

## **GALILEI G6** Lens Professional

### **THE GALILEI G6 LENS PROFESSIONAL**

**REACHING A NEW LEVEL IN BIOMETRY** WITH HD TOPOGRAPHY AND TOMOGRAPHY

> **ALL-IN-ONE** The most complete solution for refractive and cataract surgery.

## **GALILEI G6** The key features at a glance

## Various K-Values Total Corneal Power

**HD Corneal Power Maps** 



#### **Premium biometry**

The GALILEI G6 is an advanced biometry device empowering cataract surgeons to improve their results even further.

- Revolutionary concept delivering state-of-the-art biometry in one session
- Featuring Dual Scheimpflug high definition corneal power, pachymetry and posterior surface maps
- Raytraced total corneal power and higher order total corneal wavefront aberrations
- Platform of choice for next generation lens formulas and future IOL calculation through lens thickness and precise anterior and posterior high definition corneal power maps



#### **HD Pachymetry Maps**

**CT** Corneal Thickness



#### All-in-one solution, from refractive to cataract surgery

The only device to combine Dual-Scheimpflug, Placido and biometry technology in one. Designed to optimize the daily workflow in your clinic.

- All-in-one: high definition topography, anterior segment tomography and optical biometry
- · Efficient and streamlined workflow
- Cost and office-space efficient solution by integrating three devices into one
- All measurements are taken in one session to reduce realignment errors



#### **Designed for femto** cataract

The GALILEI G6 is the ultimate platform for femto cataract applications.

- Provides all data for limbal relaxing incisions<sup>1</sup>
- Dual-Scheimpflug technology for precise pachymetry data
- High-definition elevation and pachymetry maps allow exact characterization of the cornea for advanced surgical techniques
- Pre- and post-operative calculation and visualization of astigmatism and higher order aberrations

## **GALILEI G6** Comes with full GALILEI G4 capability



#### The only true solution



## Patented iris-based eye motion compensation

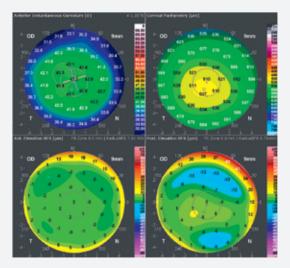
- Get precise pachymetry, elevation and curvature data – in all eyes
- High-definition anterior chamber ray-tracing
- Don't worry about eye motion during examination
  Have confidence in your follow-up measurements
- thanks to realignment of maps in 3-D
- Ideal to monitor corneal stability and changes in your patient's eye



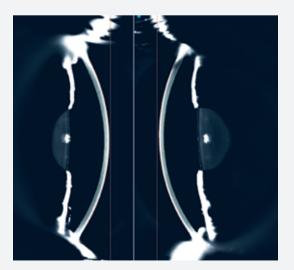
## Reaching a new level in corneal tomography

- Patented Dual-Scheimpflug technique delivers accurate pachymetry and elevation values, even if the eye is not perfectly centered
- New Cone Location and Magnitude Index (CLMIaa) based on anterior axial curvature to simplify Keratoconus screening
- Ray-tracing for the real posterior surface

For more information see GALILEI G4 brochure.



Various diagnostic maps and displays



Anterior chamber analysis

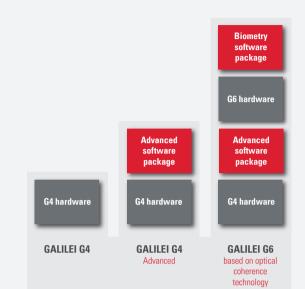


**GALILEI PLATFORM** One platform, one solution

#### Buy today and upgrade tomorrow

The GALILEI platform allows upgrades according to your needs – any time. Find below the detailed information on the different modules available.

# We simplify the daily workflow in your clinic with an all-in-one solution, from refractive to cataract surgery.



#### **Available GALILEI modules**

Feature / Module	G4	<b>G4</b> Advanced	G6
Patented Dual Scheimpflug	۰	۰	٠
Placido disc integrated	۰	0	٠
Total corneal power (ray-traced)	•	•	•
Total corneal wavefront (ray-traced)	٠	•	•
Patented iris-based eye motion compensation	٠	•	•
Optical biometry based on optical coherence technology	0	0	٠
Option to buy additional software licenses:	۲	All licenses included	All licenses include
IOL calculator	0	•	•
Corneal inlays	0	•	•
• DICOM	0	•	•
Unlimited remote workstation*	0	•	•
CSV export for clinical studies	0	•	•

• Standard software package

To be purchased separately

\* Max. 3 workstations at once.

## **GALILEI G6** Clinical benefits

#### Superior lens calculation and selection

The GALILEI G6 Lens Professional offers a complete dataset and platform for IOL calculation and selection featuring Dual-Scheimpflug and Placido data combined with eye-length measurement. Using the acquired data on lens thickness, total corneal power, astigmatism and higher order aberrations, it is the diagnostic device of choice for advanced and future IOL calculation methods.

# 



#### Designed for femto cataract: the must-have tool for implanting premium IOLs and performing corneal relaxing incisions

GALILEI G6 provides all data needed for an optimal outcome when implanting premium IOLs and performing laser corneal relaxing incisions by providing high definition pachymetry, astigmatism and curvature data.<sup>2</sup> A total corneal wavefront and higher order aberration display helps identifying the correct best IOL for every patient – every time. In addition, the device allows for a comprehensive yet convenient way to analyze preand post-op situation and results of IOL implantation and LRIs.

#### Simplify and streamline clinic workflow

The GALILEI G6 Lens Professional is an all-in-one diagnostic solution integrating tomography, topography and biometry in one device and in one measurement session. Acquiring and storing all data needed for refractive and cataract surgery on one device greatly improves efficiency in the clinical workflow and reduces maintenance costs and office space.<sup>2</sup>

The device combines all features of the GALILEI G4 with an all new software streamlined to enhance and simplify IOL calculation and selection in the clinical practice.



## **GALILEI G6** System Information

Technical Data	
Placido disc:	20 rings
Measurement speed:	60 images in 1 second
Number of measurement points – Scheimpflug/Placido:	up to 100 000 measurement points
Displayed map coverage:	max. 10 mm
Axial Length:	14–40 mm (default 14–35 mm)
Central Corneal Thickness:	250–800 µm
Anterior Chamber Depth:	1.5-6.5 mm
Lens Thickness:	0.5-6.5 mm
Keratometry:	25-75 D (4.5-13.5 mm)
White-to-White:	6-14 mm
Pupillometry:	0.5–10 mm
Axial length in-vivo repeatability:	+/- 0.025 mm*
Central Corneal Thickness in-vivo repeatability:	+/- 2 μm*
Anterior Chamber Depth in-vivo repeatability:	+/- 0.034 mm*
Lens Thickness in-vivo repeatability:	+/- 0.034 mm*
Keratometry in-vivo repeatability:	+/- 0.1 D*

\* Values represent the standard deviation of repeated measurements with one device.<sup>3</sup>

Electrical conditions	
Power requirement:	100-240 VAC, 50/60 Hz, 400 W
Fuses (110/230 V):	2×T6, 3 AH, 250 VAC

Classification according to IEC 60601-1		
Type of protection against electric shock:	Class 1	
Degree of protection against electric shock:	Type B applied part	
Degree of protection against damaging penetration of water:	IP20	

Measurement unit characteristics		
Measuring principle:	Combination of optical A-Scan, Dual Scheimpflug slit images and placido and top view images	
Observation illumination:	NIR (near-infrared) LED 810 nm	
Scheimpflug illumination:	Blue LED (UV-free) 470 nm	
Placido illumination:	NIR (near-infrared) LED 750 nm	
Biometry wavelength:	880 nm	
Image acquisition:	3 high definition CCD cameras	

IOL calculation formulas: Haigis, Holladay I, Hoffer Q, SRK II, SRK/T. For newer formulas and export to IOL packages check galilei.ziemergroup.com.





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a Ziemer Group Company Im Hausgrün 15 DE-79312 Emmendingen, Germany Phone +49 7641 9333860 info-deutschland@ziemergroup.com Ziemer Ophthalmic Systems is a privately owned, Switzerland-based med-tech company, whose activities are focused exclusively on ophthalmology.

At Ziemer we strive to empower ophthalmologists and optometrists to deliver better vision care to their patients by creating superior surgical and diagnostic tools.

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#### **Disclaimer:**

The GALILEI G6 Lens Professinal is pending FDA approval and is not available for sale in the US. For some other countries, availability may be restricted due to local regulatory requirements. Please contact Ziemer for details.

#### References:

- 1 Pajic Bojan, MD, PhD, FEBO: Planning a procedure with LRI's. Supplement to Cataract & Refractive Surgery Today Europe, October 2013: 18–19.
- 2 Fam Han Bor, MD: The Advantages of an All-in-One System. Supplement to Cataract & Refractive Surgery Today Europe, October 2013: 4.
- 3 Internal data on file.