Leica ICC50 HD

Share, Capture and Archive Images
with the New Integrated High Definition Camera System

Living up to Life

Go High Definition!

Leica ICC50 HD Advantages

- Provides live HD image, use with or without a computer
- Very fast, high-resolution live preview on an HD monitor
- Compact camera fits between the viewing tube and microscope stand
- Easy, affordable, fast, and high-quality image storage to an SD card or to a computer
- Movie clips can be recorded directly to an SD card (MP4 format)
- Control camera functions via two buttons, IR remote control, or computer
- Process and manage captured images directly on the computer
- Best image quality and sharpness without vignetting or reflection
- High-resolution still images with the 3-megapixel CMOS sensor
- USB2 connector for power supply and data transfer via computer
- Modular computer software for easy camera control, image acquisition, annotation, and measuring
- Reset feature to return the camera to its default settings
- Automatic, default, or user specific camera parameters for application specific camera settings

Fast High Resolution Live Imaging
The ability to share, capture, and archive images is an important part of the science laboratory. The new Leica ICC50 HD camera offers an economical, modular solution for viewing fast live images in High Definition (HD).
The complete system allows the user to view specimens on the display and through the binocular tube, with or without a computer connection for versatile science education.

Seamless Design: The Leica ICC50 HD fits between the microscope stand and viewing tube without an additional video or photo tube. It is designed to perfectly match newer generation Leica DM-series microscopes.

Easy to Operate: The Leica ICC50 HD provides excellent image sharpness, brightness, and color impression. In addition, the user can work with the basic presets or adjust the camera's parameters as desired. Pushing one of the two buttons on the camera quickly switches camera modes, performs white balancing, or saves an image to an SD card.

Convenient Camera Control: The infrared (IR) remote control unit provides additonal control of camera settings including white balance, brightness, and image contrast. At the push of a button on the remote control, movie clips can be recorded directly to an SD card or a gallery of captured images and movie clips can be displayed on the HD screen.

User-friendly Software for PC
The Leica ICC50 HD comes with LAS EZ (Leica Application Suite) software, which integrates the Leica microscope and digital camera into one common imaging system. The intuitive user interface minimizes the effort required for time consuming imaging tasks. LAS EZ also provides the means to define acquisition preferences by individually setting exposure, gain and gamma levels as well as color depth and size. The result is crisp, sharp images that can be saved and displayed as thumbnails in an integrated gallery and reviewed at any time. All image related information such as acquisition time, bit depth, and calibration is stored, which again simplifies the retrieval process at no additional cost. Free hand annotation is now also available on both the live and saved images!

Leica Acquire Software for MAC
The Leica ICC50 HD camera also comes with free Leica Acquire software for Apple computers – quick and easy. In the same manner as LAS EZ, Leica Aquire includes numerous intuitive image capture and editing functions to ensure that high quality images are immediately available for viewing and processing. According to the preferences settings you can pass captured images directly to iPhoto or to any other imaging application for further processing.

Leica DM750 microscope with integrated Leica ICC50 HD camera, HD RC remote control, and full HD monitor.

FULL HD 1080 · 3 MPix · 45 fps live · HDMI · USB 2.0 · MP4 Movie · Remote Control · Thumbnail Gallery · Free Hand Annotation · Windows Support · OSX Support

Leica ICC50 HD Specifications

Weight	700 g (camera only)
Height	50 mm
Exposure time	2 msec – 2 sec
Live image	45 fps (1256 × 720 Px) – 20 fps (1920 × 1080 Px), depending on brightness level
Full frame image acquisition	2048 × 1536 pixels, 3.1 megapixels
Movie clip	720 × 480 pixels (MP4)
Sensor Size	6.55 mm × 4.92 mm
Pixel size	3.2 µm × 3.2 µm
Sensor type	Aptina 1/2" CMOS
Gain	1× to 20×
Color depth	24-bit
Data format	JPEG / TIFF / BMP / MP4
Operating systems	Windows XP, Windows Vista, Windows 7, Macintosh OS X
Software available	Leica LAS EZ software (PC), optional Leica LAS modules, Leica Acquire (Macintosh)
Min. Computer Config.	Intel Pentium 4 or DuoCore, 2GHz, 2 GB RAM, 24-bit graphics, 1248 × 1024, DVD drive
Min. Display Specification	1920 × 1080 resolution, HDMI connection, DVI connection possible with HDMI/DVI adapter cable (not provided). Note that some displays require that you switch the camera live HD resolution to 1256x720P.

Mechanical and Optical Interfaces

Fits between viewing tube and microscope stand via standard Leica Microsystems dovetail interface

Center offset of the top dovetail to the bottom < 0.4 mm

Light distribution Optical 50% / Camera 50%

Internal video magnification 0.5×

Sensor Centered to optical axis ±0.1 mm

Hoizontally / Vertically aligned ±1 degree

Electronic Interfaces

Computer USB 2.0, mini-USB plug

High Definition connector Mini-HDMI

LED with 2 colors Ready (green), image capture (red)

Integrated slot SD (Secure Digital) card 1–8GB, Eye-FI, WORM supported

Black buton for changing illumination modes (press 1 second), and switching between HD to PC mode (press for 5 seconds)

Red button for capture with SD card (press 1 second), set new white balance (press 5 seconds), camera reset (press 10 seconds)

Other

Power supply USB 2.0

Power requirement 4 W

External power supply

Operating temperature range +5°C to 50°C

Relative humidity 10 to 90%

CE Declaration of Conformity Available

Tested standards EMI/RFI: EN55011-B EN50082-1

EMC: 61000-3-2 61000-3-3

Ordering Numbers

13613725	Leica ICC50 HD camera (includes camera, USB cable, HDMI cable, SD card, Leica software)
13613720	USB Power Supply 5 V for use with default settings and onboard camera controls when there is no computer
13613726	Wireless Remote Camera Control for fine tuning the HD image and making additional camera settings when no computer is being used
13613709	Photoframe reticle for use with 13613532 focusing eyepiece when capturing images on an SD card without a display for preview.

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