

**ZEISS Labscope** 



# Your Imaging App for Digital Classrooms and Routine Laboratory Work

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Labscope is your easy-to-use imaging app for connected microscopy. Be it for the laboratory, university, school or even your hobby — it's easier than ever before to snap images, record videos and measure your microscopic samples. You can easily create digital classrooms or digital labs — just connect your ZEISS microscopes into a network. Explore the advantages of an interactive learning atmosphere where you can engage your students fully and enthuse them with the content of your lessons.

You don't need to invest in parallel IT-equipment. Control your cell laboratory microscopes with a connected iPhone, iPad, Windows tablet or Windows PC, store images by workplace and observe cell cultures comfortably from your office. Then share your images — at the touch of a finger.

Whether you use Windows devices or iOS devices you will enjoy the same consistent GUI, with the same look, feel and user experience: no training required. It's never been so simple and efficient until now.



### **Simpler. More Intelligent. More Integrated.**

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### **Enjoy Connected Microscopy**

In both education and routine laboratory work, connectivity is a core feature, offering you control, remote observation and the use of mobile devices to observe and share. With Labscope you can transform your student lab via a WiFi-enabled network into a digital classroom. Labscope lets you display all the live images from all the connected microscopes at any time and from anywhere in the room. Observe how your students are doing in real-time. Project images from any microscope onto the wall or a TV screen. Discuss what students are seeing with the whole class. As you move freely around the room, 'lecture & listen' becomes 'show & see'.

### Simple. Imaging. App.

Whether you're using a traditional Windows PC with mouse and keyboard, a Windows tablet with touchscreen, or an iPad – we've got you covered. Labscope runs on all of these devices, and it has been tuned to each of them to provide the best possible user experience – whether on a small touchscreen or a large monitor.

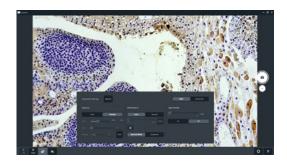
Labscope leverages network technology to switch effortlessly between microscopes and get real-time thumbnails of all microscopes in the room. If you're just looking for an easy-to-use, single-microscope imaging solution, you can skip the network and connect your ZEISS microscope to any Windows computer via a USB cable.

### **Powerful Features with Every Touch**

Labscope is the optimal choice for your digital classroom or lab. You can access cameras from multiple microscopes simultaneously from just one device. Get your students measuring, annotating and documenting their results by making it easy to snap images or record videos. Save your images in the ZEN-compatible .czi file format, which includes all metadata and a separate annotation layer — or select the .jpg format to save space. Use the integrated pointer to lead your students to areas of interest. Let them do their hand drawings with the drawing function. Or opt for Labscope Teacher to manage and organize your digital classroom. Labscope works easily by touch and gesture control, independently if you use it on your iPad or PC.











# **Your Insight into the Technology Behind It**

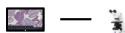
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### **Easy digital solutions**

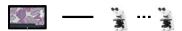
To connect a WiFi-enabled network that spans the whole lab or classroom, use Labscope-ready ZEISS microscopes. Such as Primostar 3 HD, Primotech, Primovert HDcam, Stemi 305 cam, Axioscope 5/7/Vario and Axiolab 5 – or any other microscopes equipped with cameras like Axiocam ERc 5s, Axiocam 202 mono, Axiocam 208 color.

### **Document and archive your results.**

And share the images in your digital network. It is full of possibilities.



■ Connect Labscope to your microscope to start with digital microscopy work.



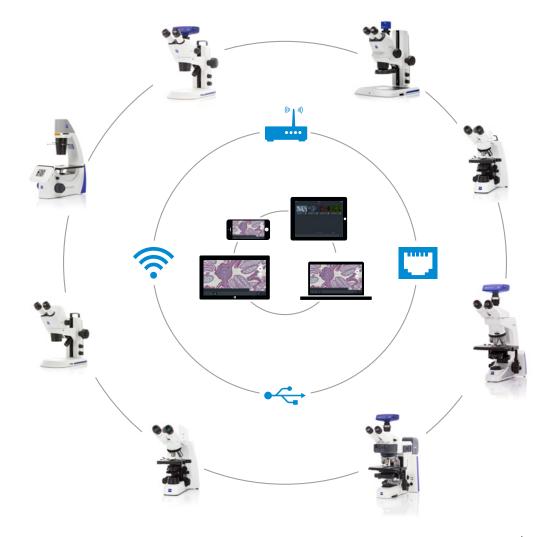
 Connect Labscope to multiple microscopes to fulfill your microscopy works on different microscopes.



Connect your microscope to multiple tablets to do the microscopy work by different users at same time.



 Connect multiple microscopes to multiple devices to enable a fully connected lab or classroom.



## **ZEISS Labscope at Work**

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Use Labscope and a Digital Classroom in the school, university or in professional education:

- Educational / teaching facilities
- Education of techniques in eye surgery



Digital Classroom with ZEISS microscopes at MTLA Hannover, MTA school, Christiane Maschek.



Digital Classroom in biology course, Hainberg Gymnasium Göttingen, Paul Mühlenhoff



Digital Classroom video trailer with Dr. Mark Ramsdale from Biosciences at Exeter University.

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# Use Labscope as easy-to-use software in your laboratory:

- Histopathology
- Cytology
- Hematology
- Parasitology
- Microbiology
- Environmental studies

- Food / beverage control
- Cell culture laboratories
- Sample preparation
- Quality control
- Microphotography
- Forensics



### **Expand Your Possibilities**

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### **Basic functions**



#### Microscope list

Get an overview of all connected microscopes. Manage and work on them easily.



#### Split view

Compare your images in detail with the split view.

Zoom in and zoom out, and even save the image of split view for documentation.



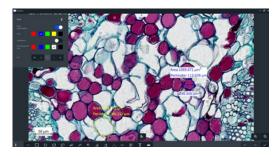
#### Live view and acquisition modes\*

High-quality live image and multiple acquisition modes make your microscopy work more flexible.



#### Report

Different kinds of report templates are prepared for you to quickly create reports from your microscopy work.



#### Annotations and measurements

Choose between 15 types of annotations and easy adjustments of color and size.



#### File management

Sort, search and share your images, videos and reports. Barcode scanning is also available when you want to set a file name or search a file.

<sup>\*</sup> Availability of each acquisition mode is depending on cameras and microscopes.

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#### **Advanced functions**



#### Acquisition settings

Get in-app control of your hardware to adjust exposure, white balance, light intensity and more. Focus on the specimen all the time.



#### Labscope Teacher\*

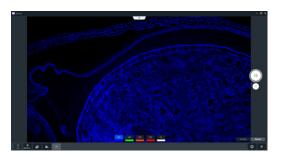
Organize and manage your digital classroom efficiently.

The digital classroom solution from ZEISS creates an interactive learning environment where digital natives feel at home.



#### Histogram

The histogram panel is available for both live view and image view. The Min/Max and Best Fit functions optimize the display effect with just one click.



#### Multi Channel\*\*

Acquire fluorescence and transmitted light images in independent channels. The module supports adding false-color, comparing channels and reporting with displaying each channel.



#### **Drawing Tube**

Do hand drawings of microscopy images without drawing skills. The translucent sketch solution provides an inspiring learning style.



#### Fast Panorama\*\*

Acquire whole slide images with your manual microscope. Profit from a fast stitching speed and high image quality. Only avaliable for Windows Labscope.

- \* Labscope Teacher is a licensed software, please consult with sales representative for enquiry, demo and free trial.
- \*\* Multi Channel and Fast Panorama are licensed modules. Get more information in the module manager of Labscope and have a free trial. Please see the remarks in page 11 for supported cameras.

# **Your Flexible Choice of Components**

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		ZEISS Labscope for iPhone	ZEISS Labscope for iPad	ZEISS Labscope for Windows
Connections	Wireless	Wi-Fi	Wi-Fi	Wi-Fi
	Wired	-	Ethernet connection via Lightning or USB-Type-C adapters	USB, Ethernet
Thumbnail of microscope	Live thumbnail with adjustable size	•	•	•
Microscope configuration	Objective selection	•	•	•
	Shading correction	_	•	•
	Configuration lock	•	•	•
	Scale calibration	_	•	• NEW
	QR code of configuration	•	•	_
Acquisition	Single snap	•	•	•
	Fast snap <b>NEW</b>	•	•	•
	Video recording	•	•	•
	Time-lapse	_	•	•
	EDF	_	•	•
	Multi Channel*	_	0	0
	Fast Panorama* <b>NEW</b>	_	-	0
Acquisition settings	Exposure, white balance, light intensity	•	•	•
	Adjustment of live quality, image orientation, color/grayscale switch, Gamma, denoise, sharpening, pixel correction and HDR	-	•	•
Live assistance	Histogram, graticule overlay, over-exposure indicator, focus indicator and split view	-	•	•

functions available
 O optional
 functions not available
 NEW new features in Labscope v3.3

The availability of some functions is related with types of cameras and microscopes.

<sup>\*</sup> Multi Channel and Fast Panorama are licensed modules. Get more information in the module manager of Labscope and have a free trial. Please see the remarks in page 11 for supported cameras.

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		ZEISS Labscope for iPhone	ZEISS Labscope for iPad	ZEISS Labscope for Windows
Annotations	Line, arrow, rectangle, circle, text, count and scale bar	•	•	•
	Polygon, polyline, spline contour, spline, angle, disconnected angle, count, caliper and multi calipers	-	•	•
	Adjustment of annotations: color and size of line, text and text background	•	•	•
Image processing	Histogram, over-exposure indicator, split view, multi-channel comparison Gamma, brightness, contrast, color intensity, sharpness	-	•	•
Supported image types	CZI, JPEG, TIFF	•	•	•
File management	Different types of file views, sorting, search and sharing	•	•	•
	Report with multiple templates	-	•	•
Interfaces for external	Barcode scanning for configuring a file name or searching a file	-	• (iPad camera)	•
functions	Foot pedal with shortcut setting for snapping	-	● (Bluetooth foot pedal)	•
Theme	Dark and light theme	•	•	•
Global settings	General settings, default annotation settings, etc.	•	•	•
	Module with licensed modules	-	•	•
Digital classroom extensions	Pointer, drawing tube and the connection with the classroom management software Labscope Teacher*.	Pointer only	•	•
Extensions for iOS functions	Importing and managing Labscope files via Files App; Sharing files via AirDrop	•	•	n.a.

- functions available
   O optional
- functions not available

The availability of some functions is related with types of cameras and microscopes.

<sup>\*</sup> Labscope Teacher is a licensed software. Please consult your sales representatives for an enquiry, demo and free trial.

# **Technical Specifications**

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Application Information:			
Seller	Carl Zeiss AG		
Category	Education, Documentation, Microphotography, Laboratory, Research		
Compatible ZEISS microscopes	Primostar 3 HD, Primotech, Primovert HDcam, Stemi 305 cam, Axioscope 5/7/Vario and Axiolab 5		
Compatible ZEISS cameras	Axiocam ERc 5s, Axiocam 202 mono, Axiocam 208 color, Axiocam 105 color (Windows only) and Axiocam 305 mono/color (Windows only)		
Languages	English, Czech, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish		
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System requirements	ZEISS Labscope for iPhone	ZEISS Labscope for iPad	ZEISS Labscope for Windows
Operating system	iOS 13 or later	iOS 13 or later	Windows 10 (64-bit)
Minimum hardware	iPhone 6s/plus iPhone SE (2016)	iPad Air 2 iPad 5 iPad Mini 4	CPU: i3 (6 <sup>th</sup> generation) dual-core @ 2.5 GHz RAM: 4 GB
Recommended hardware	iPhone 7 or later	iPad Air 3 or later iPad 6 or later iPad Mini 5 or later iPad Pro 1 or later	CPU: i5 (7 <sup>th</sup> generation) quad-core @ 3.0 GHz or above RAM: 8 GB or above

System requirements	ZEISS Labscope Module Fast Panorama
Operating system	Windows 10 (64-bit)
Minimum hardware	CPU: i5 (8 <sup>th</sup> generation) quad-core @ 3.0 GHz RAM: 8 GB or above
Recommended hardware	CPU: i7 (9 <sup>th</sup> generation) hexa-core @ 4.0 GHz or above RAM: 16 GB or above

Supported camera types for Multi Channel module: Axiocam 105 color, Axiocam 202 mono, Axiocam 208 color and Axiocam 305 mono/color. Supported camera types for Fast Panorama module: Axiocam 305 mono/color. Not all performance specifications of the used cameras can be supplied in the Labscope environment due to application specific restrictions.





Download Labscope for Windows Runs on Windows 10 (64-bit)



Download Labscope for iOS

#### Note:

You could use <u>ZEISS Labscope Forum</u> for submitting your service request of Labscope, and it also includes the FAQs and latest release information.

If you have any ideas for Labscope development, please share with us in ZEISS Portal My Voice.











