

GALILEI G4

For refractive and cataract surgery



For refractive and corneal surgery

Feature
Highly accurate pachymetry and elevation data, even when measurement is decentred.
Detect the thinnest pachymetry very precisely. True measurement of the posterior surface.
The new Cone Location and Magnitude Index (CLMlaa).
A powerful ray-traced Total Corneal Wavefront solution.
Measure the anterior curvature with Placido disc imaging, the standard in the industry and proven over the years.
Screen the full anterior segment of the eye with the patented Dual Scheimpflug system.
Patented iris-based eye motion compensation.

Clinical relevance
Reliable and fast patient screening for refractive surgery.
Get a highly accurate posterior curvature, for more precise keratoconus screening.
A superior I-S index for advanced keratoconus screening.
Measure spherical and aspherical aberrations for wavefront guided treatments.
Get true and highly accurate curvature data. Measured and not only calculated.
Improve your surgery outcome with true and reliable individual pachymetry and anterior segment measurements.
Small to moderate eye motions can't be prevented; especially in elderly patients or children, leading to clinically relevant and unrealistic surface data if not compensated for. The GALILEI applies an intelligent iris-pattern tracing system to correct for eye motion. Have confidence in your follow-up measurements thanks to realignment of maps in 3-D.

For cataract surgery

Feature
Ray-traced Total Corneal Power (TCP) versus SimK.
A powerful ray-traced Total Corneal Wavefront solution.
IOL calculator/selector. ²
One platform, one solution. We simplify the daily workflow in your clinic with an all-in-one solution, from refractive to cataract surgery.

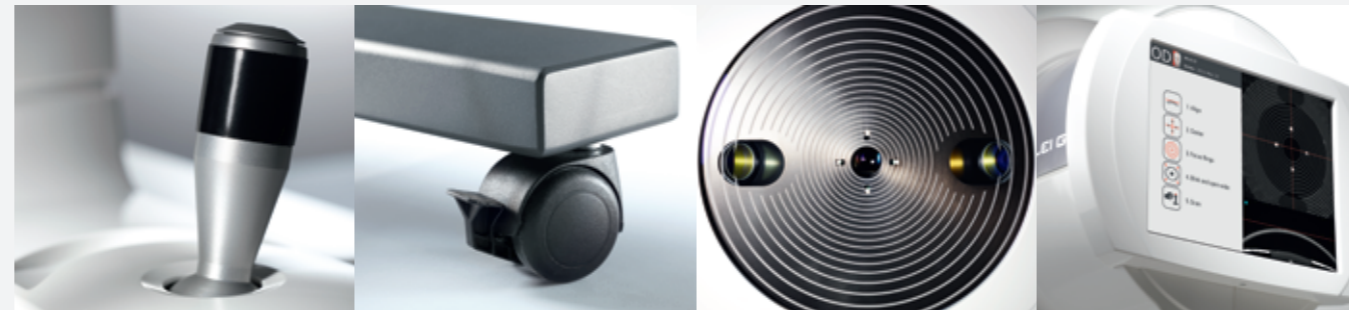
Clinical relevance
More predictable results in cataract surgery with Total Corneal Power (TCP), especially in post-refractive eyes and for premium procedures (toric IOLs).
Measure spherical and aspherical aberrations for highly predictable outcomes in cataract surgery.
IOL calculation and selection. Based on most recent formulas such as Haigis, Hoffer Q, Holladay I, SRK II and SRK/T.
Buy a high performance anterior segment analyzer today and upgrade later to perform optical biometry measurements as soon as available. ¹ This solution will include the power of Dual Scheimpflug and Placido imaging. The optical biometry function on top completes the package for all your needs in cataract and refractive surgery.

¹ DISCLAIMER: Please note that this application is still in preparation and has not yet been approved by the FDA and other regulatory bodies.

² This license does not include A-scan measurements. The axial length needs to be entered manually.

GALILEI G4

Specifications



Technical specifications	
Processor:	Intel Core2 Duo 2.5 GHz
Scheimpflug camera pixel resolution:	2 × 1280 × 960
Top view camera pixel resolution:	1280 × 960
Placido disc:	20 monochrome rings
Speed:	60 images in 1 second
Displayed map coverage:	10 mm
DICOM compatibility:	Yes
Precision:	+/- 0.25 Dpts.
Reproducibility:	+/- 0.1 Dpts.
Pachymetry:	+/- 2µm
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:	Rotational scan of Dual Scheimpflug slit images combined with 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 760 nm
Image acquisition:	3 CCD cameras
Images per scan:	7–30 (adjustable by user)

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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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Actual product characteristics, specifications, and prices are subject to change.
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GALILEI G4

THE NEW GALILEI G4
REACHING A NEW LEVEL IN CORNEAL
TOPOGRAPHY AND TOMOGRAPHY



**ALL-IN-ONE
SOLUTION, FROM
REFRACTIVE TO
CATARACT SURGERY**

GALILEI G4

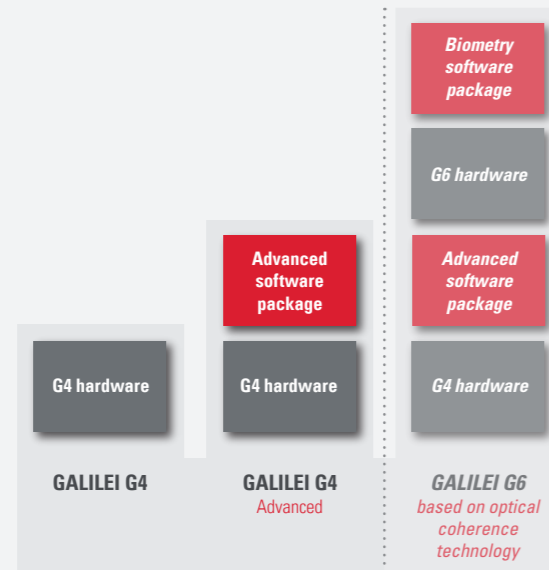
One platform, one solution

Buy today and upgrade tomorrow

The GALILEI G4 is a modular system, which you can upgrade according to your needs – any time. Find below the detailed information on the different modules available.

The GALILEI G4 is ready for the future. Our engineers have been working intensively on our in-house built OCT technology. Based on this technology, the GALILEI will soon be able to process optical biometry measurements for cataract surgery.

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	G4 Advanced	G6
Patented Dual Scheimpflug	•	•	•
Placido disc integrated	•	•	•
Total Corneal Power (ray-traced)	•	•	•
Total Corneal Wavefront (ray-traced)	•	•	•
Patented iris-based eye motion compensation	•	•	•
Optical biometry based on optical coherence technology ¹	○	○	•
Option to buy additional software licenses:	•	All licenses included	All licenses included
• IOL calculator	○	•	•
• Corneal inlays	○	•	•
• DICOM	○	•	•
• Unlimited remote workstation ²	○	•	•
• CSV export for clinical studies	○	•	•

• Standard software package
○ To be purchased separately

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² Max. 3 workstations at once.

GALILEI G4

The new GALILEI G4 at a glance

3 new high-definition cameras
2 Scheimpflug and 1 top view

New automatic surface alignment for simplified measurement process

Reduced light intensity for the patient's comfort



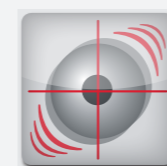
The only true solution

- Get best pachymetry, elevation and curvature data – in all eyes
- High-precision anterior chamber ray-tracing



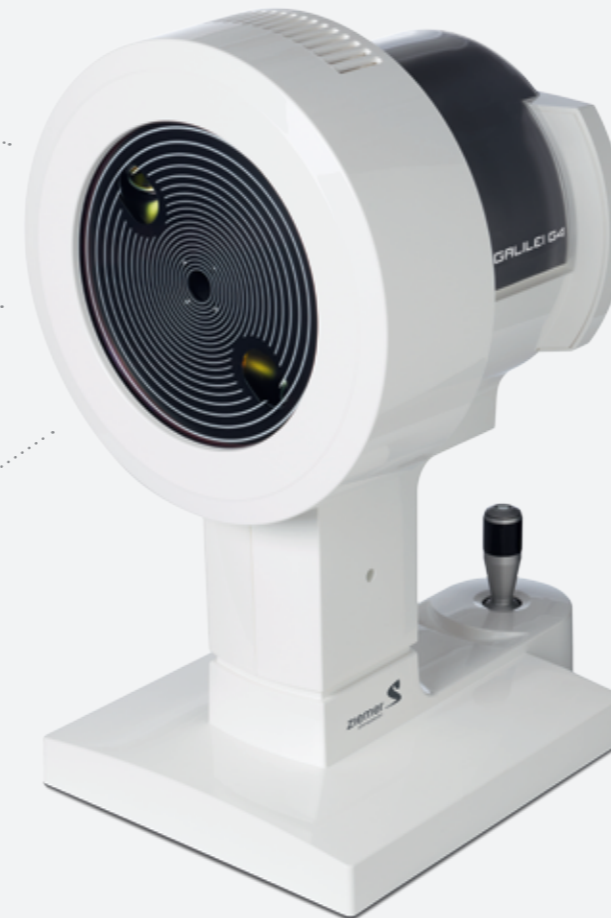
Reaching a new level in corneal tomography

- Highly accurate pachymetry and elevation values – independent of alignment
- The new Cone Location and Magnitude Index (CLMlaa), based on anterior axial curvature
- Ray-tracing for the real posterior surface



Patented iris-based eye motion compensation

- 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



New cross-slide for extra smooth operation



One platform, one solution

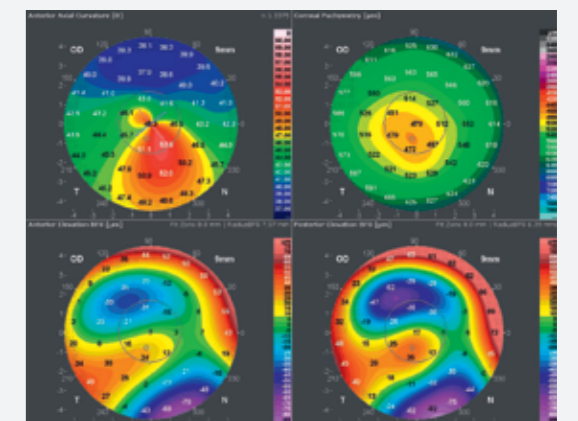
We simplify the daily workflow in your clinic with an all-in-one solution, from refractive to cataract surgery.

Option to upgrade to optical coherence technology for optical biometry measurements as soon as available¹

- The GALILEI platform is unique. Stay flexible with your medical equipment
- Add on software packages according to your individual needs

The new GALILEI V6.0 software

- Cone Location and Magnitude Index (CLMI), a superior I-S index
- Automatic surface alignment to the four Purkinje dots: you will love it
- New licensable software feature to measure eyes with a corneal inlay
- New licensable IOL calculator/selector²



Refractive report of keratoconus

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