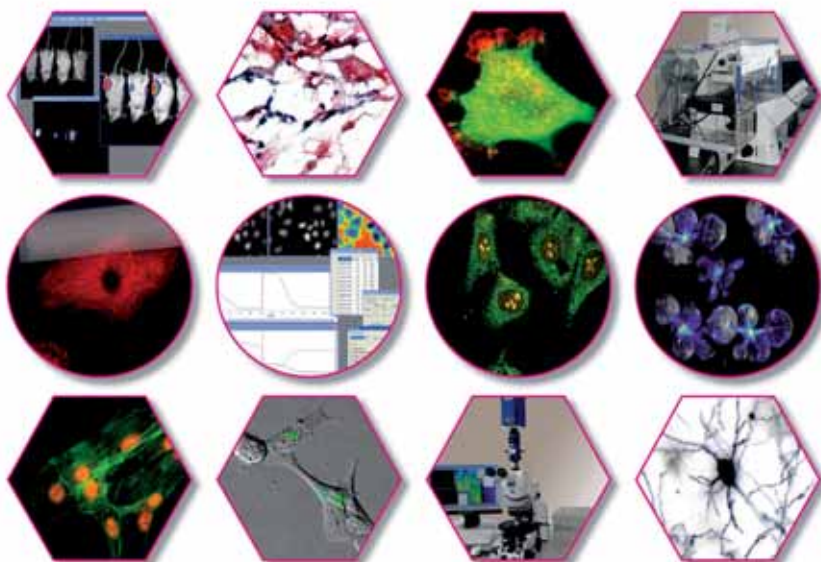


# VisiView<sup>®</sup>

Imaging Software for  
Life Science Research

VisiView<sup>®</sup> is a high performance imaging software from Visitron Systems GmbH for BioImaging 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. Its multitasking ability supports simultaneous image acquisition and analysis. The VisiView<sup>®</sup> software represents the philosophy of simple operation and seamless integration of applied standards.

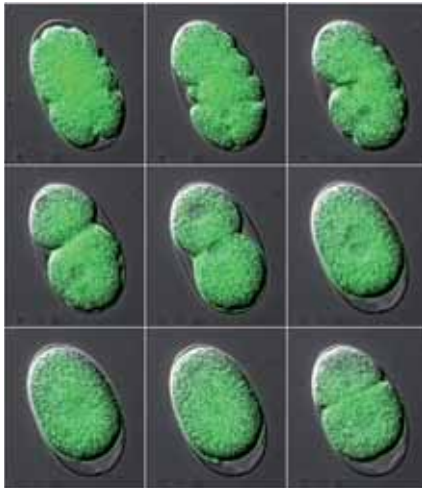
Flexible and  
microscope platform  
independent software



**VISITRON**  
**SYSTEMS** GmbH



.....20 years of excellence.



## 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.

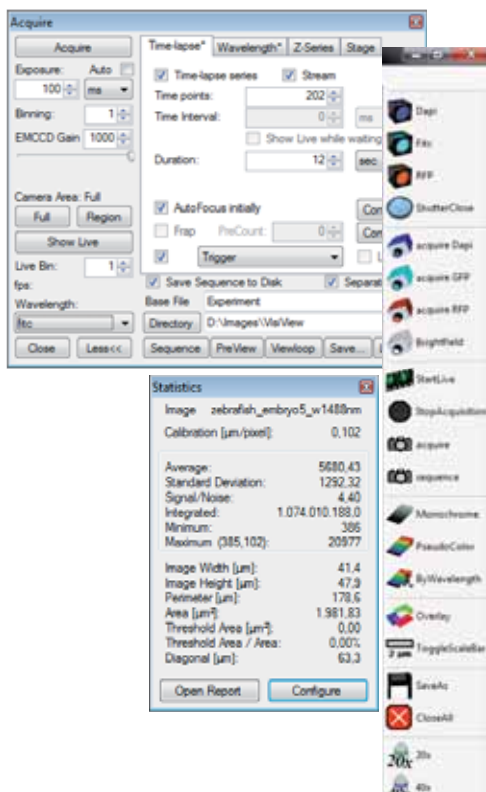
## Device Stream Acquisition

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 peripherals

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 is possible.



## 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 scope control allows you to control all motorized microscopes from any vendor. We have easy access to any illumination component like filter cube changer, shutter or condenser control. The objectives can be easy selected and calibrated. The focus control allows both the automatic generation of Z-stack images and the software autofocus readjustment to keep your cells in best focus.

## Automate with Macro and Toolbar

Reproducible and easy to use!

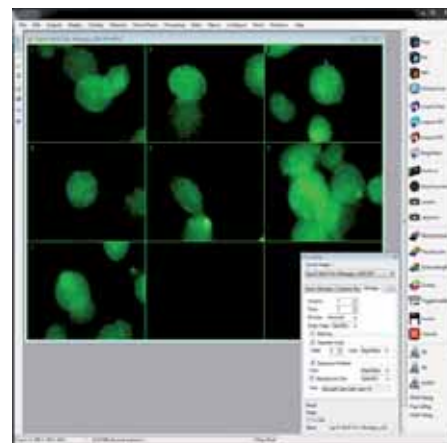
The VisiView® software offers convenient customized toolbars and easy control of system settings and macro functions. It is perfect for frequently performed operations. The macro menu covers all functions for automation, commands and sequences.

## XY- Motorized Stage Control

In order to acquire at different stage positions you will need a motorized scanning table as well as the VisiView stage control option. You can define multiple stage position and use them for a multi dimensional acquisition experiment in combination with time-lapse, multi-color and Z-stack.

## Scanning of Multiwell Plates

The scanning technique can also be used for scanning multiwell culture plates with different sizes like 6-, 12-, 24-, 96 well formats. In addition, high magnification sub-scanning within a single well is supported. To review images, the standard display mode is used with easy hot-key selection of multi-stage-positions, zoom and movie function.



Scan certain positions of your specimen or multiwell culture plates in just one process. Use highly precise motorized XY-stages synchronized with in the acquisition cycle at maximum speed. Observe multicolour fluorescence with up to 4 cameras at the same time to get maximum time resolution. VisiView grows with your demands.

Acquisition of images developed for analyzing large areas

## Simultaneous Image Acquisition: Up to four Cameras in Multi-Camera Mode

Four Cameras – in live image displays, who can do this ?

Beside the control of multiple cameras from different vendors or models within one PC, VisiView supports up to four cameras from the same model in simultaneous mode. This allows the observation of e.g. four different fluorochromes at the same time. As a result the negative effects related to sequential image acquisition, like time delay between colors, are avoided.

This function is perfectly suited for performing highly reliable ion measurements with emission ratio dyes (e.g. indo-1, cameleon), FRET or performing co-localisation studies.

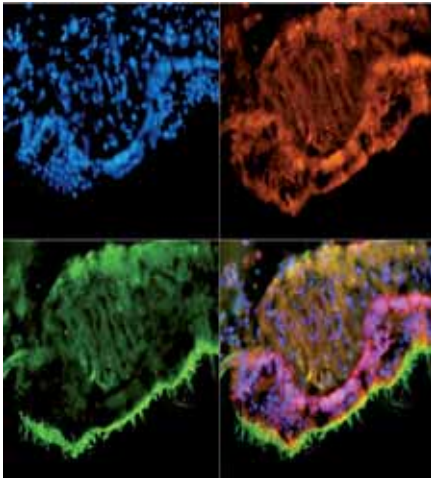
## SplitView Analysis

Allows the on-line division of images acquired with an optical image splitter, which is mounted in front of the CCD camera. This replaces time consuming post-processing and enables on-line analysis of emission ratio experiments.

## Create AVI Movies

Easily convert sequences files e.g. stck image format to AVI video format for easy presentation.





## Merge Color Channels

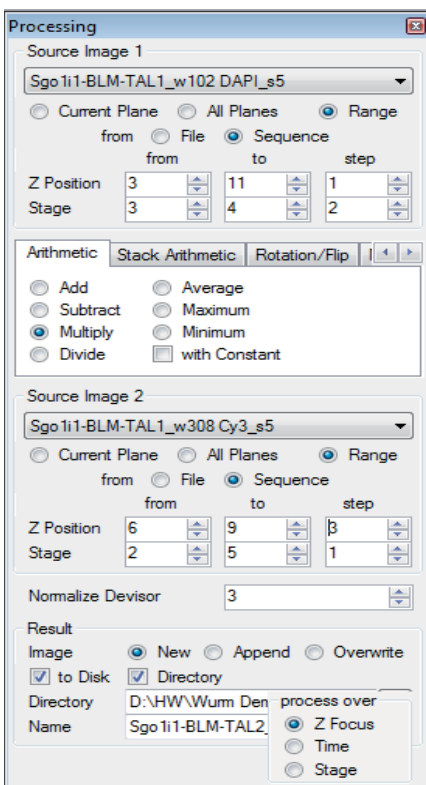
Combine several color images to get the complete picture. The overlay module allows to merge multiple fluorescent, bright-field, phase contrast or DIC images into a color composite image. Up to 7 channels are available. If a channel is optically shifted, the xy pixel alignment compensates the shift.

## Colocalization

Colocalization refers to observation of the spatial overlap between two different fluorescent labels, each fluorescence image having a separate emission wavelength. To see the differences located in the same area or very near to one another, VisiView® calculates the area, gray value etc. of the image and reports it into Microsoft® Excel or text file.

Measure, process and analyze your images

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



## Pseudo-Color or Wavelength Calibration

Each acquired image can be automatically calibrated wavelength dependent via 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.

## 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  $\mu\text{m}^2$  and diagonal  $\mu\text{m}$ .

## 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 - Multi-Dimensional image data, analysis and archiving of image sequences. All analysis values can be reported into a text file or directly into Microsoft® Excel.

## Line-Scan Analysis

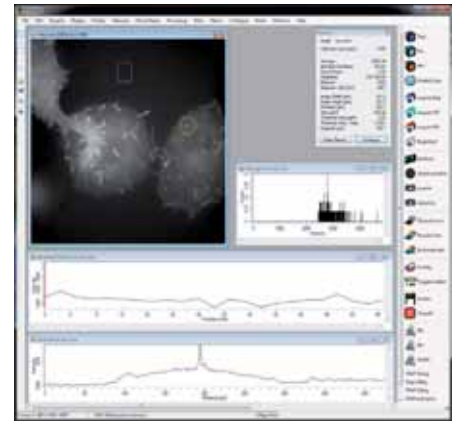
The Line Scan feature gives you a one-dimensional intensity distribution for the line region that is shown within your image. The y-axis shows the intensity values and the x-axis shows the position values. The x-axis values are shown calibrated, if the image is calibrated.

## Histogram Analysis

The Histogram feature gives you graphical distribution of the frequency of the intensity values. The total area of the histogram is equal to the image brightness.

## Montage - Tiling Display

For display of acquired sequence e.g. time-lapse or z-axis stacks, usually a montage display is used. This option is included into the processing menu. Free selection of columns, rows, fill order, separator lines etc. can be chosen for best overview.



Quantitative image analysis usually starts with image acquisition and ends with the presentation of measured results. VisiView® offers a comprehensive set of tools including image scaling, rotation, calibration, background subtraction, shading correction, color changing and adding a scale bar.

Measure, calibrate,  
stitch, rotate and  
threshold your images

## Calibrate Distance within Images

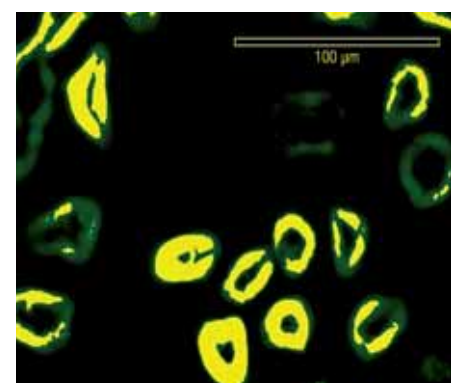
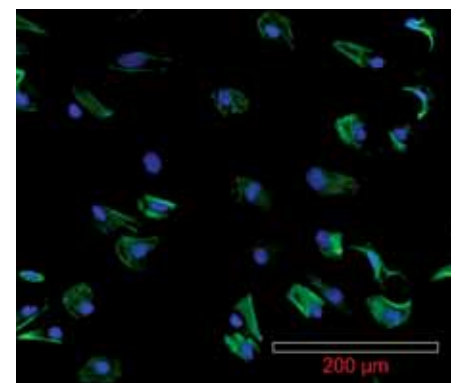
With the calibrate dialog you can calibrate existing images or the acquisition system, which means that future acquired images will be calibrated automatically. The objective calibration is done via the magnification setup. If an automated microscope is used, the system will change automatically depending on the objective lens in use.

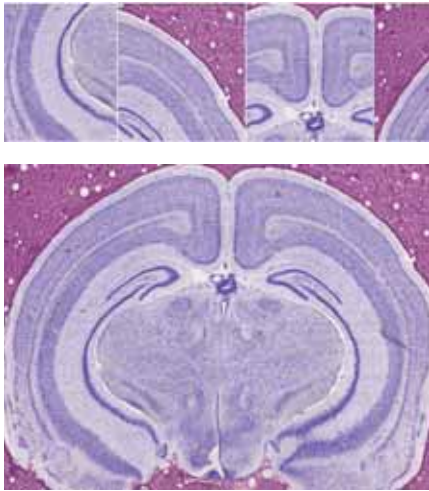
## Dynamic Scale Bars

Use the scale bar during an experiment on-line, even if you zoom or bin the image, the scale bar displays the correct calibrated values. The scale bar is variable in size, color, description and position and can be easily stamped into the final documented image.

## Region Measurements

The region measurements function is an easy tool for manual region measurements by combining multiple parameters. Regions are available as line, circle, square and polygon. To document your work, regions can be stored and easily transferred to other images or stacks.





## Scan Slide Module

The scanning of the specimen with VisiView® is a very easy three step procedure. The first step of the acquisition process is the auto calibration. The second step is the definition of the scanning area and the third step is the scan itself.

During the scan, the user will directly see the result in an overview.

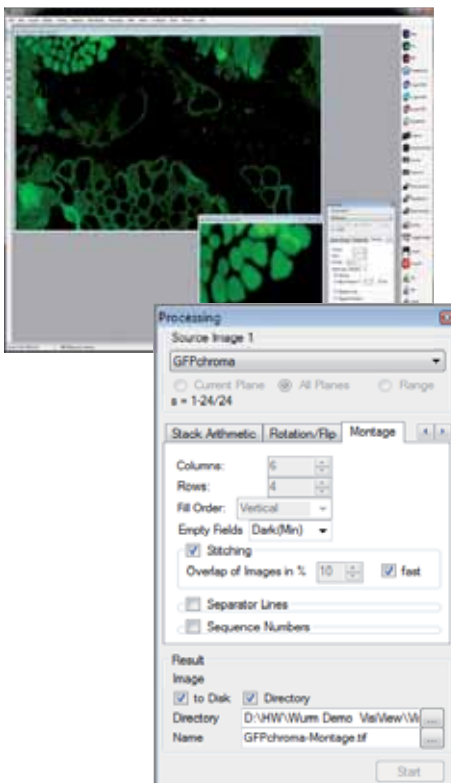
The scan area can be defined in a two step process. First the upper left and then the lower right corner needs to be defined. VisiView's live view mode helps you find and set the positions of interest in your sample.

If you now start the scan, single images are acquired and tiled to a high resolution image of the entire specimen.

Automatic scanning of the sample improve throughput, extend overview, allows repeating analysis

The scan slide module generates a comprehensive view of specimens which exceed the conventional field of view. This is achieved by automatic scanning of a user-defined sample area and subsequent image stitching. Precise stitching algorithms assure maximal accuracy of these high resolution images.

Scan the whole area of your specimens or multiwell culture plates in just one process. Use highly precise motorized XY-stages synchronized with the acquisition cycle at maximum speed.



## Scan Slide with Time-Lapse and Multicolor

Beside performing the standard acquisition the Scan Slide mode can also be combined with time-lapse experiment. In addition, for each scan area, multicolor e.g. Dapi, Fitc or CY3 can be acquired. This combination offers the most flexibility for scan slide application.

## Auto-Calibration

In order to obtain the best results, the system needs to be perfectly calibrated. In VisiView, this is quiet simple and fast. One needs to mark an object in the middle of a Live image and start the calibration. VisiView then automatically measures the camera angle and the precise image xy calibration.

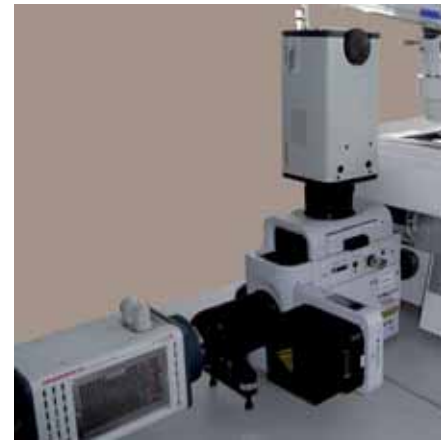
## Stitching of Multiple Images

Analysis of large surfaces requires to scan the area of the specimen. The acquired multiple images can then be automatically stitched to an ultra high resolution image during acquisition or afterwards in the post-processing. Two different algorithms are available: A fast and a slow high-precision one. Typically, a 10% overlap of the scanned images is used to achieve best results.

# VisiView<sup>®</sup> Ratio Option

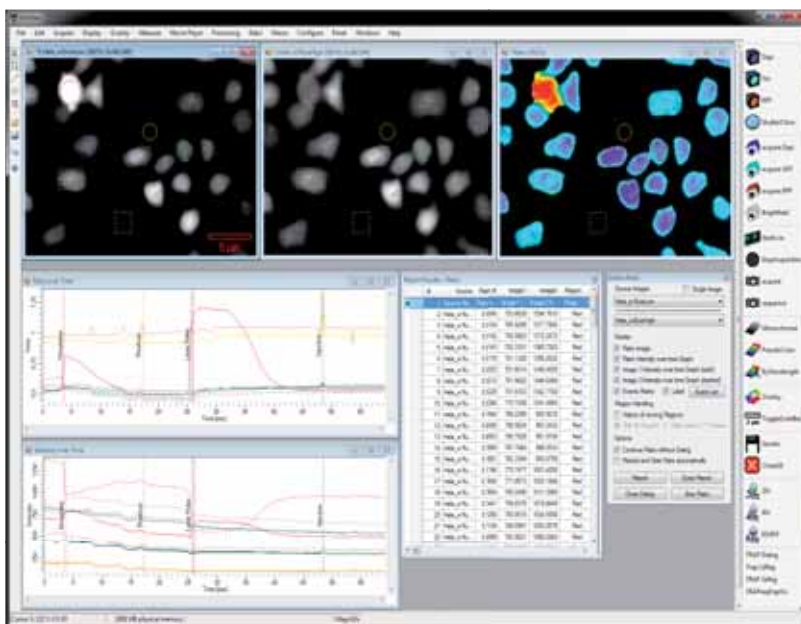
## All in one

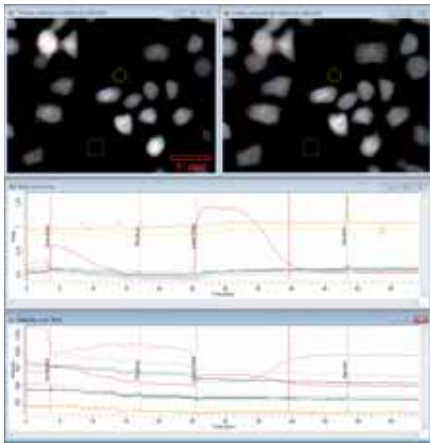
The requirements of biomedical research in cell biology are continuously growing and getting more complex. This process is challenging the development of imaging software in microscopy. The VisiView<sup>®</sup> software designed by microscopy specialists offers seamless integration of hardware. The flexibility and clear menu structure helps for easy operation. A modular architecture allows the extension with new or additional application modules like Ratio, FRAP, FRET, structured light Confocal etc.. A simple solution with powerful functions to solve your application demands.



The Ratio Option of the VisiView<sup>®</sup> is specially designed for on-line ratio applications like dual wavelength intracellular measurements such as Fura-2, BCECF, FRET or single wavelength dyes, calcium green, fluo-3, etc.. The ratio option provides a simultaneous display of the original wavelength, e.g. 340nm, 380nm, ratio and the corresponding intensity graphs. Either intensities over single or multiple regions of interest are selectable. The flexible architecture of VisiView<sup>®</sup> in combination with application modules allows researchers to pick the software solution that best suits their needs.

**On-Line Ratio**  
Investigate changes in  
fluorescence intensities  
in your cells





## Making Measurements, History Function

Regions of interest or arbitrary shapes can be placed on every raw source or ratio image to display the intensity value or ion concentration. The measurements can be done during on-line acquisition. Regions can be repositioned using the history function if the cell has moved or the stage was touched. Individual regions can be frozen or changed by editing the current region or even all regions at once.

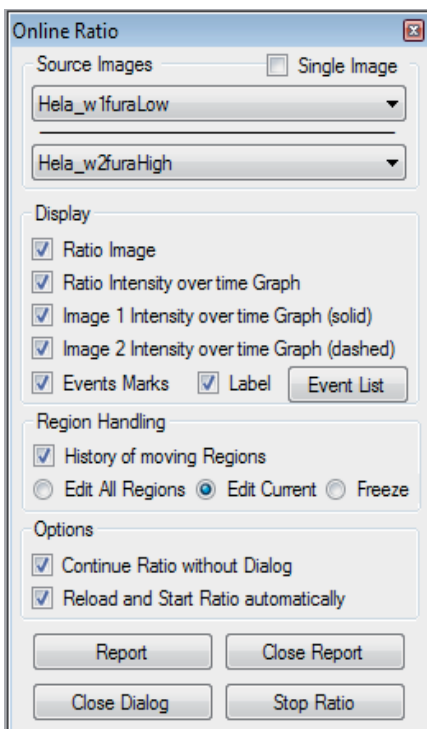
## Trigger Protocol

For flexible experiment control, complex user defined trigger sequences can be important. The trigger protocol option offers variable on/off switching of external devices during all kinds of experiment sequences.

Measure calcium concentration and pH value and visualize intra- and intercellular processes

## FRET Ratio in living Cells

Förster resonance energy transfer (FRET) is a radiationless mechanism of energy transfer between two spatially close fluorophores called donor and acceptor. In FRET condition, photoexcitation of the FRET-donor molecule leads to a decreased donor fluorescence and an increased fluorescence of the FRET acceptor.

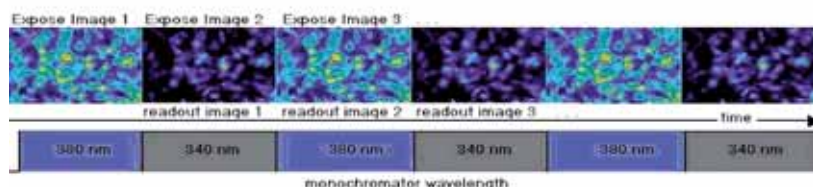


## On-line Time Interval Sequences

A novel feature of the ratio option is the capability to change the time interval without interrupting the measurement or stopping the experiment. For instance, you can have the system acquire images with a long time lapse. After e.g. injection you can switch to fast time lapse or streaming acquisition mode.

## Wavelength Changers

The ratio option supports device drivers for numerous available illumination systems. From standard filter wheels and shutters up to tunable illumination systems, e.g. polychromators (Visi-Chrome) and high speed filter changers, e.g. DG4. The devices are controlled automatically during image acquisition. High speed stream acquisition supports maximum frame rates of the CCD camera while changing wavelengths between frame or interline transfer.



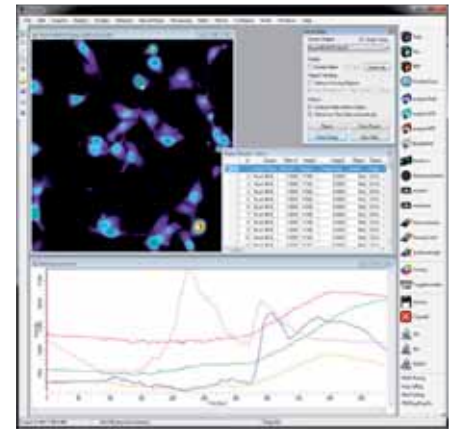


## CCD Camera, Binning and Super Pixel

If the signal is too weak or noisy, the binning technique of the CCD camera can be used to improve the signal-to-noise ratio. Binning groups neighbored pixels to create a super pixel. Typically, up to 8x8 pixels can be selected. In addition, binning speeds up the frame rate up to e.g. 300 frames per second.

## SplitView Ratio

Allows the on-line separation of images acquired with an optical image splitter, which is mounted between the microscope and the CCD camera for simultaneous multichannel imaging of FRET or emission ratiometric applications.



## Interactive Display and Graphs

A display of multiple graphs gives flexibility over the presentation of the experimental data. The VisiView® Ratio option enables interactive access of individual graph traces to display the images which correspond to selected time and intensity values.

Analyze  
time lapse images  
quantitatively

## Threshold Measurement

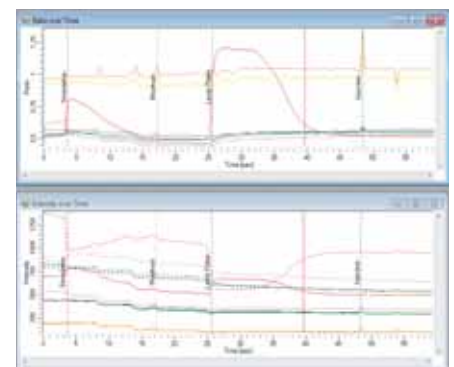
To aid in the isolation of labelled cells, a grey level threshold of the intensity can be used for cell area measurement, e.g. cell contractibility or cell growth. The threshold helps to reduce the distracting effects and improve the accuracy of collected data.

## Event Marks

During the experiment, the event mark function can be used to store the injection time, changes in experiment conditions or applied triggers. The mark in the time scale shows the exact time when the event happened. The events are stored with the exact time of creation and the mark will be introduced during data review.

## Logging of Data to Microsoft® Excel or Text File

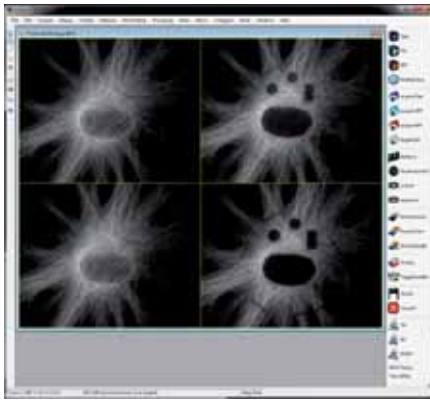
All measurement options including the ratio module have a data report feature. This is a way to display and export measured data for later processing. The report feature allows to define which of the respective parameters shall be included in the report. The internal viewer can be turned on any time to display measurement data. Additionally, data can be logged into Microsoft Excel application or text file.

The screenshot shows a data report table with columns for 'Time', 'Ratio', 'Image 1', 'Image 2', 'Region', 'Region', 'Region', and 'Ratio of'. The table contains 22 rows of data, each representing a measurement point. The data values are numerical and represent the experimental results at different time intervals.

# VisiView® FRAP Option

## Easy to use FRAP Scanner

The VisiView® FRAP option in conjunction with the 2D-VisiFRAP gives you control over high power lasers, which are focused down to the  $\mu\text{m}$ -scale. The co-evolution of Software and 2D-VisiFRAP results in a perfect interplay and high time resolution when switching lasers. Moreover, flexible ROI selection and fast laser deflection provide the freedom to specifically excite multiple parts of your samples almost at once.



Analyze FRAP  
Fluorescence Recovery  
by using 1D or 2D  
VisiFRAP scanner

FRAP - Fluorescence recovery after photo bleaching is commonly used to measure the lateral mobility of molecules in a lipid bilayer. For this, the molecule of interest is linked to a fluorescent dye, which is at the first step bleached by high intensity light in a specific area of the sample. The lateral diffusion of intact fluorophores into the bleached area is called fluorescence recovery and can be measured by immediate and sequential image capture after the bleaching step.

## FRAP Acquisition Dialog

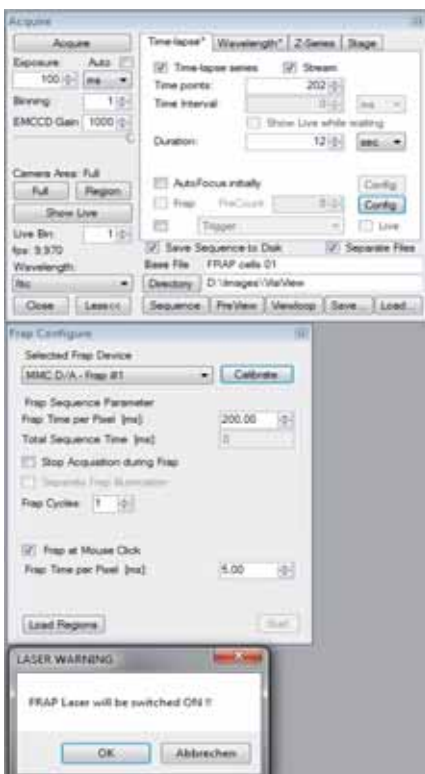
The FRAP configuration dialog is directly accessible from the time lapse tab of the clear-cut VisiView acquire dialog. It gives you control over FRAP parameters as well as access to the simple auto-calibration procedure. Further, you can easily test the FRAP parameters using a live preview before you start the real experiment.

For the FRAP experiment you can define settings for pre- and post-bleach time lapse series, which record the fluorescence intensity changes before and after the FRAP cycles.

Once again, with the powerful VisiView Macro Editor you can design any custom FRAP experiment.

## Automatic Calibration Algorithm

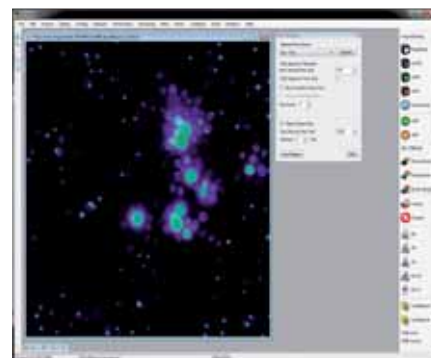
A calibration which matches the camera coordinates with the laser scanner galvo coordinates needs to be done once for each microscope objective used for FRAP. This is accomplished automatically by moving the beam to some pre-defined positions in the live image and marking their coordinates. Subsequently, the appropriate calibration is selected automatically when the objective is changed.



## FRAP on the Fly Function

For fast kinetics, FRAP on the Fly mode can be used. It will be selected at the FRAP acquisition dialog. During the acquisition sequence e.g. cells can be laser activated by clicking with the mouse pointer within the image. Depending on the selected dwell time and laser power, the photo reaction can be observed and recorded on-line.

This new feature in the VisiView® software is minimizing any loss of temporal information and shows the flexibility and high speed positioning of the VS-FRAP scanner. The unique FRAP on the Fly solves perfectly the major demand of FRAP experiments.



## Photobleaching or Photoactivation

Is achieved by scanning with a laser beam controlled by a 2D galvanometer over a user defined region. The VisiView FRAP option is controlling the 2D galvanometer module, the laser illumination and the synchronization. The laser intensity can be adjusted by the user. Regions to be covered by the laser beam can be a single point, a line or a sequence of lines. Areas can be defined as circles, rectangles or freehand shapes.

Analyze PA  
Photo-Activation  
using 1D or 2D  
VisiFRAP scanner

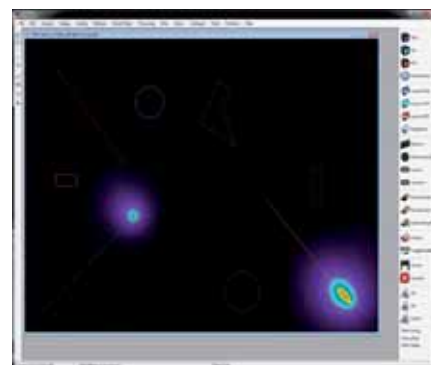
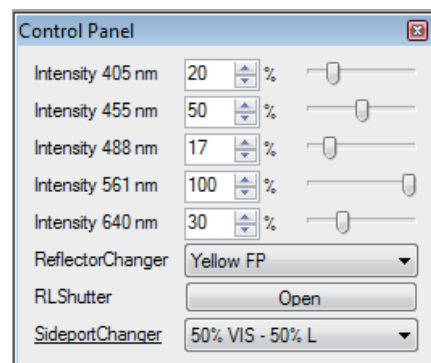
## Laser Control

The VisiView® ensures that the FRAP laser spot hits the selected area or region. High speed TTL shutter mode for laser diodes or VS-AOM/AOTF for solid state laser offers precise on/off synchronization to avoid artefacts. Intensity control of both FRAP and imaging lasers is possible at any instant during an experiment using VisiView's interactive Control Panel. The Control Panel allows always access for intensity control slider.

Simultaneous laser use for confocal and FRAP imaging is possible by dual laser illumination. VisiView® allows simultaneous on-line viewing of both the confocal image and the FRAP bleaching process.

## Region Analysis

To define the region or points to be bleached or activated, you have to draw one or more regions in an image of the specimen. A control dialog allows the selection of the time which the laser beam stays at one point and the number of bleaching cycles to be performed. The intensity over time graph shows the intensity information for each region. All analysis values can be reported into a text file or directly into Microsoft® Excel spreadsheet program.



# VisiView® Screening Option

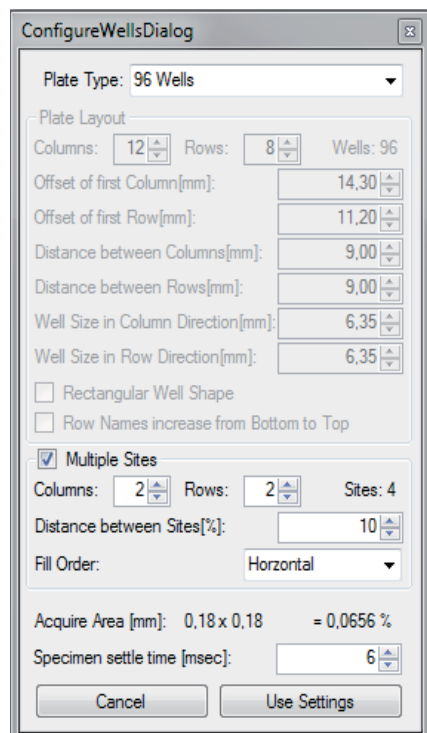
## Acquisition Dialog and Setup

In the stage tab of the acquisition menu, the screening conditions can be defined. Either the standard xy stage position control or the control of multiwell plates can be selected. Because of the magnification calibration, the VisiView® software knows automatically the correct scanning area of the selected multiwell format. With a single mouse click all wells or individual wells can be selected. Only selected wells are scanned and acquired. Before each acquisition, the autofocus can be used to find the best optical section. The whole settings can be stored and reloaded for later usage.

Recent advances in imaging technology and live-cell fluorescent probes like GFP / RFP, allowing cell biologists to quantitatively examine cell structure and cell functions at higher spatial and temporal resolution than years ago.

The Screening option of the VisiVIEW® imaging software helps scientists to acquire automatically a high throughput of cells growing in dishes or multiwell plates. The sample area can be extended by scanning multiple sites per well. VisiView's unparalleled autofocus always helps to find the best focus of the cells.

Using automated fluorescence microscopy with XYZ-stage for research in cell based screening



## Configure Well Dialog

There are different sizes of multiwell plates available. The VisiView® screening option supports 6, 12, 24, 48, 96, 384, 1536 and custom formats. For the selected plate type a plate layout is created with calibration values for offset, distance between columns and rows, well size and well shape. In addition, multiple sites for each single well can be selected, e.g. 16x16, if higher objective magnification is used for high resolution imaging mode. The specimen settle time optionally prevents from taking blurred images of samples moving due to inertia.

## Autofocus

The autofocus module calculates the optimal focal section for each multi-well sample in reflected-light, transmitted-light and fluorescence. For images that are recorded as time lapse or at different well positions, the cells are automatically refocused if focus shift appears.

## Calibration

The screening system is easy to use because of the predefined stage and magnification calibration. The user only has to select the objective and the current xy-stage position.

## Microscope Setup

For screening applications, we recommend the usage of a motorized microscope with XYZ stage. But it is also possible to use a manual microscope with external motorized components like filter wheels, focus devices and XY-stages. Multi-band filter sets with single excitation and emission filters have to be selected carefully according to the used fluorochromes.

For long term time lapse applications cells need perfect incubation conditions. The VisiScope large incubation chamber with CO<sub>2</sub> control is required. It stabilizes the temperature of all internal components like sample holders or objectives during the entire observation.



Multi color imaging with automatic color detection and overlay up to seven fluorescence channels per well gives the user a high flexibility in cellular research. The VisiView® software helps with easy device control and intuitive handling of the software. The macro interpreter language covers all functions for automation for customized automation according to your experimental demands.

## Analysis and Display of multiwell format

## Montage - Review of Screening Images

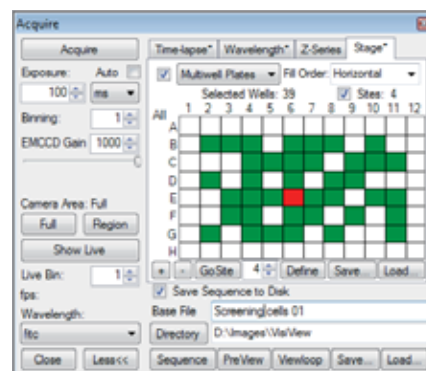
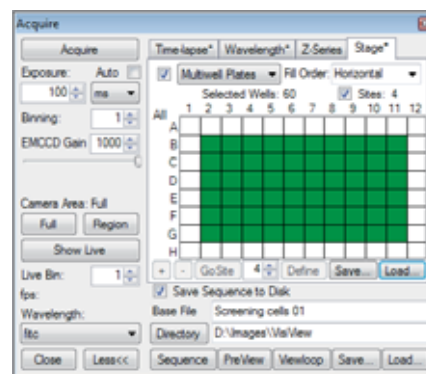
There are different ways to display the acquired sequence of multiple wells. Single display as a sequence of image stacks which can be converted to AVI movie format, or overview image of the used multiwell positions as a montage display with columns and rows. The latter function is also known as tiling.

In addition, the stitching algorithm of the montage display can be used if site scanning within an single well is used. This feature will also improve the overview and the resolution of the image.

## Cell Counting of Screening Information

Measure or count cells automatically with a wide range of object classifiers. The object analysis tool makes it possible to determine morphometric parameters from the specimen and to report it automatically into Microsoft® Excel or text format.

The well arranged object analysis dialog selectively displays filter functions, sum of object statistic or single object values. Again, VisiView's unmatched on-line functionality offers simple on-line adjustment of threshold intensity values to improve the object segmentation and the analysis results



# VisiView® Object Analysis

## Segmentation of Image Information

The segmentation of cell images is a necessary step of many automated biomedical image processing procedures. The function offers intelligent threshold operations for images to identify your objects or image information. The threshold function offers various methods like below-, above-, inclusive-, exclusive to segment the image.

## Image Enhancement

Because of shading or background effects, correction and enhancement of images is required before segmentation can be performed. The processing tool of VisiView® helps to prepare your image for optimal analysis.

Automated object identification and counting allows the user to choose different parameters for morphometric measurement or classification of cells. Measure all objects or define filters to restrict your measurements to objects which meet specific customized criteria.

Object analysis count, classify and measure multiple cell parameters

## Object Analysis - Cell Counting

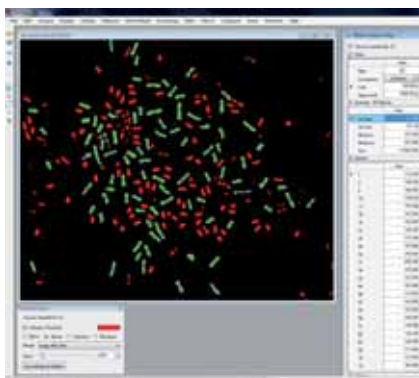
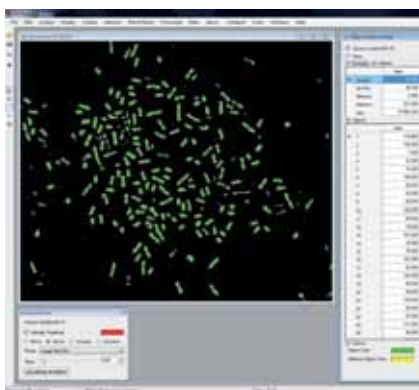
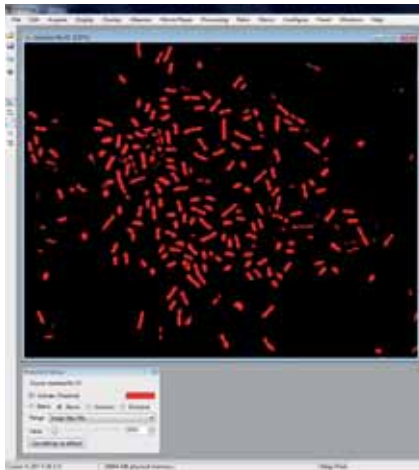
Measure or count cells automatically with a wide range of object classifiers. The object analysis tool makes it possible to determine morphometric parameters from the specimen and to report them automatically into Microsoft® Excel or text format.

The well arranged object analysis dialog displays selectively filter functions, sum of object statistic or single object values. Again, VisiView's unmatched on-line functionality offers simple on-line adjustment of threshold to improve the object segmentation and analysis result.

Certain options can be selected to improve the display and analysis like object color, display object border, fill holes, create object mask etc.. Artifacts are removed by the individual filter functions and displayed in a different color. This function makes the VisiView® imaging software a powerful analysis tool.

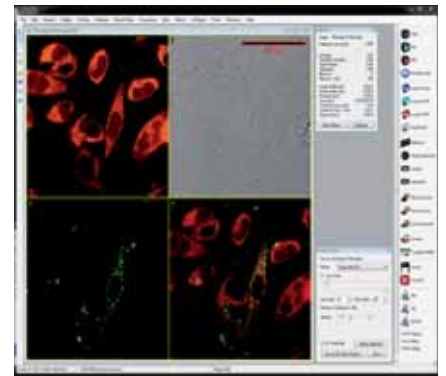
## On-Line Object Counting

The object counting of VisiView allows both the analysis of stored images and the on-line counting at live acquisition. Depending on the selected filter criteria all images and results can be stored or rejected.



## VisiView® Optional Plug-Ins:

- Illumination option
- Magnification option
- Z Focus option including SW Autofocus
- Hardware Autofocus option
- XY-Stage Control Option
- Dual Camera or SplitView option
- Ratio Option
- Measurement option
- Processing option
- Object Analysis
- Colocalization Analysis Option
- Automatic Scan Slide Option
- Scanning of Multiwell Plates
- Remote control - from external programs



## 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 of 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

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

## VisiView® Hardware Support:

- camera driver: Photometrics, QImaging, Hamamatsu, PCO, Diagnostic Instruments, Andor (on request)
- automated microscope: Zeiss, Olympus, Leica, Nikon
- shutter / filterwheel: Vincent, Ludl, Sutter and ASI
- xyz stage: ASI, Märzhäuser, Ludl, Leica and Nikon
- z-stage: Piezo z-focus control
- microscope hardware autofocus: Zeiss, Leica, Nikon, Olympus and ASI
- illumination system: X-Cite, HXP and PhotoFluor
- LED illumination: Lumen, CoolLED, Colibri, Lumencor, Heliophor
- high speed illumination: DG4, Polychromators
- optical image splitter
- multi camera control: e.g. up to 4 CoolSnap cameras
- laser illumination: diode and solid state lasers
- AOM and AOTF: intensity and channel control
- confocal: CSU W1, CSU 22/X1, CARV-II, X-Light, Infinity
- FRAP: VS1D and 2D scanner; iLAS
- structured light illumination: VisiGRID
- motorized VisiTIRF condensor and iLAS





## Supported File Formats

Read and write support of 8/16bit TIFF, single and multiple TIFF, BMP, SPE, STK-MetaMorph, nd-MetaMorph.

## AVI Movies

Easily convert sequences files to AVI video format.

## System Requirements

Windows® XP Pro, or Windows® 7 Pro  
Ultimate 32bit and 64bit support

Computer RAM Storage:

fast Intel CPU min 2,1 GHz, 4.0 GB RAM, 500 GB HDD disk

Specifications are subject to change. Please contact Visitron Systems GmbH or your local reseller for the latest features.

## Exceptional Service and Support

### Customized Developments

Do you need customized software features to improve the functionality of your experiment or to implement special equipments in your microscopy setup?

The VisiView® software would be a perfect solution. With a innovative team of software engineers we are listening to our customers and with our experience we try to help to suit your specific needs.

### Training

Visitron Systems GmbH has a highly qualified support and application team at its disposal for installations and single or group training, directly at the customer place or at the office in Puchheim Germany. Whether you are new to VisiView® or you are an imaging professional, our courses help you in use of the latest imaging software techniques.

### Technical Support

When you are registered with your copy of VisiView® software, we are offering a 12 month maintenance support by our technical support engineers via phone, email or on-line teamviewer software.

### Online Tutorials and Web-Seminars

View video tutorials of introduction or features in VisiView® software or access to on-line web-seminar by teamviewer software.

Find free informations and application notes at [www.visitron.de](http://www.visitron.de)

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