

### Wireless Digital Imaging Engaging, Collaborative Education



# Flexible Classroom for the Digital Age



Adding wireless (WLAN) capabilities to a science classroom enables students to work together in an interactive way. The flexibility offered by wireless connectivity improves efficiency, helping educators save time and reduce costs.

Every microscope equipped with a WLAN-enabled EP50 camera becomes a wireless imaging system. Connect through the camera's

WLAN signal\* and stream 5-megapixel images and Full HD videos to mobile devices or WLAN-enabled PCs and laptops.

Installing the camera is easy. Its stand-alone functionality is enabled by onboard imaging software, making additional PC equipment unnecessary.

\* A USB WLAN adaptor is required to operate the camera in wireless mode. This WLAN adaptor is not included with the standard EP50 package. Please contact your local sales representative.

## Inspiring Enthusiasm

The free EPview app makes it easy to connect wirelessly to the EP50 camera.\* Educational activities are enhanced by the easy-to-navigate interface and the crisp images shared among students on their mobile devices.

## Interactive Learning

Wirelessly stream images and video to enable collaboration and interactive learning between students and educators.\*

## Engaging Lectures

Use the HDMI port to connect the camera to monitors, and projectors to display live or previously captured images.



## Improved Learning Process

Onboard imaging software with full stand-alone capabilities enables users to display live images directly on a Full HD monitor and store data on an SD card without additional hardware.

### 3 Control Options

The camera can be controlled with OSD (On-Screen Display) software using a monitor and mouse, or with the EPview app for mobile devices and EPview software for PCs and laptops with Windows operation systems. All three options provide controls for image acquisition and display, basic measurements, annotation, and sharing functionality.





### ▶ Inspiring Enthusiasm

With its USB WLAN adaptor, the EP50 camera can create its own wireless network, but it can also be integrated into LAN networks using its USB-to-Ethernet adaptor. Entire classrooms can easily connect to the camera using the free EPview app for mobile devices and software for Windows operating systems. The simple and intuitive user interface enables students and teachers to easily capture, process, and store sample images.

### Interactive Learning ◀

Teachers and students can directly access live microscope images, making the classroom a truly interactive space. Images can be shared with the entire class, enabling open discussion between students and educators based on live examples. Simultaneous direct output of WLAN and HDMI is available.



### ▶ Engaging Lectures

The camera easily connects to a monitor or projector so that teachers can support their lectures with live images or videos. The EP50 camera transforms the microscopy classroom from an individual experience into an engaging group activity.



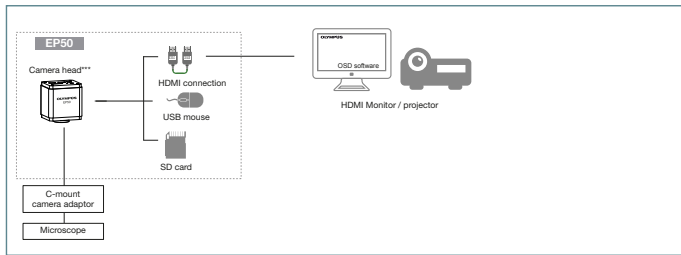
### Improved Learning Process ◀

Display live images directly on a Full HD monitor using the HDMI output with no additional hardware required. The onboard interface enables users to control the camera through its simple on-screen icons—only a monitor and mouse are required. Image and movie files can be stored on an SD card for sharing and further investigation.

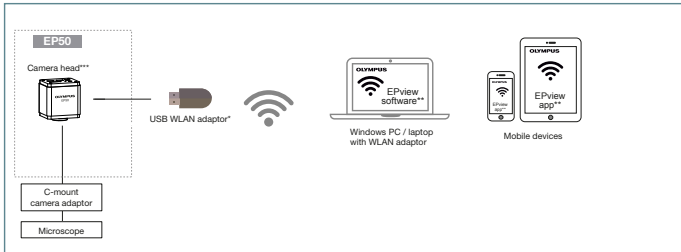


## EP50 CAMERA SYSTEM DIAGRAMS

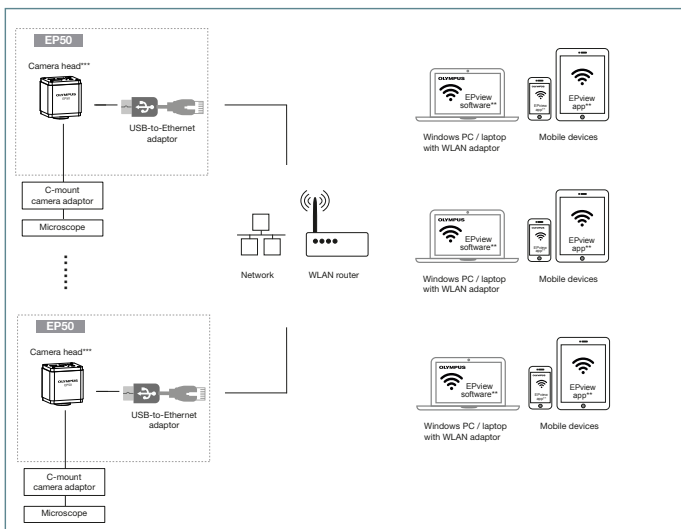
### Stand-Alone Configuration



### WLAN Configuration







### Digital Classroom Configuration



- \* The USB WLAN adaptor is an optional accessory of the EP50 camera.
- \*\* EPView is available for iOS, Android, and Windows operating systems.
- \*\*\* USB connection for USB mouse, USB WLAN adaptor<sup>®</sup>, and USB-to-Ethernet adaptor only.
- \*\*\*\* The frame rate may be lower depending on the available network infrastructure capabilities/performance.
- \*\*\*\*\* The wireless connection stability and reliability can be compromised by existing environmental radio interference and/or the condition of users' mobile devices.

## EP50 CAMERA SPECIFICATIONS

Image Sensor	Color CMOS
Sensor Size	1/1.8 inch (7.140 mm × 4.980 mm)
Resolution (Max.)	2592 × 1944 pixels (Snapshot only)
	1920 × 1080 pixels (HDMI, WLAN, on PC)
Pixel Size	2.4 × 2.4 μm
A/D Converter (Bit Depth)	8 bits
Exposure Times	1 ms – 918 ms
	Snapshot only (2592 × 1944 pixels)
Live Frame Rates	Up to 30 fps (on PC, 1920 × 1080 pixels)
	Up to 60 fps (HDMI Output, 1920 × 1080 pixels)
	Up to 25 fps (WLAN Output, 1920 × 1080 pixels)****
Data Transfer	HDMI, WLAN (using the WLAN adaptor), Ethernet (using the USB-to-Ethernet adaptor)
Annotation Functions	Text, Arrow, Rectangle, Circle
	Line: Length measurement
	Parallel lines
	Circle: Diameter, area, perimeter measurement
Measurement Functions	Angle: Angle measurement
	Rectangle: Area, perimeter measurement
	Polygon: Area, perimeter measurement
	Point: Coordinates, number
	Scale bar
Remarks	Supported Mobile Device OS: EPView is available for iOS 11 and later Android 5.1 and later
	   
	Supported number of connections to one camera: 6***** WLAN adaptor not included. Please contact your local sales representative.
PC Control	Microsoft Windows 10 (32 bit/64 bit) Microsoft Windows 8/8.1 (32 bit/64 bit) Microsoft Windows 7 (32 bit/64 bit)
Dimensions (W × D × H)	78 mm × 65 mm × 88 mm (3.08 in. × 2.56 in. × 3.47 in.)
Weight	Approx. 470 g (1.04 lb)
Camera Mount	C-mount
Storage	SD (HC I; UHS-I, Class 10) Card

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- Images on the PC monitors are simulated.
- Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.