



Leica SFL100, 4000 & 7000

The Latest Illumination Technology for all Areas
of Fluorescence Microscopy

Living up to Life

Leica
MICROSYSTEMS

New Experience in Fluor



Small but powerful: modern LED illumination for transmitted light and fluorescence with Leica SFL100 and Leica DM1000 LED

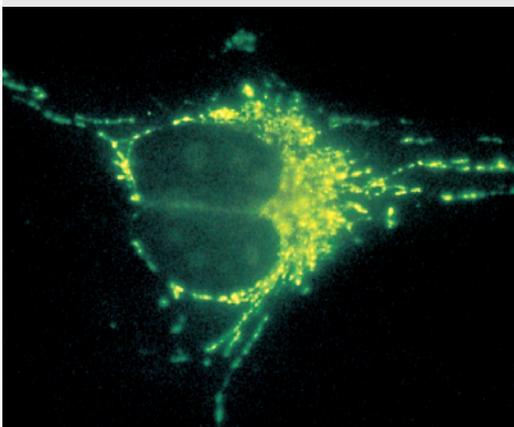
Treading new paths in clinical fluorescence microscopy

The age of expensive mercury burners, which were awkward to center and always failed at the wrong moment, is finally over. Also the compromises that had to be made in image quality.

To boost the efficiency of fluorescence microscopy in pathology, cytology, microbiology and many other fields, there is a new solution developed by Leica Microsystems: SFL100. This compact and attractively priced fluorescence illumination makes light work of FITC applications as used in immunohistochemistry, for example.

Key advantages of the SFL100:

- Genuine incident light fluorescence with adjustable light intensity for optimum image quality
- 470 nm excitation, ideal for all FITC applications (other excitation wavelengths on request)
- LED lifetime of 10,000 hours, i.e. no need for lamp change, practically maintenance-free and hardly any follow-up costs
- Minimum footprint due to compact design without a ballast – more room in the lab
- Smart and easy operation, no centration, just switch on and work – saves valuable time
- No need to wait after switching off, switch on and off whenever necessary
- Compatible with all microscopes equipped for fluorescence, such as Leica DM1000–3000
- Economic alternative to traditional fluorescence microscopy setup in terms of purchase cost, too
- Low power consumption environment- and budget-friendly



Leica SFL100 provides brilliant fluorescence against a perfectly dark background

Fluorescence Microscopy

State-of-the-art technology in fluorescence microscopy

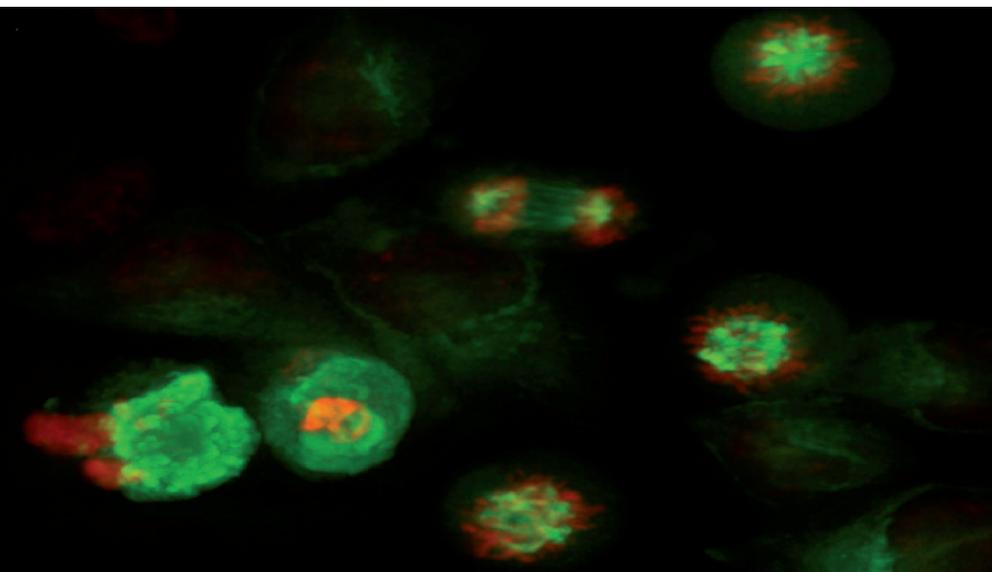
LEDs for high-end fluorescence microscopy? What used to be a definite no-no is now ideal for almost all applications imaginable thanks to today's high-performance LED technology. For modern fluorescence microscopy in cell biology, neurobiology and imaging facilities, the Leica SFL4000 is the new solution. Right from the start, working with this flexible and powerful fluorescence illumination is inspiring. And it remains efficient, and very pleasant too for 10,000 hours of guaranteed lifetime.

Key advantages of the Leica SFL4000:

- Five powerful LED modules, freely combinable
- Directly adapted to microscope without loss of light in light guides, no need for adjustment
- Switch on and off without downtime
- Specific excitation of fluorochromes with one wavelength
- Simple combination of more than one wavelength for multi-color experiments
- Brilliant and high-contrast images due to reduction of stray light
- Less specimen damage
- Better quantification thanks to stable excitation intensities



Modern fluorescence microscopy for inverted research microscopes, too: here the Leica DM16000 B with SFL4000



Living HeLa Cells
Green: Tubulin/GFP, Red: Histone/mCherry
Courtesy of: Dr Urs Ziegler, Centre for Microscopy and Image analysis, University of Zurich – Irchel



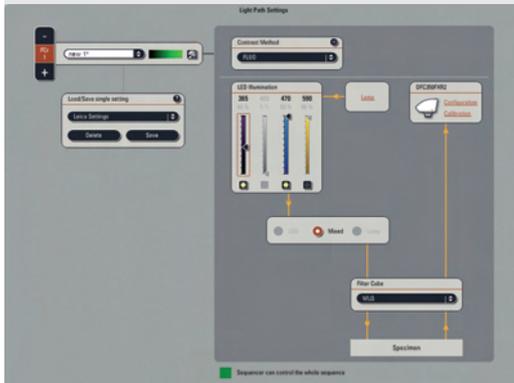
The Leica SFL4000 with Leica DM2500 for up to five different wavelengths grows with users' needs.



SFL100 – uncomplicated solution for all fluorescence microscopes of Leica Microsystems



Leica Microsystems' new SmartTouch concept is used to control the new Leica SFL4000.



The full integration of the SFL7000 into the Leica AF software combines real-time control, fast switching times and easy operation.

Leica SFL7000: the optimum solution for all upright and inverted research fluorescence microscopes

State-of-the-art Illumination Technology in Fluorescence Microscopy

The new Leica SFL7000 LED illumination is the perfect solution for high-speed applications. Fast live cell experiments in particular benefit from the full software integration and the precise real-time synchronization. The new LED light source can be precisely adjusted or switched on and off in less than 1 ms – always synchronized with other components of the high-speed experiment. The Leica SFL7000 therefore opens up completely new avenues in cell research.

Key Benefits of the Leica SFL7000:

- Full software integration with fast switching times under 1 ms
- Easy combination of different wavelengths in high-speed experiments
- Adjustment and blocking of different wavelengths
- More protection for the sample material due to real-time on/off switching (less bleaching)
- Combinable with standard light source
- Coded combined slide for mixing an LED and a standard light source at defined wavelengths
- Five powerful, freely combinable LED modules
- Adjustment-free, direct adaption to the microscope without light loss in fiber-optic guides

