

ARGOS

ADVANCED OPTICAL BIOMETER

SEE MORE, EVALUATE BETTER.

ARGOS has the highest success rate among dense cataracts.

HIGHLY SUCCESSFUL

Even for dense cataracts

ACCURATE

2D OCT image for error free results

FAST

Data acquisition time under one second



For more info and to get product updates visit

www.movu-inc.com

Movu Inc. Santa Clara, CA
a santec company



CE 0123

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The ARGOS Optical Biometer obtains precise ocular biometry and performs calculations for accurate selection of IOLs (intraocular lens). This device uses SS-OCT (swept-source optical coherence tomography) to deliver the highest success rate and accuracy, even among the densest of cataracts. A non-invasive, non-contact optical biometer, ARGOS outperformed its competitors in clinical trials.

HIGHEST SUCCESS RATE FOR DENSE CATARACTS

Initial studies of dense cataract result in higher success rate using ARGOS compared to the leading competition. The OCT technique used in ARGOS has an intrinsic advantage of 100x greater sensitivity over other light based biometers.

[Get it right the first time with ARGOS](#)

ALL INFRARED (IR) LIGHT, NO HARSH ILLUMINATION

Keratometry is performed by using a ring of 16 IR LEDs. Using the reflected image in combination with the OCT signal provides accurate corneal curvature results.

[Minimize patient discomfort with ARGOS](#)



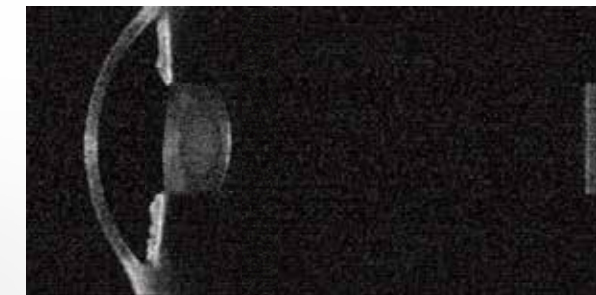
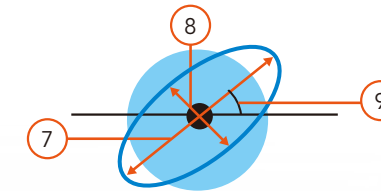
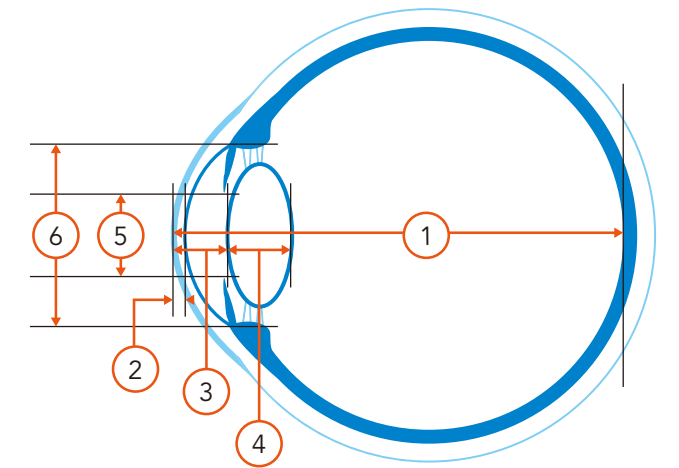
MEASURES 9 PARAMETERS IN LESS THAN 1 SECOND

Image acquisition for biometry and keratometry takes less than 1 second. ARGOS captures 6 images in less a second and outputs 3 sets of results with calculated average and standard deviation values.

[Speed and accuracy with ARGOS](#)

BIOMETRIC PARAMETERS CAPTURED BY ARGOS

- Axial length 1
- Corneal thickness 2
- Anterior chamber depth 3
- Lens thickness 4
- Pupil size 5
- White-to-white(Corneal diameter) 6
- Flat Meridian 7
- Steep Meridian 8
- Astigmatism 9



2D WHOLE-EYE IMAGING BASED ON SS-OCT TECHNOLOGY

Intuitive 2D OCT imaging provides high confidence in accuracy. Using the reflected image from a ring of 16 IR LEDs in combination with the OCT signal provides accurate corneal curvature results.

[See more, evaluate better with ARGOS](#)

MEASUREMENT

The ARGOS biometer is controlled through Windows-based user interface. The technician is easily guided to reach alignment through tracking markers and the unique 2D image window guide. Accurate measurements begin with the touch of joystick-mounted button.

ENHANCED RETINAL VISUALIZATION

ARGOS has 10x higher sensitivity than conventional partial coherence reflectometry devices. In Enhanced Retinal Visualization mode (ERV), it can increase sensitivity up to 100x for axial length detection, resulting in significantly improved success rates.

ANALYSIS MODE

After measurement, the technician can assess the validity of the measurement by referring to the 2D image and signal. Analysis Mode includes the option to manually adjust boundary positions for fine tuning.



SUMMARY

Biometry values output in convenient ready to print format. Alerts are generated for unusual discrepancies in OD and OS values.



IOL POWER CALCULATIONS

IOL calculations made with choice of 6 IOL power formulas.

OVERVIEW



Integrated double chin rest

Chin rest adjustment dial

Joystick/Measurement button

KEY SUMMARY

Technology	Optical Biometer based on 1 micron Swept Source Optical Coherence Tomography Video Keratometry with IR LED ring illumination
Parameters	Corneal thickness, Anterior Chamber Depth, Lens thickness, Axial Length, Radii of flat and steep meridians (K-reading), White-to-white (Corneal diameter), Pupil size, Astigmatism
IOL Formulas	Haigis, HofferQ, Holladay1, SRK/T, Shammas No-History
IOL Library	Manufacturer's data uploadable from ULIB (User Group for Laser Interference Biometry) library source
Peripherals	Desktop PC (refer to requirements on next page) Display Resolution 1600x900 pixel (or greater) Daily calibration fixture

SPECIFICATIONS

TECHNOLOGIES

Function	Measurement Method	Technology	Speed
Biometry	Coherent optical	Swept source	0.6 second acquisition time
	interferometry/tomography	Lateral beam scanning	for 1 set of measurement
Keratometry	Ring LED illumination	Infrared LED	3 second output time

MEASUREMENT

Parameter	Symbol	Range	In-vivo repeatability(SD) *
Corneal thickness	CCT	300 - 800 μ m	<10 μ m
Anterior Chamber Depth	ACD	1.5 - 5.0 mm	10 μ m
Lens thickness	LT	0.5 - 6.5 mm	20 μ m
Axial Length	AL	15 - 30 mm	10 μ m
Radii of flat and steep meridians (K-reading)	R ₁ , R ₂ (K ₁ , K ₂)	5.5 - 10 mm (60D - 34D)	20 μ m (0.13 D)
White-to-white (Corneal diameter)	CD	7 - 15 mm	60 μ m
Pupil size	PS	2 - 13 mm	90 μ m
Astigmatism	AST	0 - 180 dec	5 deg (for Cylinder >1D)

UNIT

	Value	Notes
Laser Class	CLASS 1 LASER PRODUCT	
Dimensions	310 (W) x 485 (D) x 495 (H) mm	
Weight	21kg (not including cables)	
Power Supply for Device	24 V DC	
Power Supply for AC Adapter	100 - 240 V AC 50/60 Hz	EN60601-1 Compliant
PC	Intel Core i5 or greater	
	8 GB RAM memory	
	500 GB storage	
Monitor	Windows 7 Professional	
	1600x900 pixel (or greater)	

*Data source for obtaining the above in-vivo repeatability
The clinical study for quantifying in vivo repeatability was approved by an Institutional Review Board.
The study was planned and conducted as a prospective, comparative study.
In-vivo repeatability study was performed and analyzed for 43 healthy eyes with 3 acquisitions per eye.
The **repeatability** of axial length measurement may be different in eyes with cataracts.