

From Eye to Insight

Leica
MICROSYSTEMS

Integrated Camera for Stereo Microscopes

DOCUMENTATION MADE FAST, EASY, AND NETWORKED

Leica IC90 E with Ethernet Capability



ONE OF A KIND

The Leica IC90 E was developed for the stereo microscopes of the Leica M series. It makes your daily documentation and microscopy work easier and supports you to become more efficient. The camera can be simply integrated into your company network – providing you the freedom to capture images very fast from various devices.

Enjoy high quality images

- > See finest details, even at low magnification, the 10-megapixel CMOS sensor paired with the digital zoom ensure full camera power.
- > Work smoothly with the live image on screen, the high frame rate of 35 fps ensures smooth imaging even if the sample is in motion.
- > Find the best contrast for your sample by using the color and monochrome acquisition modes.
- > Inspect, analyze, and organize your images with the LAS X software – the latest imaging technology to simplify your inspection and documentation tasks.



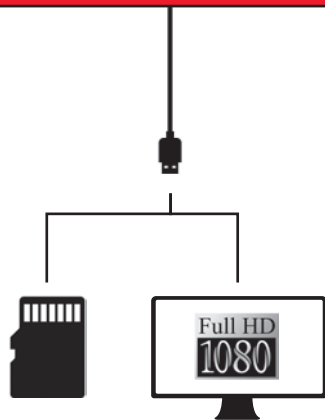
The integrated camera allows you to view samples both on screen and through the microscope's binocular tube.

CHOOSE YOUR CONNECTION

There are various ways to connect the Leica IC90 E with your viewing devices.

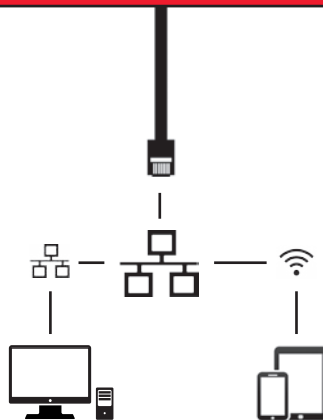


HDMI mode



Use **HDMI mode** to connect the camera to a large HD-screen for a **standalone operation** without computer.

Ethernet mode

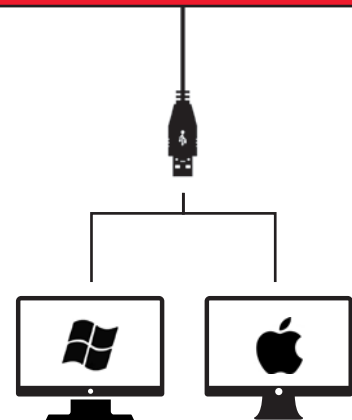


Capture images from any remote PC or Mac with access to your LAN network.

Also mobile devices can be used, if they have access to your network by Wi-Fi.

Use **Ethernet mode** to connect the camera **with your facility's network** via Ethernet (RJ45) cable.

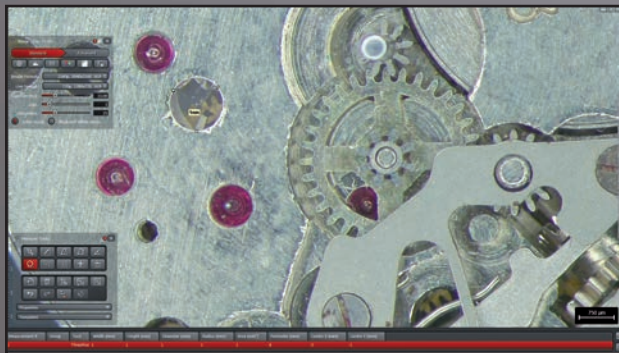
USB mode



Use **USB mode** to connect the camera directly **via USB2 cable** with a **PC** or **Mac**.

ADAPTERS BELONG TO THE PAST

All connectors of the Leica IC90 E are housed inside the camera providing you an easy and cost-effective way to add documentation ability to your microscope.



Work with the Leica Application Suite (LAS) X for PCs, with Leica Acquire for Mac or download the Leica AirLab App from iTunes or Google Play Store if you would like to work with mobile devices.



SPECIFICATIONS

LEICA IC90 E

Exposure time	1 msec – 500 msec
Max. live image rate	Live image on computer screen up to 35 fps (1,024 × 768 pixels) Live image on HDMI screen up to 38 fps (1,280 × 760 pixels) Live image on HDMI screen up to 20 fps (1,920 × 1,080 pixels)
Image formats	2,160p 3,840 × 2,160 16:9 (Capture) 1,080p 1,920 × 1,080 16:9 (Live & Capture) 720p 1,280 × 720 16:9 (Live & Capture) 10 MP 3,648 × 2,736 4:3 (Capture) 5 MP 2,592 × 1,944 4:3 (Capture) 2.5 MP 1,824 × 1,368 4:3 (Capture) 1.9 MP 1,600 × 1,200 4:3 (Live & Capture) 0.8 MP 1,024 × 768 4:3 (Live & Capture)
Movie clip	Full HD (1,920 × 1,080) and HD Ready (1,280 × 720) MP4 with 25 fps
Sensor size	6.44 mm × 4.6 mm, 1/2.3" CMOS
Pixel size	1.67 μm × 1.67 μm
Gain range	1× to 20×
Color depth	3 × 8 bit (24 bit)
Data format	JPEG / MP4
Software	LAS X 3.0 and higher (Windows 7, Windows 10) LAS 4.9 and higher (Windows 7, Windows 8 / 8.1) LAS Acquire 3.3 and higher (MAC OS X) LAS EZ 3.3 and higher (Windows 7, Windows 8 / 8.1, Windows 10)
Recommended computer config.	Depends on the used software

MECHANICAL AND OPTICAL INTERFACES

Mechanical	Fits between tube and optics carrier via standard Leica dovetail, no additional c-mount or phototube needed
Light distribution	Optical 50 % / Camera 50 %
Internal video magnification	0.5×

INTERFACES

Connectors	1 × HDMI type A (full size) 1 × USB 2.0 type B 1 × RJ 45 (Ethernet port) 1 × analog input for hand-/footswitch
Remote control	IR remote control: RC3 (recommended) or RC2 (compatible) Cable remote control: Hand-/footswitch
Mode panel	2 push buttons for capture and mode selection 3 LEDs to indicate operation mode (USB, HDMI, and Ethernet mode)
Status LED	2 colors (green and red)
SD card slot	SDHC up to 32 GB
Pinhole switch	Toggle between HDMI output resolution

OTHER

Power supply	Over USB 2.0 port (power from computer or external power supply)
Power requirement	5 V DC / 800 mA 4 W
Operating temperature	10 °C to 40 °C (50 °F to 104 °F)
Storage temperature	-20 °C to 55 °C (-4 °F to 131 °F)
Relative humidity	10 % to 90 %
Weight	600 g (camera only)

CAMERA KIT AND ACCESSORIES



Article number: 12 730 521

Camera and software kit

Enables you to capture images on a PC with LAS or LAS X.

Content

- > Leica IC90 E camera
- > USB cable, type A-B
- > CD with Leica Application Suite (LAS) Software



Article number: 12 730 528

Standalone kit (accessory)

Enables you to connect your Leica IC90 E to a HDMI monitor and store images on a SD card. Recommended if you use the camera without a PC.

Content

- > HDMI cable, type A-A
- > Remote control RC3 (art. no. 10 450 805)
- > SD card
- > Power supply with international connectors for US, EU, UK, and AU
- > Ethernet cable



Article number: 12 730 229

Hand-/footswitch (accessory)

Enables you to operate the camera remotely with your hand or foot. The following functions can be programmed: image capture, video, white balance, and overlay. Recommended if you need both hands to manipulate the specimen or if you work with a boom-/floorstand sensitive to vibrations.

Content

- > Hand-/footswitch

