

# SPECIFICATIONS

## SS-1000 MEASURING MODE

<b>ANTERIOR SEGMENT (customized)</b>		
Scan direction	Radial / Raster V / Raster H	
Scan types	16 - 256 images	
Scan resolution	256 - 512 A-scans per line sampling	
Scan speed	Min 0.2 sec. / max 4.8 sec.	
Scan range	Adjustable 6 – 16 mm	
Scan depth	6 mm	
Scan mode	2D, 3D	
Fixation targets	1 x central / 4 x peripheral 1 x accommodation (+5 dpt to -10 dpt)	
<b>CORNEAL MAP</b>		
Scan direction	Radial scan - 16 images	
Scan resolution	512 A-scans per line sampling	
Scan speed	0.3 sec.	
Scan range	ø 10 mm	
<b>BLEB SEGMENT</b>		
Scan direction	Raster scan - horizontal, vertical	
Scan resolution	256 lines x 256 images	
Scan speed	2.4 sec.	
Scan range	8 x 8 mm, 12 x 12 mm	
<b>ANTERIOR SEGMENT (High-Resolution Scan)</b>		
	<b>3D / MOVIE</b>	<b>2D</b>
Scan direction	128 images	1 image
Scan resolution	512 A-scans	2048 A-scans
Scan speed	2.4 sec.	0.2 sec.
Scan range	ø 16 mm / 16 x 16 mm	16 x 16 mm
<b>ANTERIOR CHAMBER ANGLE (HD)</b>		
	<b>3D / MOVIE</b>	<b>2D</b>
Scan direction	64 images	1 image
Scan resolution	512 A-scans	2048 A-scans
Scan speed	1.2 sec.	0.2 sec.
Scan range	8 x 4 mm	8 x 8 mm

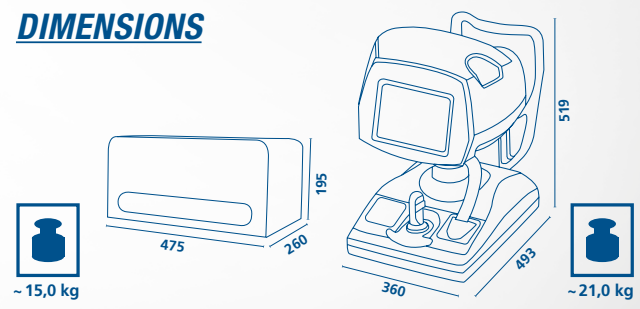
## SS-1000 ANALYSIS

<b>3D/2D ANALYSIS</b>	
3D viewer	Gonioscopic, cutplanes, rotating, ITC
Maps	Topography (anterior/posterior/ACD) Pachymetry (numerical/individual) Ks / Kf / AvgK
Measurement	Personal curvature correction, anterior chamber angle, area / bleb segment analysis, ACD / CCT / flap / thickness / bias, (cornea / iris / ACD) volume, anterior / posterior keratoconus, screening, positioning of toric IOL, ITC (3D angle analysis), OKULIX (ray tracing IOL calculation)
Video export	2D rotation view / C-Scan view, 3D video

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<b>MEASURING UNIT</b>	
Resolution	Axial (depth) 10 µm or less (in tissue) Transverse 30 µm or less (in tissue)
Scan speed	30,000 A-scans / second
Scan range	16 x 16 x 6 mm
Stroke of moving section	88 (X axis), 40 (Y axis), 45 (Z axis) mm
Stroke of chin rest	70 mm
Touch screen	8.4" colour TFT
Dimension WDH	360 x 493 x 519 mm
Weight	Approx. 21 kg
<b>ALIGNMENT</b>	
Mode	Manual via joystick or touch screen, auto alignment, auto shot
<b>LIGHT-SOURCE UNIT</b>	
Type	Swept source laser
Wavelength	1310 nm
Principal	Fourier domain
Output power	Less than 5 mW
Dimension WDH	475 x 260 x 195 mm
Weight	Approx. 15 kg
<b>POWER SOURCE</b>	
Voltage	100 VAC - 240 VAC
Frequency	50/60 Hz
Power consumption	120 VA - 160 VA
<b>Workstation Computer</b>	
OS	Windows® XP or Windows® 7
CPU	Intel® Core™ 2 duo processor or higher
Memory	4 GB or higher
HDD RAID	750 GB or higher x 2 (level1)
Data output	Printer (LAN / USB)
Display	19" colour TFT display
Data export	LAN / USB
Documentation	MS / printer (not included) Video printer (not included)
<b>Accessories</b>	
E-lift table	1200 x 550 mm, PC holder, Printer holder, Isolation transformer

## DIMENSIONS



2012/08 - subject to change without notice

# FOURIER DOMAIN OCT CASIA SS-1000

## 3D SWEPT SOURCE OCT

# DELIGHT IN SIGHT

High speed autotracking measurement for anterior segment.



- High scanning speed: 30,000 A-Scans/sec.
- 130,800 A-Scans
- Cut plane 16 x 16 x 6 mm
- Topo / Pachy map in 0.3 sec.

- Free adjustable display in 2D and 3D
- Individual correction based on the cornea power
- Total scanning time only 2.4 sec. for high resolution



**THE TOMEY  
CASIA SS-1000  
FOURIER DOMAIN OCT**



**QUALITY IN DETAIL**

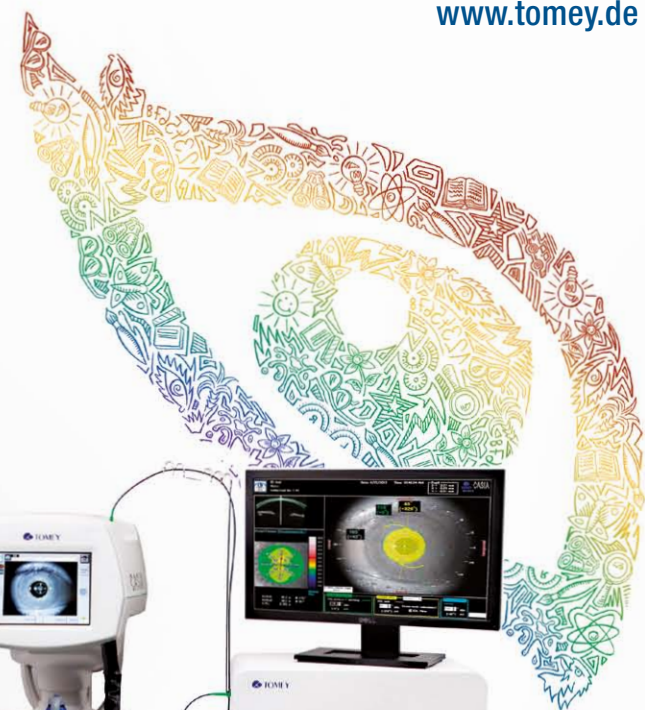
With the **CASIA SS-1000** Fourier Domain OCT you can take high-speed and high-resolution images for a variety of clinical situations. Due to the swept source technology, three dimensional data can be captured at a speed of 0.3 to 2.4 seconds with minimal motion artefact.

The **SS-1000** measures 256 B-scans over the cornea which enables the real 3D view. The high density of the B-scans allows you an entire analysis of the anterior chamber.

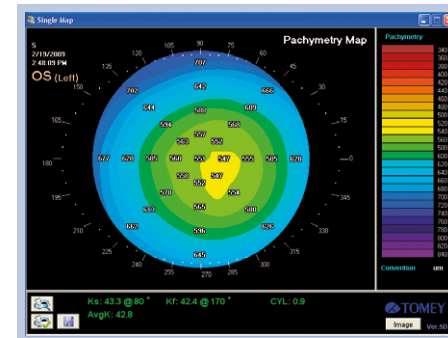
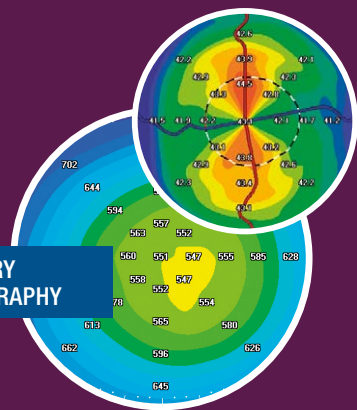
Since the **SS-1000** is a non-contact system, you can take the images immediately after surgery. Corneal curvature, anterior chamber angle analysis, bleb segment analysis, measurement of corneal thickness and anterior chamber depth and the anterior segment of an opaque cornea can be analyzed with various applications. Additional to the measurement values in the single B-scans the SS-1000 provides you with a Topography and Pachymetry map of the surface of the cornea. The individual cornea power correction, considering all physical changes in the AC is guarantor of correct calculation and relocation of the same cornea spot.

# A Picture is worth a thousand words

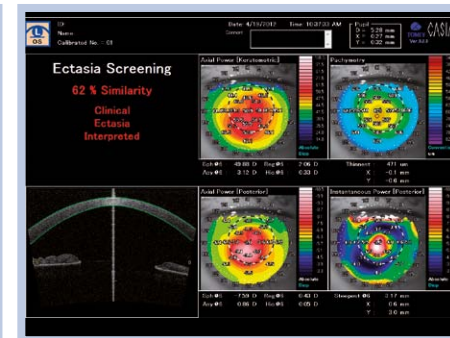
To see 3D videos and get more information please visit our homepage: [www.tomey.de](http://www.tomey.de)



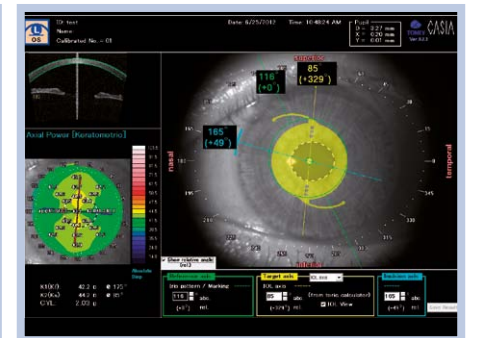
**PACHYMETRY  
plus TOPOGRAPHY**



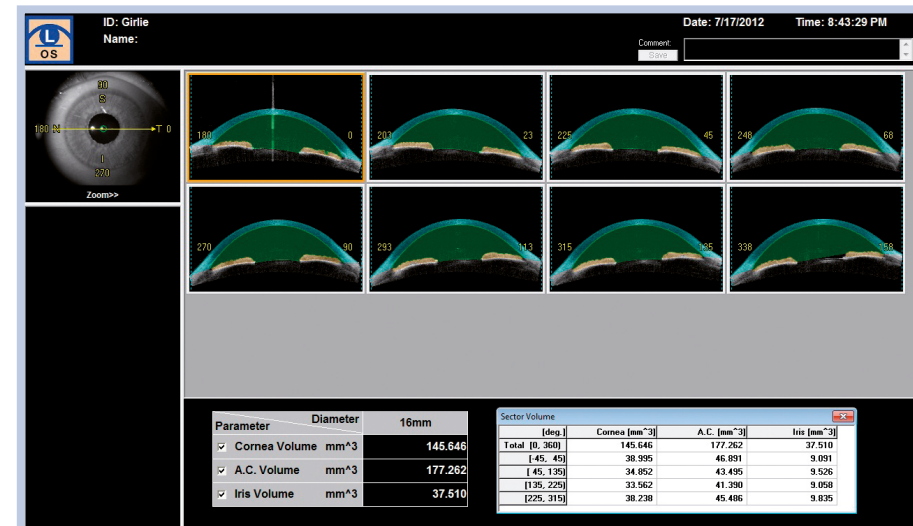
**Pachymetry map**



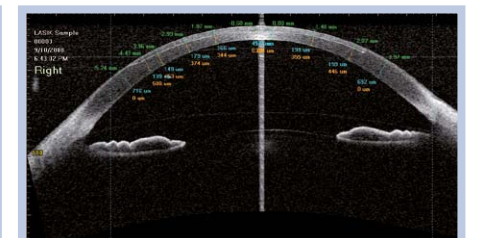
**Keratoconus screening**



**Positioning of toric IOL**



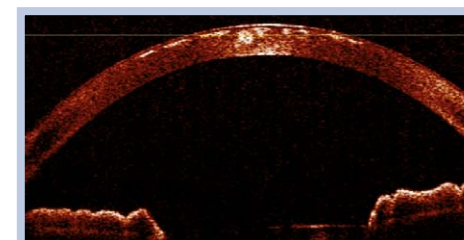
**Iris, ACD and Cornea volume calculation:**  
By just one click you can easily calculate the iris volume as well as the anterior chamber and the cornea volume. Three values – one step!



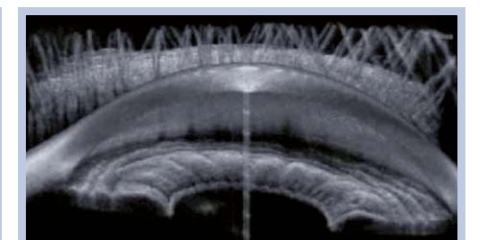
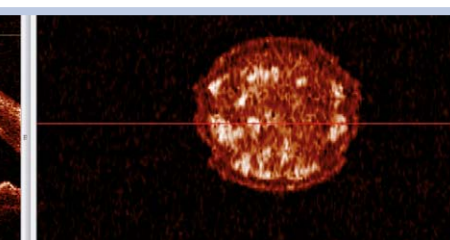
**Flap measurement**



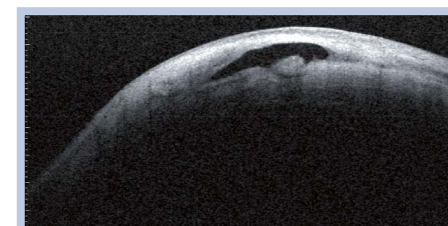
**DSEK:** You can see the centration and complete attachment of the transplanted cornea.



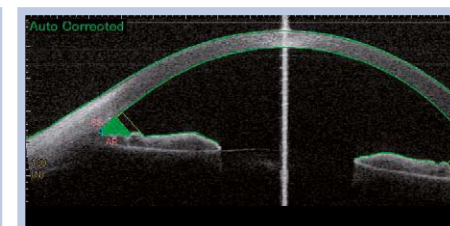
**C-Scan view**



**Gonioscopic view**



**Bleb segment**



**Standardised angle measurement**



**Angle closure Glaucoma**