

F-View II

FireWire™ fluorescence camera



www.soft-imaging.net

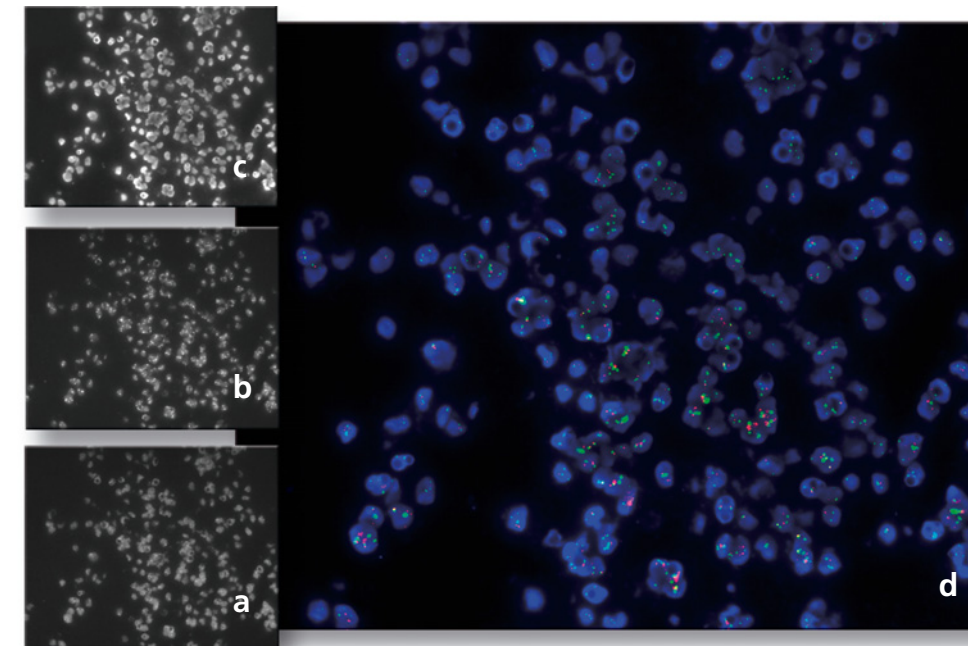
Observatory for the microcosmos!



The **F-View II** is a 12-bit CCD monochrome camera. It is ideal for applications that require extremely high sensitivity, low noise, high-resolution and quantifiable images. The **F-View II** is Peltier-cooled, powered by FireWire technology™ (IEEE 1394) and is specially designed for FISH or fluorescence applications which require multiple exposures with single band-pass filters.

The **F-View II** is fully integrated into the **analySIS®** image analytical software.

A growing family!
Digital cameras by Soft Imaging System.



a) Her2 gene (Spectrum Orange),
b) DNA (DAPI),
c) Chromosome (Spectrum Green),
d) Combination with mFip
Specimen: Norbert Wey, University Zürich,
Department of Pathology, Switzerland

Specifications

- resolution: 1376 x 1032
- binning: 2x, 4x, 8x
- cell size: 6.45 x 6.45 μm²
- effective area: 8.9 x 6.7 mm²
- pixel clock rate: 20 MHz
- dynamic range: 12 bit
- exposure time: 100 μs to 160 s
- frame rate*: > 22 frames/sec @ 2x binning
- cooling element: Peltier-Cooling, 10 °C @ 25 °C ambient
- temperature monitor: CCD chip & housing
- temperature stabilized: Yes, ± 0.5°C
- readout noise: < 2 counts
- non linearity: < 0.6%
- anti-blooming: > 300
- dimensions: 100 x 85 x 50 mm³
- weight: 570 g
- camera mount: standard C-mount
- firmware: Flash EEPROM
- PC interface: FireWire™ (IEEE 1394)

Optional:

Depending on options, analySIS® expansion level and camera:

- Real-time automatic contrast control
- Real-time shading correction
- Real-time sharpness monitor
- Real-time histogram display
- Real-time FFT computation and display

* Camera test conducted on a typical dual CPU PC configuration. The camera resolution setting and the speed of the PC used will directly affect the frame rate.

Europe

Soft Imaging System GmbH
Johann-Krane-Weg 39
D-48149 Münster
Germany
Phone: +49 (251) 79800-0
Fax: +49 (251) 79800-99

North America

Soft Imaging System Corp.
12596 W. Bayaud Ave. - Suite 300
Lakewood, CO 80228, USA
Phone: +1 (303) 234-9270
and (888) FIND SIS
Fax: +1 (303) 234-9271

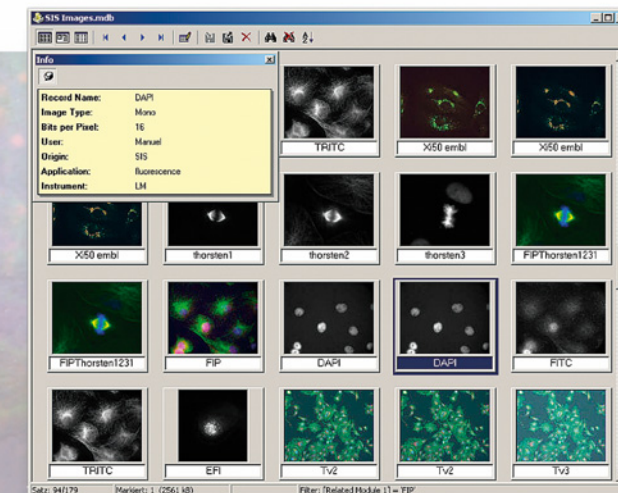
Asia / Pacific

Soft Imaging System Sdn Bhd
Jalan Usahawan
510E, 2nd Floor,
2320 Century Square
63000 Cyberjaya, Malaysia
Phone: +60 (3) 8318-1400
Fax: +60 (3) 8318-1411

Online

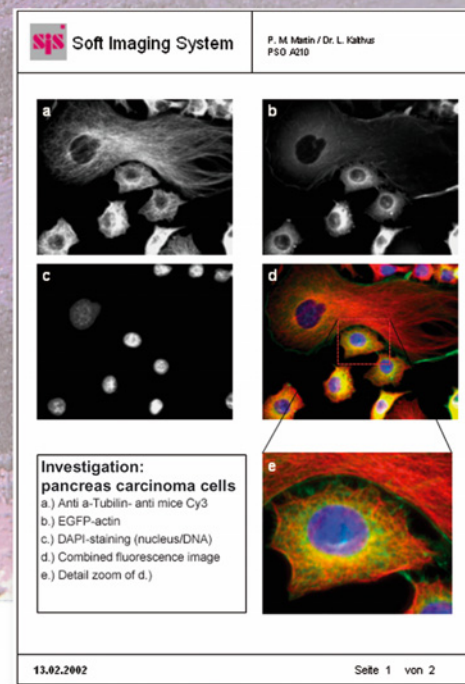
e-mail:
info@soft-imaging.de

Website
www.soft-imaging.net



Automatic report generation

Now you can produce multi-page reports quickly and efficiently. Select multiple images in the image database and insert them all into the report via a single command. In addition to the images themselves, you can have information from any database field automatically included in reports. Automatic scaling, detail zooms, and more – all available to optimize the way you work with images. All documents generated using the **analySIS®** software can be inserted into reports. Use the report generator to print out images, related measurement sheets, and diagrams – all on the same page. This report generator provides you with the utmost flexibility for page layout and design. You set up your own templates exactly the way you want them to be. Templates need to be created just once. Templates are what your reports are based on and ensure that the appearance of your documents is uniform. Use the RTF Export function to export your reports to MS Word for continued editing.



Archiving

analySIS® offers you a powerful, fully network-able, image-archiving system that handles all the images and data generated during the process of image acquisition and documentation. Images can be stored along with text, sheets and other graphics as records for complete documentation of tasks and processing steps. Input, display and query masks can be defined independently.

Take advantage of **F-View II**'s full integration into **analySIS®**

■ Real-time functions

F-View II is fast. Put this in combination with the high speed of today's CPU's, and you've got an attractively broad range of real-time functions within **analySIS®** available to you. These include automatic contrast control, sharpness monitoring and histogram display.

■ Analyzing images

A vast library of text, graphic and editing functions is available for labeling images. Special filters and professional particle analysis assist in more extensive investigation of

images. All this makes it simple to obtain reliable and reproducible results quickly.

■ No more darkroom

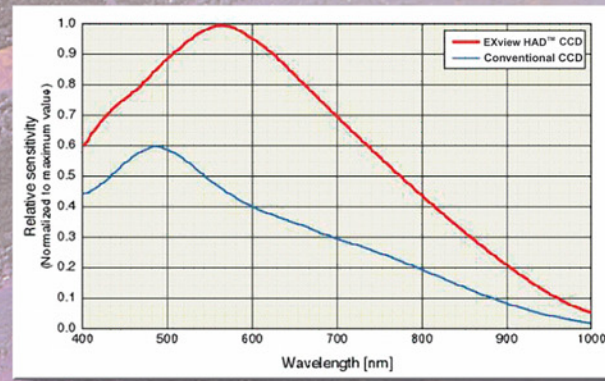
Photo-quality printouts can be obtained following acquisition without any need for a darkroom nor its developing chemicals. And these photo-quality printouts are in your hands in minutes.

F-View II and analySIS® –

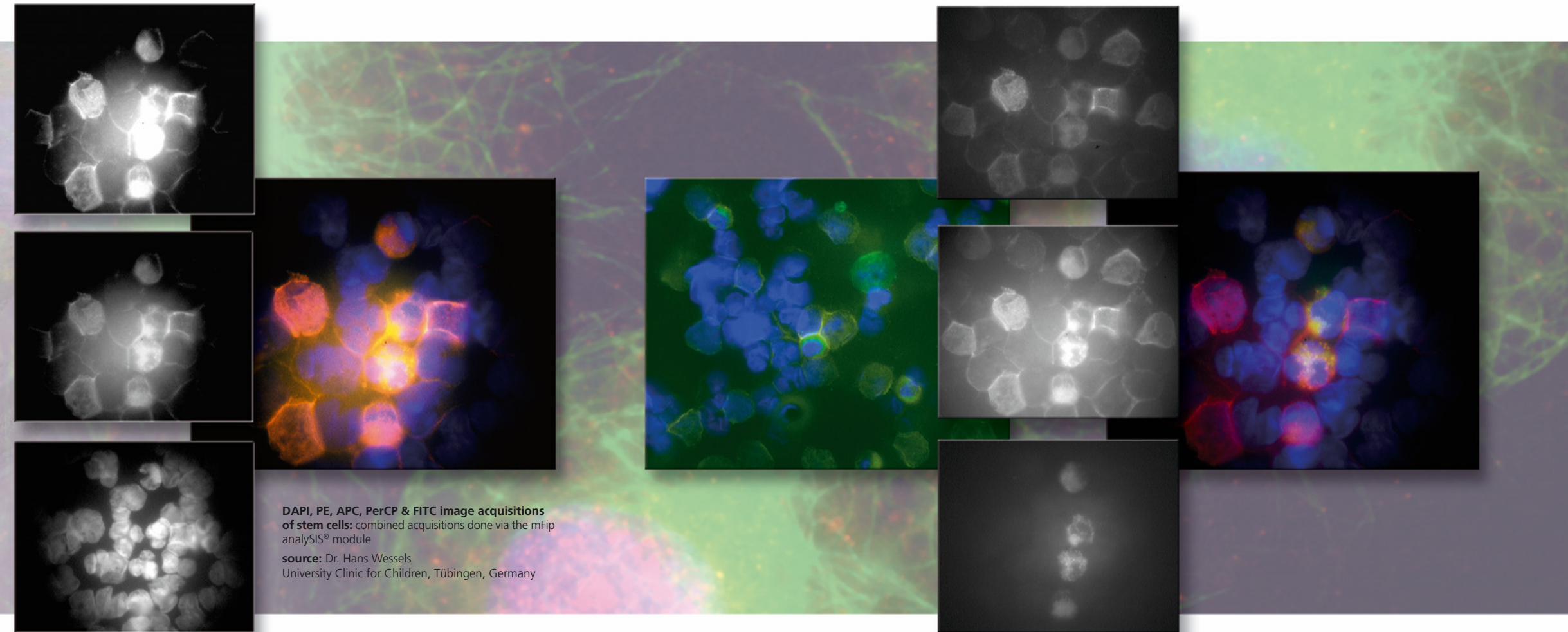
Giving you the tools from tomorrow for the tasks of today!

F-View II

FireWire™ fluorescence camera



characterization of CCD chip used



Digital Solutions - Developed to be exceptional!

Soft Imaging System's digital cameras are designed to meet the steadily rising demands on digital image acquisition for all areas of microscopy. And so is the newly developed 12-bit, cooled CCD color camera **F-View II**, our latest 12-bit, Peltier-cooled, FireWire™-driven solution for fluorescence microscopy.

All camera functions are fully controlled by the **analysisIS®** image-processing software. Real-time functions enable the use of the entire dynamic range under all conditions and guarantee the best contrast.

F-View II's integration into **analysisIS®** provides all the capabilities and advantages of state-of-the-art digital image processing and analysis, ranging from image labeling, archiving, report generation and e-mailing, as well as photo-realistic printouts without the darkroom.

■ High Resolution

The CCD chip of the **F-View II** has 1376 x 1032 pixel resolution. The 12-bit dynamic range means that even acquisition of images with very bright and faint regions is dynamically optimal.

■ High sensitivity

CCD elements are so sensitive that they have no trouble detecting even the weakest of signals. The electronic shutter offers variable exposure times ranging from 100 µs to 160 s.

■ High frame rate

The high speed ADC (Analog-Digital Converter) working at a clock rate of 20 MHz in full 12-bit dynamic range is able to perform double sampling even at a readout

rate of 20 MHz. Various frame rates are supported by this camera. For example, the camera can be set to acquire at a high frame rate of more than 22 fps at TV resolution using 2x binning. View your zoomed-in sample, locate the area of interest and focus – all conveniently onscreen. No longer are you forced to trade off speed for quality. For acquisition the system switches automatically into the high-resolution mode. This avoids bleaching of your fluorescence specimen and offers optimal performance when setting parameters.

■ FireWire™ Interface (IEEE 1394)

FireWire™ technology guarantees that the **F-View II** installation is easy on any PC or laptop equipped with a FireWire™ port. The days when you were limited to

a frame grabber and just a single camera are history. FireWire™ technology enables you to use multiple cameras on the same PC.

■ Peltier-Cooling

Image noise is generally the result of the CCD chip not being cooled to a low enough temperature ("dark current"). For the **F-View II**, thermal noise is not a problem because the CCD chip is Peltier-cooled and stabilized at 10°C. Noise is further suppressed by the application of a highly efficient readout technique known as Correlated Double Sampling (CDS).

■ Compact design

With its elegantly compact, newly designed housing, the **F-View II** can be mounted onto all light microscopes with a C-mount adaptor. No other interfaces or adaptors are necessary. Plus, you only need one cable for getting data and power to the PC's FireWire™ port. No more clutter and no 'octopus' of cables getting in your way.