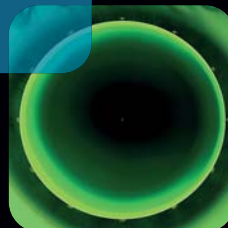
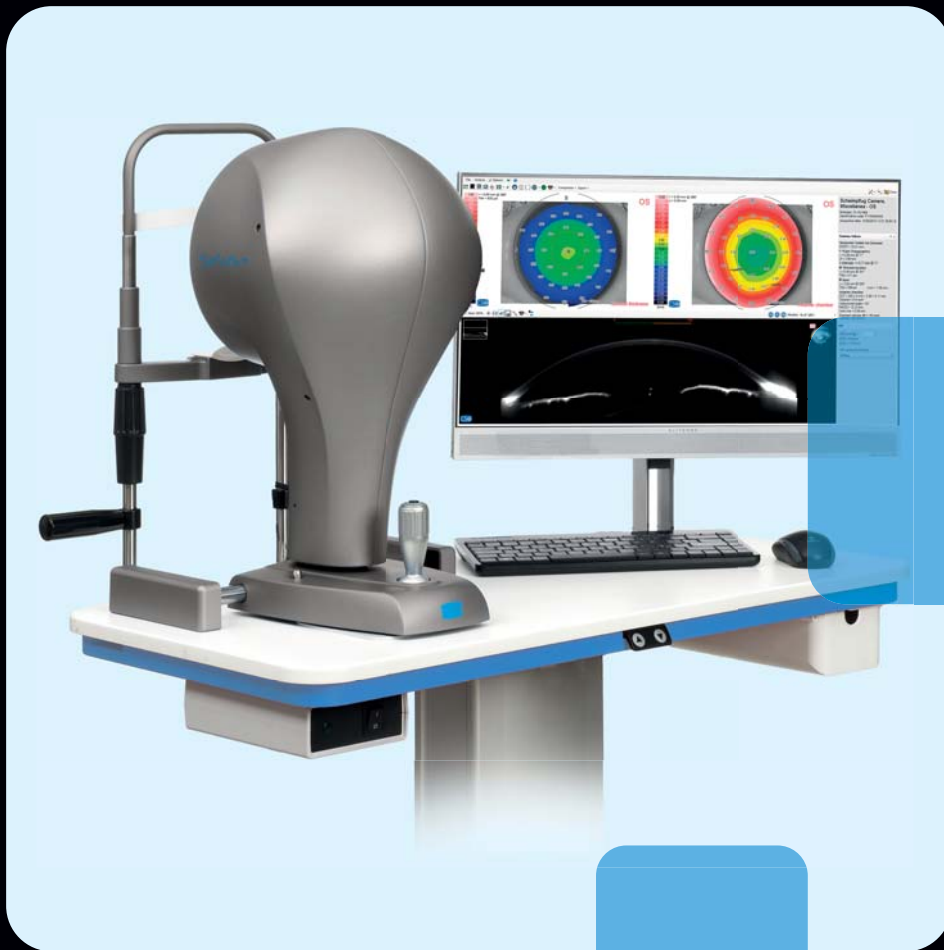


Placido-Scheimpflugcamera Sirius+

The clever combination of the Placido topography with the Scheimpflug tomography offers highly precise measurements.



SIRIUS+

Tomograph and Corneal Topographer



Highest precision for front and rear surface

Sirius+ combines placo disk topography with Scheimpflug tomography of the anterior segment providing information on pachymetry, elevation, curvature and dioptric power of both corneal surfaces over a diameter of 12 mm.

All biometric measurements of the anterior chamber are calculated using up to 100 HR corneal sections.

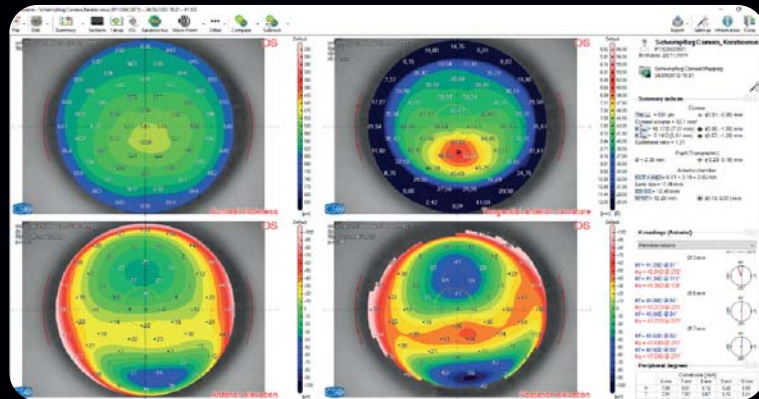
Measurement speed reduces the effect of eye movement producing a high quality accurate measurement.

In addition to the clinical diagnosis of the anterior segment the most common uses are refractive and cataract surgery, an IOL calculation module is available.

Objective examinations provide an accurate measurement of pupil diameter in scotopic, mesopic and photopic conditions.

SIRIUS+

With exceptionally fast and easy image acquisition



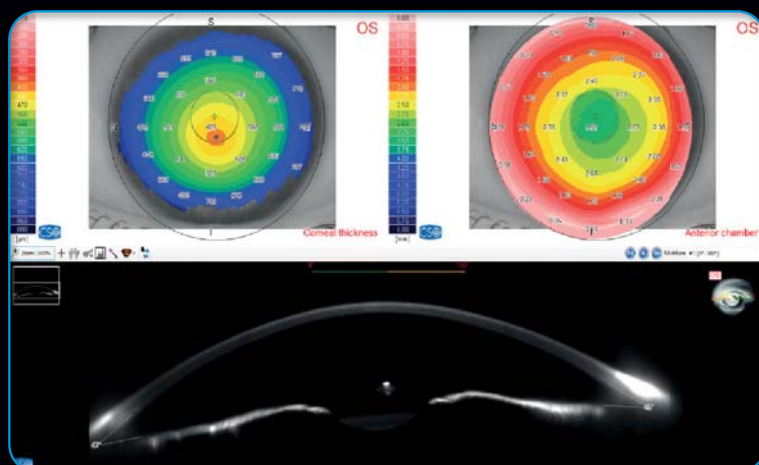
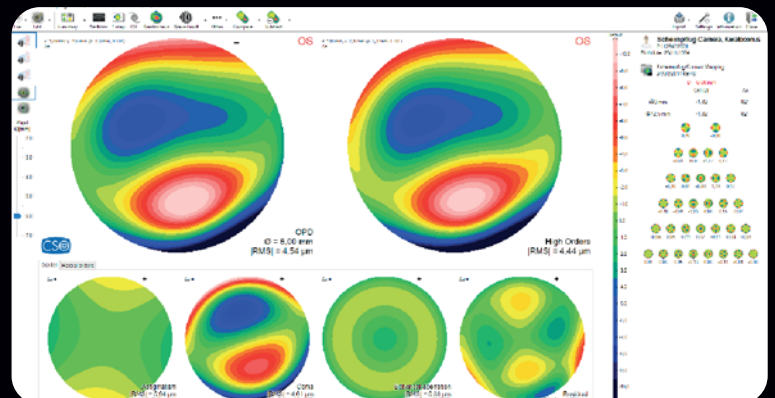
The Phoenix Software

The Sirius+ uses the cross-device Phoenix software, which allows you to perform extensive analyses, evaluations and progress reports.

Patient data and measurement results are stored in a modern database and can be shared between many devices, such as the digital slit lamp "DigiPro".

Corneal Aberrometry

Aberrometric analysis offers a complete overview of the corneal aberrations. It is possible to select the contribution of the anterior, posterior or total cornea for different pupil diameters. The OPD/WFE maps and the visual simulations (PSF, MTF, image convolution with optotype) can help the clinician in understanding or explaining the patient's visual problems.

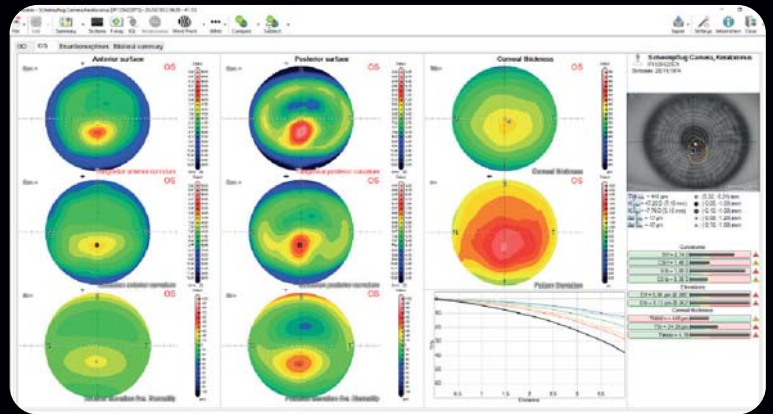


Glaucoma-Screening

For glaucoma specialists Sirius+ enables the measurement of irido-corneal angles and pachymetry. These two values are useful in the diagnosis of the disease.

Keratoconus Screening

Keratoconus screening provides the clinician with important information about the patients cornea. Understanding this can help prevent complications associated with ectasia before corneal surgery is undertaken.



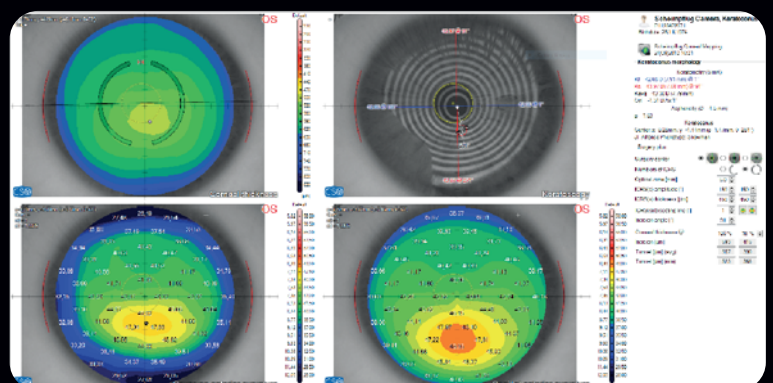
Pupillometry

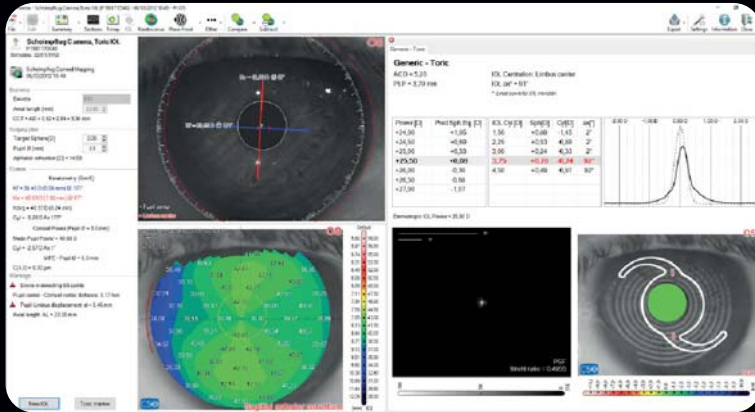
Sirius+ has built-in pupillometry measurement software. The measurement of the pupil in scotopic, mesopic, photopic conditions and in dynamic mode. Knowledge of the center and the diameter of the pupil, is essential for many clinical procedures which seek to optimize vision quality.



Intrastromal Rings

On the basis of the pachymetry map and corneal altimetric data, Sirius+ allows for intrastromal rings system planning, which may be an option for the correction of refractive defects and some forms of keratoconus.



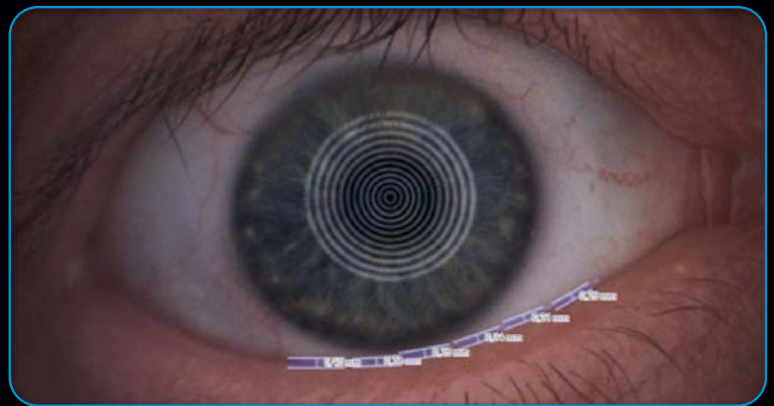


IOL Calculation Module (optional)

This module is based on Ray-Tracing techniques, regardless of the state of the cornea (untreated or previously treated for refractive purposes), provides the calculation of the spherical and toric power of the intraocular lens.

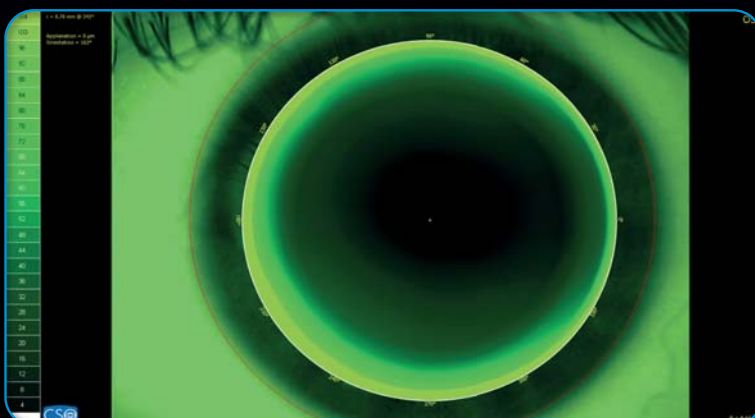
Videokeratometry

The use of a new white light and blue light illumination source, for the stimulation of Fluorescein, will extend the functions of the device for the application rigid and ortho-k contact lenses.



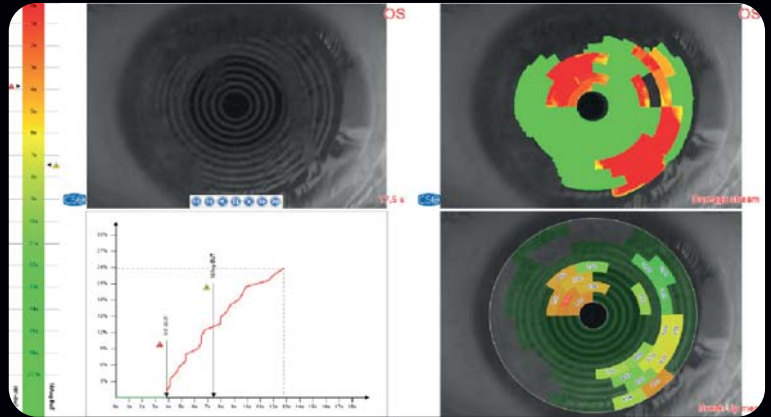
Contact Lens Application Module

A contact lens fitting module is available which simulates the fit of rigid lenses based on an internal database of many lenses and manufacturers.



Advanced Analysis of the Tear Film

Placido disk technology allows for the advanced analysis of the tear film, such as NIBUT (Non Invasive Break-up Time).

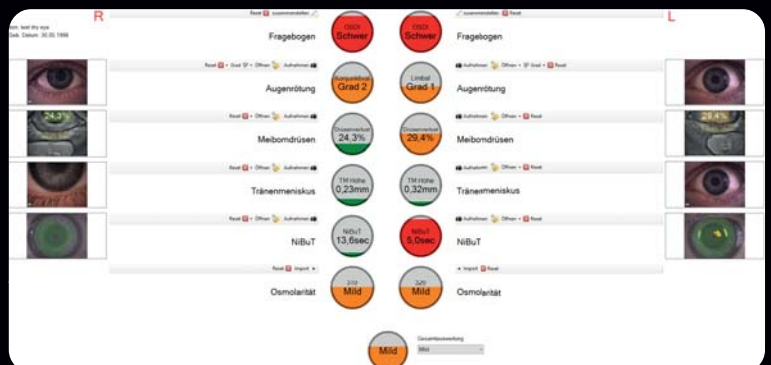


Meibography

Meibomian glands can be viewed under infrared light. Once the image is captured, you can use the software to aid in the analysis of the condition of the glands.

Comprehensive Dry Eye Report

The colour camera allows the measure of tear film Break-up time, Meibomian glands analysis, Conjunctival and limbal hyperemia and tear meniscus height. The Dry Eye report provides a comprehensive assessment of the patients corneal condition and helps in the diagnosis of Dry Eye Disease (DED).



Technical Data Sirius+

Data transfer	USB 3.0
Power Supply	external power source 24VCC In: 100-240Vac, 50/60Hz, 0.9-0.5A Out: 24Vdc - 40W Net cable : IEC C14 plug
Dimensions (HxWxD)	515 x 315 x 255mm
Weight	7kg
Chin rest movement	70mm +/- 1mm
Minimum height of the chin cup from the table	24cm
Base movement (XYZ)	105 x 110 x 30mm
Working distance	74mm

Light Sources

Placido disk	LED 400-700nm
Scheimpflug	LED 475nm (UV-free)
Pupillography	LED 940nm
Fluoresceine lighting	LED 470nm
LED auxiliary lighting	LED 400-700nm

Topography

Placido rings	22
Measured points	from 41,932 to 150,832 for the front surface from 36,300 to 145,200 for the rear surface
Topography coverage	12mm
Dioptric measurement range	1D to 100D
Measurement accuracy	Class A according to UNI EN ISO 19980-2012
Compatibility with standard	DICOM v3 (IHE integration profile EYECARE Workflow)

Accessories	Light diffuser filter for auxiliary illumination with magnetic lock, 530 nm Yellow barrier filter with magnetic lock, -6D additional lens for meibography with magnetic lock, 8 mm diameter calibration tool
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Minimum System Requirements	CPU: i3 or higher (suggested i5) Intel chip set 4 GB RAM or higher (suggested 8 GB) graphics resolution min. 1280x960 px 1 GB dedicated graphics memory USB 3.0 connection Windows 10 (64bit) operation system
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The specifications and the images are not contractually binding and can be modified without notice.
Windows® is a Microsoft Corporation trade mark.



Scientific Papers (extract)

Nasser, Cornelius K., et al. "Repeatability of the Sirius imaging system and agreement with the Pentacam HR." *Journal of Refractive Surgery* 28.7 (2012): 493-497.

Author information: Department of Ophthalmology, Assaf Harofeh Medical Center, Israel.

Jorge, Jorge, et al. "Central corneal thickness and anterior chamber depth measurement by Sirius® Scheimpflug tomography and ultrasound." *Clinical ophthalmology (Auckland, NZ)* 7 (2013): 417

Author information: Clinical and Experimental Optometry Research Laboratory, Center of Physics (Optometry), School of Sciences, University of Minho, Braga

Maresca, Nunzio, et al. "Agreement and reliability in measuring central corneal thickness with a rotating Scheimpflug-Placido system and ultrasound pachymetry." *Contact Lens and Anterior Eye* 37.6 (2014): 442-446.

Author information: Degree Course in Optics and Optometry, Faculty of Mathematics, Physics and Natural Sciences, Roma TRE University, Rome, Italy.

Huang, Jinhai, et al. "Precision of a new Scheimpflug and Placido-disk analyzer in measuring corneal thickness and agreement with ultrasound pachymetry." *Journal of Cataract & Refractive Surgery* 39.2 (2013): 219-224.

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