



Seeing beyond

# ZEISS IOLMaster 700

## Next-generation optical biometer

The IOLMaster® 700 from ZEISS is based on SWEPT Source OCT and builds upon 20 years of experience in optical biometry.

### Key benefits

- Start your workflow with more insights **NEW**
- Get fewer refractive surprises
- Optimize your workflow
- Improve your refractive outcomes



#### Customer value

**Start your workflow with more insights thanks to Central Topography** **NEW**

#### Details

- Gain additional information and detect visually relevant asymmetries on central corneal shape
- No additional hardware needed
- No changes to the current workflow

**Get fewer refractive surprises**

- Directly measure the posterior corneal surface with Total Keratometry (TK®)
- Detect unusual eye geometries and visually verify your measurement with the patented Cornea-to-Retina Scan
- Detect poor fixation with the unique Fixation Check

**Optimize your workflow**

- Achieve a cataract penetration rate of > 99%<sup>1</sup>
- Measure both eyes in less than 45 seconds<sup>2</sup>
- Use precise and efficient markerless toric IOL alignment<sup>3,4</sup>
- Connect with EQ Workplace® and EQ Mobile® from ZEISS to streamline your cataract workflow from biometry, calculating and ordering IOLs to surgical planning

**Improve your refractive outcomes**

- Get indications for macular pathologies with the Fixation Check<sup>5,6,7</sup>
- Distance and user independent Telecentric Keratometry

1 R. Varsits, N. Hirsnschall, B. Doeller, O. Findl; Increasing the number of successful axial eye length measurements using swept-source optical coherence tomography technology compared to conventional optical biometry; presented at ESCSR 2016.

2 Depending on experience of operator and eye conditions.

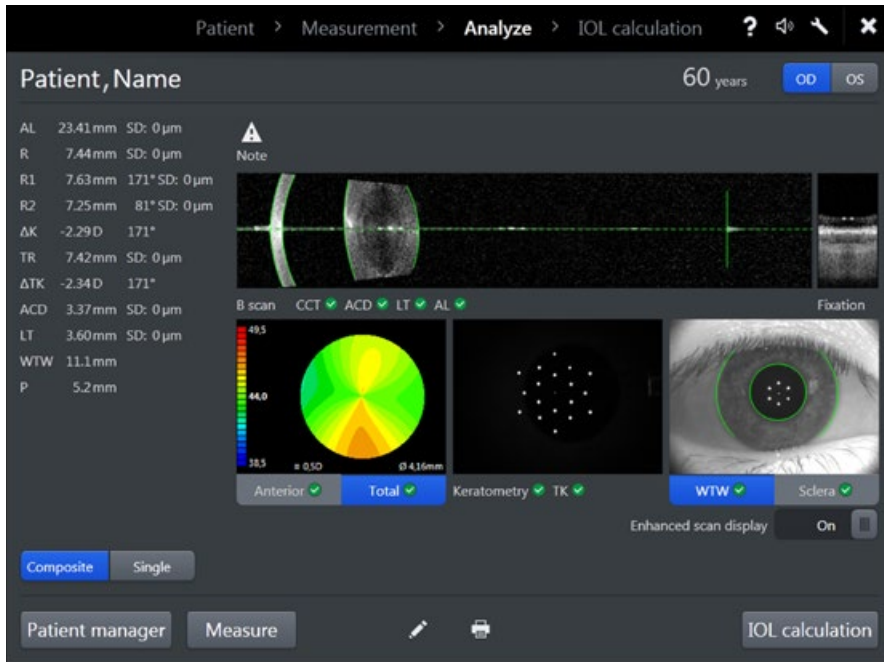
3 Proof for "precise": Clinical data of Prof. Findl / Dr. Hirsnschall presented at ESCRS 2013 – technically verified pre- / intraoperative matching precision  $\pm 1.0^\circ$  in mean.

4 Proof for "efficient": W. Mayer (2017). "Comparison of visual outcomes, alignment accuracy, and surgical time between 2 methods of corneal marking for toric intraocular lens implantation". JCRS, October 2017

5 Hirsnschall N, Leisser C, Radda S, Maedel S, Findl O. Macular disease detection with a swept source optical coherence tomography based biometry device in patients scheduled for cataract surgery. JCRS VOL 42, APRIL 2016.

6 Bertelmann et al.; Foveal pit morphology evaluation during optical biometry measurements using a full-eye-length swept-source OCT scan biometer prototype; European Journal of Ophthalmology, Nov/Dec 2015.

7 Findings need to be verified and pathologies diagnosed with a dedicated retina OCT



ZEISS IOLMaster 700 screenshot showing biometry values, Cornea-to-Retina Scan image, Fixation Check image, Central Topography, Keratometry and Reference Image.

Measurement range/ Repeatability	Axial length 14 – 38 mm Corneal radii 5-11 mm Anterior chamber depth 0.7 – 8 mm Lens thickness 1 – 10 mm (phakic eye) 0.13 – 2.5 mm (pseudophakic eye) Central corneal thickness 0.2 – 1.2 mm White-to-white 8 – 16 mm
Display scaling	Axial length 0.01 mm Corneal radii 0.01 mm Anterior chamber depth 0.01 mm Lens thickness 0.01 mm Central corneal thickness 1 μm White-to-white 0.1 mm
Interfaces	ZEISS EQ Workplace ZEISS EQ Mobile ZEISS FORUM® eye care data management system ZEISS computer-assisted cataract surgery system CALLISTO eye (via USB & FORUM) Data interface for electronic medical record (EMR) / patient management systems (PMS), Holladay IOL Consultant software and PhacoOptics® Data export to USB storage media Ethernet port for network connection and network printer
Line voltage	100 – 240 V ± 10 % (self sensing)
Line frequency	50 – 60 Hz
Power consumption	max. 150 VA
Laser class	1