

Leica DC300 FX Leica DC350 FX

See the Light
Advanced fluorescent imaging technology

Leica
MICROSYSTEMS

The specialists for live cell fluorescence imaging

The new Leica DC FX Series digital cameras offer a variety of solutions for your most demanding imaging needs.

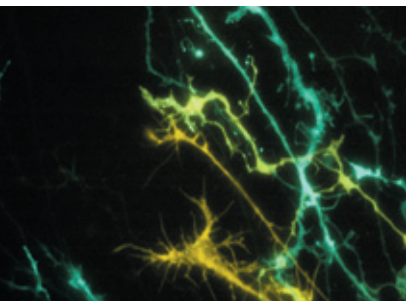
- DC300 FX – color, extended range digital camera
- DC350 FX – monochrome extended range, digital camera

These new digital camera systems from Leica Microsystems record live cells, motion sequences and samples that require fast exposure times at the lowest light intensity. The high sensitivity in the visible and infrared spectrum (Leica DC350 FX) assure reliable results in GFP microscopy and other low-light applications for faster exposure times. The advanced camera housings are small, lightweight and can quickly attach to light microscopes, stereomicroscopes, and macroscopes.

Supporting a new heat dissipating metallic shell, the DC FX Series offers exposure times up to 600 seconds without the concern of thermal background noise.

Feature highlights

- 1.4 Megapixel CCD with Bayer Array RGB Filter with very high sensitivity
- High sensitivity in the visible and infrared spectrum (Leica DC350 FX)
- Ideal for live cells and samples that require fast exposure times
- 36 bit RGB color depth (Leica DC300 FX); 12 bit (Leica DC350 FX)
- High linearity across the complete dynamic range and lowest signal to noise ratio
- Exposure time adjustable from 5 to 600 seconds
- Partial Scan Mode: fastest scanning of a freely defined area at full resolution
- Easy installation on practically every microscope, stereomicroscope and macroscope
- Power supply for camera and fast data transfer using one cable
- Intuitive user interface with convenient image capture and processing functions for PC



Reduced exposure time

The heart of the new digital cameras is a 2/3" progressive scan interline extended range sensor. Due to increased camera sensitivity and rapid fluorescence excitation, images can now be acquired without concern of fluorescence bleaching. Active cooling of sensor elements using a Peltier element creates noise-free images even at the lowest light intensity. The Leica DC350 FX monochrome camera is the perfect tool for genetics applications due to their high sensitivity in the red and near-infrared range.

Intuitive solutions for PC

The new Leica FX cameras have been designed to optimize the performance of the vast number of operating systems available to the market. To maximize the camera's performance on a PC platform, an advanced PCI interface has been engineered to take full advantage of the latest Windows™ operating systems.

Motion captured with precision

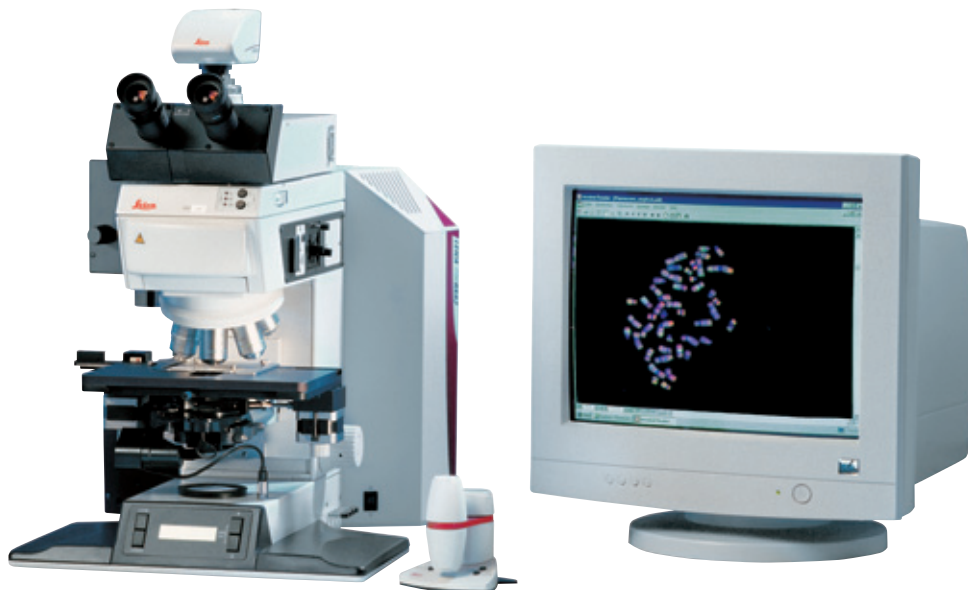
In Partial Scan Mode, freely definable areas can be captured with precision. The extremely high scanning frequency allows efficient documentation of three-dimensional moving objects at full camera resolution.

Highest scanning rates

The camera delivers up to 60 images per second in 4 × 4 binning mode. The top scan rate allows fast focusing of the specimen using the monitor and perfect parameter adjustment. At the same time, specimen bleaching is avoided. You can opt to record in high-resolution mode.

Leica image management software

The Leica Image Manager (IM) software comprises various programs for archiving, editing, and analyzing electronic images. To introduce you to digital image archiving, your digital camera includes the Leica IM50 intuitive and easy-to-learn software. Leica IM500 and IM1000 meet the high demands of professional image management. In larger networks, client-server databases such as SQL are supported. The user can freely define the structure of the database and always add application modules, such as measuring, image correlation, time lapse, image superimposition, presentation, and multifocus.



Leica DM RXA2 research microscope
with Leica DC350 FX digital camera



Technical data

	Leica DC300 FX	Leica DC350 FX
Housing		Metal
Dimensions (L x W x H)		132 x 74 x 68.5 mm
Weight		495 g
Exposure time		5 µs – 600 s
Live image		On computer screen
Live image size		1392 x 1040 (full frame)
Cooling		Active (Peltier cooling) Advanced cooling concept
Sensor		
CCD sensor	2/3" – CCD ICX285AQ Interline Progressive Scan	2/3" – CCD ICX285AL Interline Progressive Scan
Sensitive area		9 mm x 6.7 mm
Pixel size		6.4 µm x 6.4 µm
No. of pixels		1392 x 1040 1.4 million pixels
Max. resolution (total number of pixels)		3.15 million pixels
Color filter	RGB Bayer	without
Dynamics		Type > 64 dB 1875:1
AD converter		12 bit
Protective filter	Hoya CM500S	Schott B270

Leica DC300 FX / DC350 FX

Software

Supported operating systems	Windows 98, Windows 2000, Windows NT4 SP5, Windows ME, Windows XP
Software	TWAIN driver software, IM50

Interfaces

Optical	C-mount
Recommended video adapter	0.63 x
Data	TWAIN, HotLink
Power supply	12 V, via computer
Computer	PCI card

Miscellaneous

Minimal computer configuration	Pentium III, 256 MB RAM, 24 Bit true color, 1 PCI slot, CD-ROM
Operating temperature range	+5 – +35 °C
Relative humidity	max. 70%

Equipment components

Order numbers for PC

10 447 043		Leica DC300 FX CCD Camera
10 447 044		Leica DC350 FX CCD Camera
10 446 278		3 m cable for DC300 FX / DC350 FX
10 446 276	optional	6 m cable for DC300 FX / DC350 FX
10 447 068		PCI card for DC300 FX / DC350 FX
10 447 119		Leica driver software

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