

# Seeing more with the first digital microscope.



**ZEISS ARTEVO 800**

[zeiss.com/artevo800](http://zeiss.com/artevo800)



Seeing beyond



# Seeing more for greater certainty in surgery.

How can digital visualization help ophthalmologists reach new levels of performance? To help achieve superior outcomes and increase patient satisfaction? To find out, ZEISS worked closely with leading ophthalmic surgeons and developed the first digital microscope – the ARTEVO® 800 from ZEISS.

ZEISS ARTEVO 800 is a completely integrated digital microscope for heads-up surgery. As a leader in visualization technology for more than 170 years, ZEISS has embraced digital technology, combining ZEISS optics with the vast possibilities of digital imaging. See more with DigitalOptics™, AdVision® and Cloud Connectivity.

## DigitalOptics

See like never before.

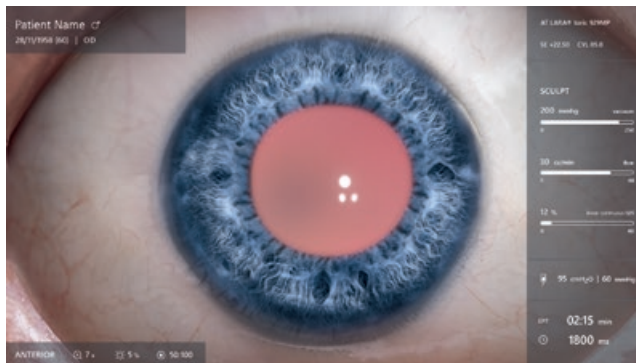
ZEISS ARTEVO 800 integrates the new DigitalOptics to provide optimized digital visualization during ophthalmic procedures. DigitalOptics allows for reduced light intensity, while providing outstanding depth of field and higher resolution images with natural colors.

ZEISS provides the technology to see like never before for more certainty in surgery. With DigitalOptics, ZEISS ARTEVO 800 enables you to see even more – with greater comfort.

*"I've been working with the ZEISS team on the development of the new digital microscope. I was impressed by the very low level of light that is needed to really see the retina and do perfect surgery."*

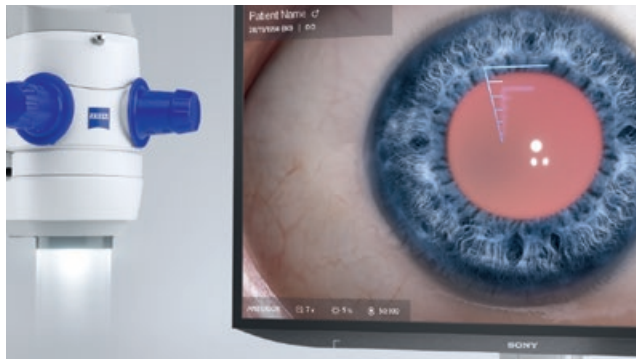
*Jean-François Korobelnik, MD  
CHU de Bordeaux, France*

25% higher  
**resolution**<sup>1</sup>



**Excellent resolution and natural colors**  
Experience natural colors when you view the surgical field. The optical system is optimized to produce remarkably clear images.

Outstanding  
**depth of field**<sup>2</sup>



**Outstanding depth of field**  
ZEISS ARTEVO 800 is the microscope of choice to provide exceptional depth of field. See structures of the eye in focus at the same time.

25% better  
**light transmission**<sup>3</sup>



**Dramatically reduced light intensity**  
Provide your patients with more comfort during surgery. The DigitalOptics of the ZEISS ARTEVO 800 offers the choice to operate at reduced light intensity – while an uncompromised level of brightness is maintained.

<sup>1</sup> Measured comparing the number of vertical TV lines of a 4K 3D monitor with polarization using a resolution test chart ISO 12233 from Esser. Comparing the ZEISS ARTEVO 800 to a competitor's system on the same monitor with yields 1000 TV lines resolution for the ZEISS ARTEVO 800, and 800 TV lines resolution for the competitor's system.

<sup>2</sup> Depth of field depends on magnification.

<sup>3</sup> Based on transmission calculation. Data on file. Increased optical transmission together with light sensitive ZEISS ARTEVO 800 cameras result in light reductions of up to 85% (according to Peter Stalmans, MD).

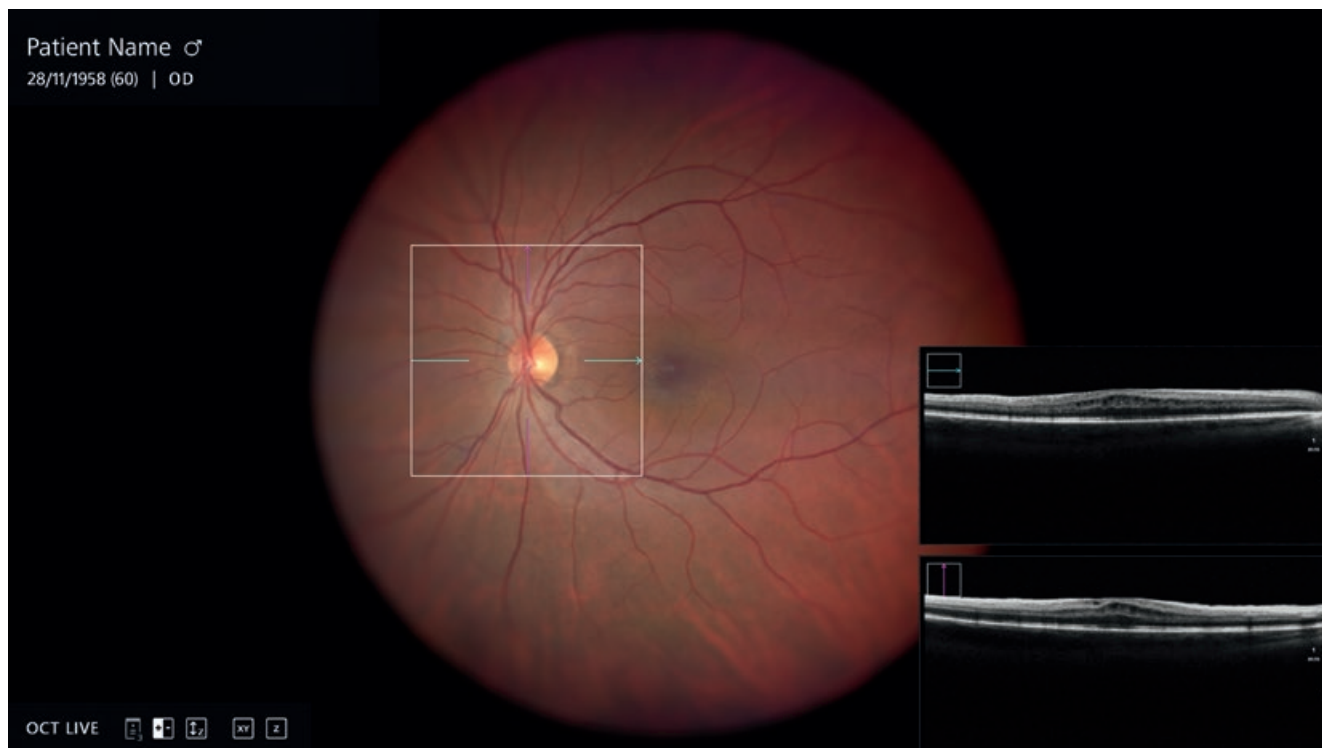
# AdVision

Every detail in your line of sight.

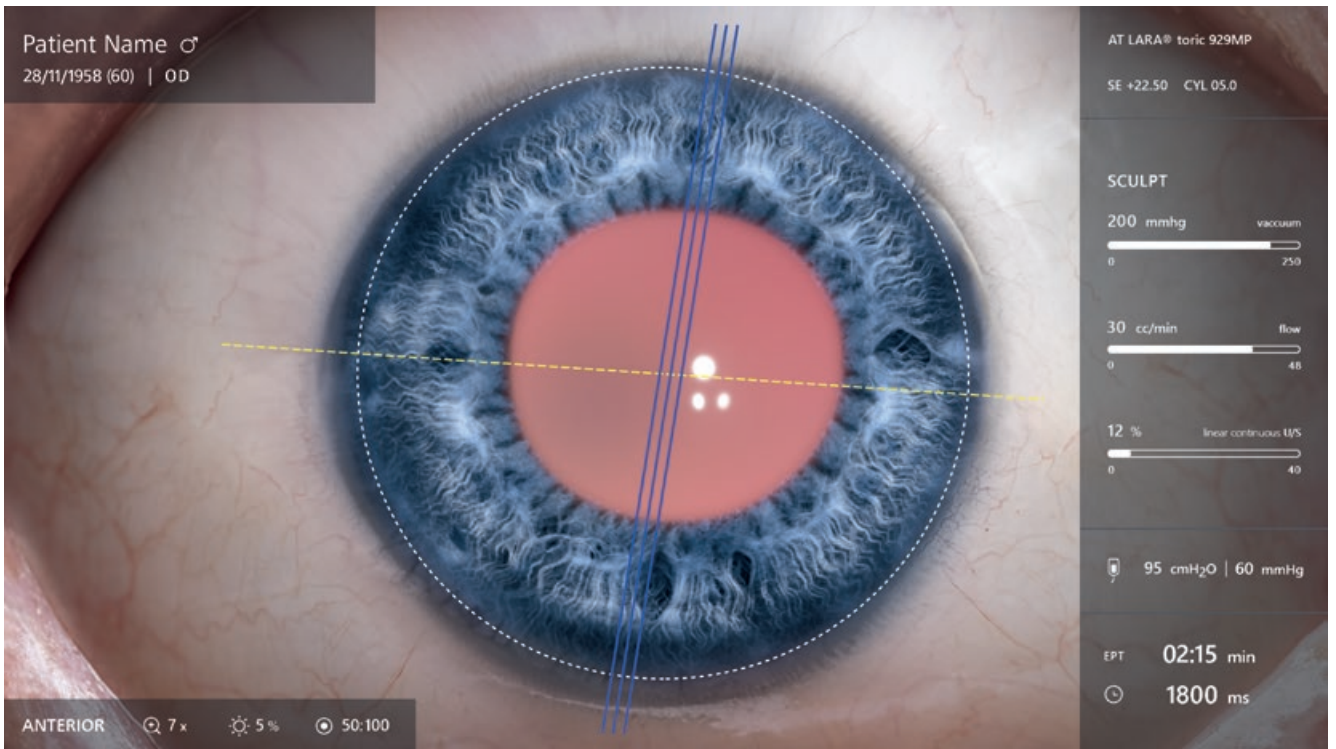
With ZEISS ARTEVO 800, make immediate decisions based on real-time data. AdVision places essential data where it is needed: into the view of the surgeon, without blocking the surgical field. See intraoperative OCT imaging, cataract assistance functions, phaco vitrectomy values and patient identification – to never miss a detail.

*“With the integration of intraoperative OCT and heads-up 3D display in one platform, a whole new world of opportunity has opened. It is the wave of the future.”*

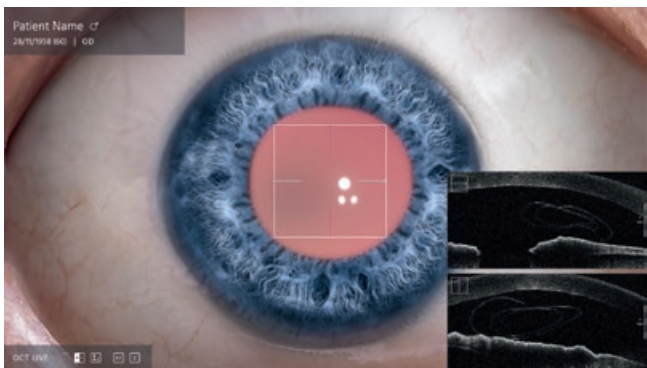
*Rishi Singh, MD  
Cleveland Clinic, USA*



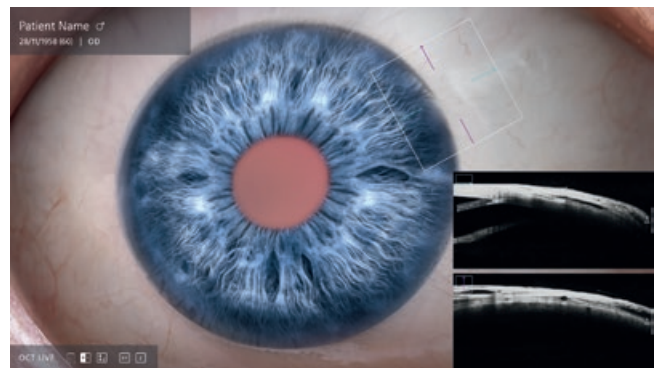
Retina surgery with integrated intraoperative OCT



*Cataract surgery with assistance functions*



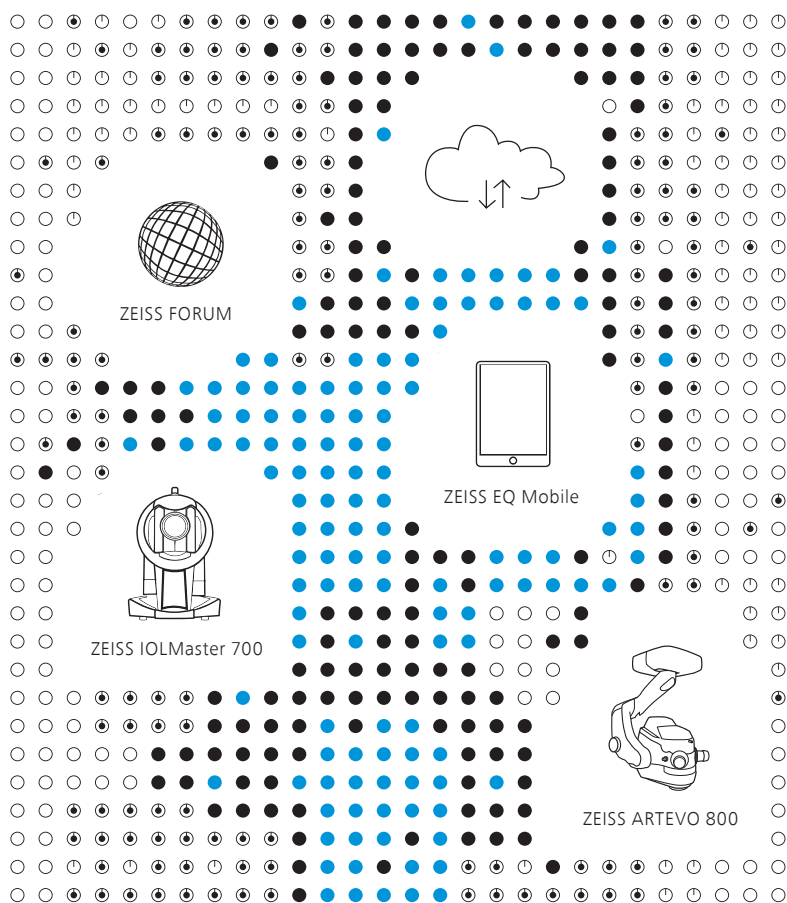
*Cornea surgery with integrated intraoperative OCT*



*Glaucoma surgery with integrated intraoperative OCT*

# Cloud Connectivity

Access data, anytime and anywhere.



*“The dream of every surgeon is to have all the information gathered together in one cloud system that is very proficient and very productive and makes our lives much easier in just one click.”*

*Khalid Al-Sabti, MD, FRCS  
Kuwait Specialized Eye Center, Kuwait*

Cloud Connectivity allows surgeons to access essential information no matter where they are – and when they want. So whether it’s in the OR during surgery, in the office reviewing a procedure, or in the classroom with students, Cloud Connectivity ensures the data is within easy reach and improves your workflow.

ZEISS ARTEVO 800 is integrated into the ZEISS Cataract Suite via the ZEISS EQ Mobile app. Experience wireless transfer of your data and images when you need it. The entire cataract workflow is now seamlessly connected to the cloud – from the office to surgery, and from surgery back to the office.



# AutoAdjust and Hybrid Mode

Without compromise.

With ZEISS ARTEVO 800 with Hybrid Mode, you can view the surgery using the 3D image on the screen or through the oculars. The operating team will continue to view the image and data on the 55" monitor.

AutoAdjust is designed to follow the surgeon's workflow and automatically adjusts settings without additional interaction – for example, when switching between anterior and posterior segments.

*"With ZEISS ARTEVO 800, I can switch between anterior and posterior segments very quickly without the need to make any adjustments."*

*Peter Stalmans, MD,  
UZ Leuven, Belgium*



## **AutoAdjust**

*Stay focused on your surgery. AutoAdjust anticipates your workflow and adjusts your settings automatically.*



## **Hybrid Mode**

*For greater flexibility in the OR, you have the freedom to choose between digital and hybrid visualization without compromising the quality of visualization.*



## Customer Care from ZEISS

### Optimizing your operation.

To efficiently deliver optimal surgical outcomes for your patients, you rely on the availability of your medical equipment every time you need it.

For maximum system uptime and convenience, you might want to consider a service agreement for your ZEISS ARTEVO 800.

Depending on the service package you choose, OPTIME service agreements from ZEISS cover preventive maintenance, corrective maintenance and spare parts.

Also available are different financing options. These ZEISS Financial Solutions allow you to acquire ZEISS technology developed especially for your individual needs.

No matter which ZEISS services you choose, we are committed to helping you optimize your business in every respect.

# Technical data

## ZEISS ARTEVO 800

<b>Visualization</b>	2x 3-Chip 4K Cameras External 55" 4K 3D video monitor Digital and hybrid mode available
<b>Surgical microscope</b>	Magnification factor = 0.4x–2.4x Focusing: electric/motorized, focus range: 70 mm DigitalOptics
<b>Illumination</b>	SCI (Stereo-Coaxial Illumination) included Xenon, LED and Halogen available Optional filters available
<b>Slit illumination</b>	Integrated slit illuminator Slit widths: 0.2 mm, 2 mm, 3 mm, 4 mm Slit height: 12 mm External slit illumination VISULUX available

## ZEISS Intraoperative OCT

<b>Scan parameters</b>	A-Scan depth: 2.9 and 5.8 mm in tissue Scan length adjustable 3–16 mm Scan rotation adjustable 360° Scan modes for live and capture acquisition: Live: 1-line                      Capture: 1-line 5-lines                      5-line cross hair                      cube
------------------------	---

## ZEISS RESIGHT family

<b>Fundus viewing systems</b>	ZEISS RESIGHT 500 (manual) ZEISS RESIGHT 700 (motorized)
<b>Lenses available</b>	60D and 128D

## ZEISS CALLISTO eye

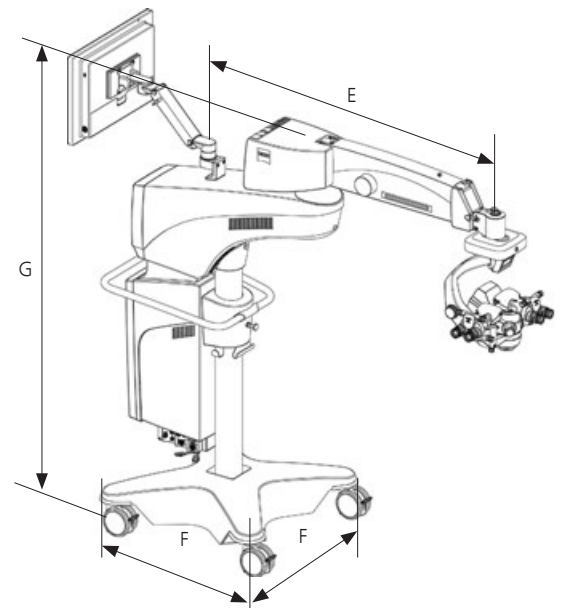
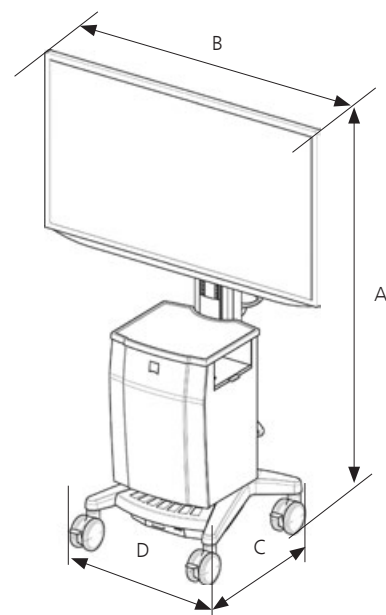
<b>Assistance functions</b>	<b>Z ALIGN®:</b> perform toric IOL centration on the visual axis provided by the IOLMaster and perform rotational alignment
	<b>Incision:</b> position incisions, optionally on the steep axis; add opposite clear cornea incision and paracenteses
	<b>Rhexis:</b> size and shape capsulorexis and align the IOL on the visual axis provided by the IOLMaster
	<b>LRI:</b> perform relaxing incisions
	<b>K TRACK®:</b> estimate the local corneal curvature in combination with a keratoscope

## Connectivity

<b>Data management</b>	DICOM module for image and video data transfer to and from PACS (e.g., ZEISS FORUM) Cloud Connectivity available
------------------------	---

## Measurements

<b>Monitor</b>	Total height (A) 1830 mm Monitor width (B) 1265 mm Monitor cart length (C) 721 mm Monitor cart width (D) 621 mm
<b>Microscope</b>	Swivel arm length (E) 893 mm Microscope footprint (F) 805 mm Total height (G) 1880 mm





ARTEVO 800  
RESIGHT 700  
CALLISTO eye Panel PC



RESCAN 700  
CALLISTO eye Software



**Carl Zeiss Meditec AG**  
Goeschwitzer Strasse 51–52  
07745 Jena  
Germany  
[www.zeiss.com/artevo800](http://www.zeiss.com/artevo800)  
[www.zeiss.com/med/contacts](http://www.zeiss.com/med/contacts)

**EN\_32\_010\_00701** Printed in Germany. CZ-VIII/2019 International edition: Only for sale in selected countries.

The contents of the brochure may differ from the current status of approval of the product or service offering in your country. Please contact our regional representatives for more information. Subject to changes in design and scope of delivery and due to ongoing technical development. ARTEVO, CALLISTO eye, RESIGHT, DigitalOptics, Advision, AutoAdjust, Z ALIGN and K TRACK are either trademarks or registered trademarks of Carl Zeiss Meditec AG or other companies of the ZEISS Group in Germany and / or other countries.  
© Carl Zeiss Meditec AG, 2019. All rights reserved.