

# Sirius

## TOMOGRAPH AND CORNEAL TOPOGRAPHER

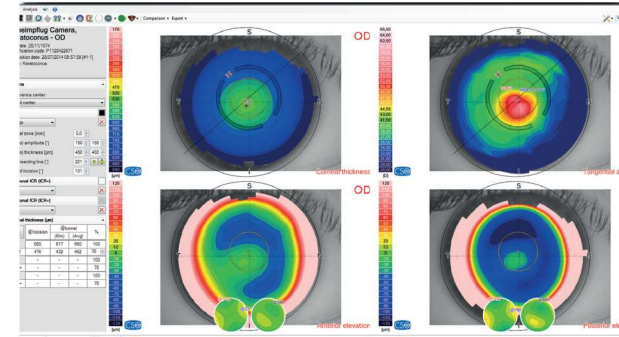
Combines placido disk topography with Scheimpflug tomography of the anterior segment. Sirius provides information on pachymetry, elevation, curvature and dioptric power of both corneal surfaces over a diameter of 12 mm. All biometric measurements of the anterior chamber are calculated using 25 sections from the cornea. 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. When combined with the corneal map they can be used for refractive surgery planning and follow up.



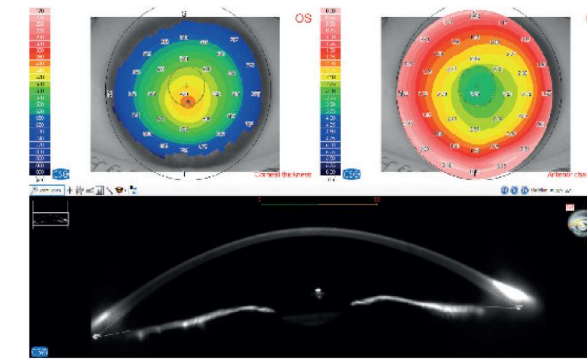
### INTRASTROMAL RINGS

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



### 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.



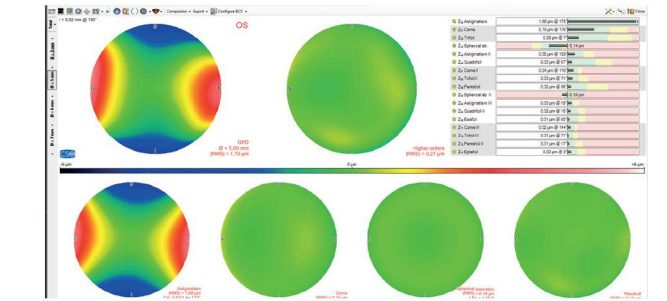
### PUPILLOGRAPHY

Sirius has built-in pupillography measurement software. The measurement of the pupil in scotopic (0.04 lux), mesopic (4 lux), photopic (50 lux) conditions and in dynamic mode. Knowing the center and the diameter of the pupil, is essential for many clinical procedures which seek to optimize vision quality.



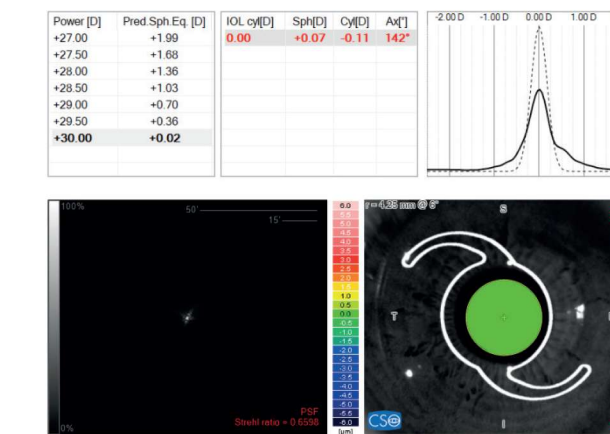
### CORNEAL ABERROMETRY

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.



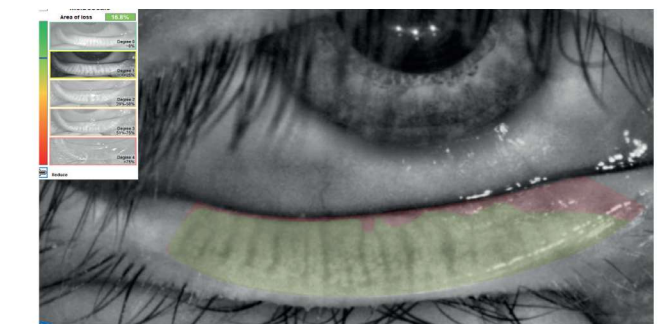
### IOL CALCULATION MODULE (OPTIONAL)

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.



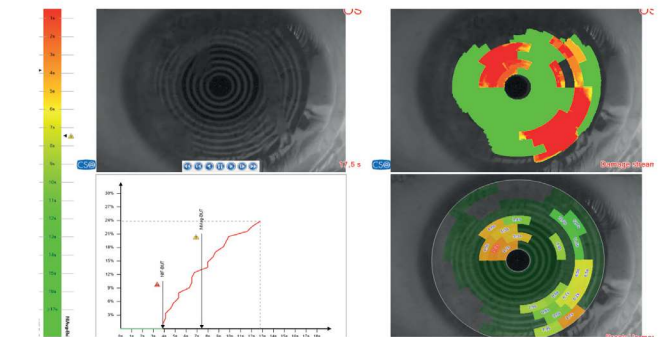
### MEIBOGRAPHY

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.

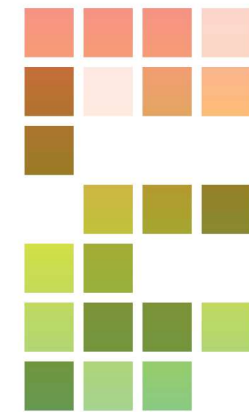


### ADVANCED ANALYSIS OF THE TEAR FILM

Placido disk technology allows for the advanced analysis of the tear film, such as NIBUT (Non Invasive Break-up Time). Based on the Ocular Surface Disease Index questionnaire (OSDI), limbal and conjunctival hyperaemia, Meibomian glands analysis, tear meniscus

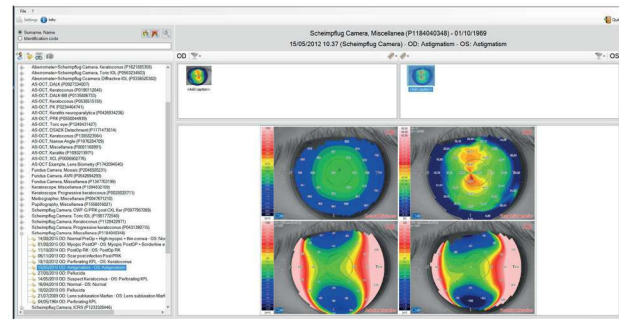


analysis and tear osmolarity, calculated merging together all partial scores, provides an overall evaluation of the clinical condition of the patient for a comprehensive diagnosis of the dry eye disease.



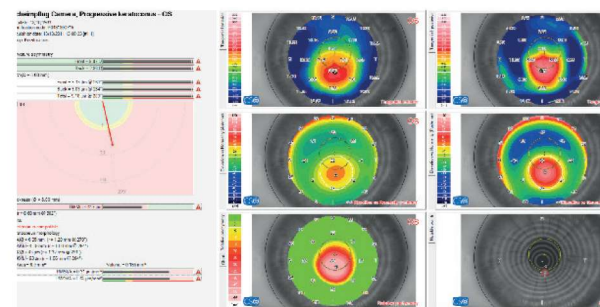
### FEATURES OF THE PHOENIX SOFTWARE

Sirius uses the Phoenix software platform allowing patient data to be saved for future review and analysis, shared by all CSO devices.



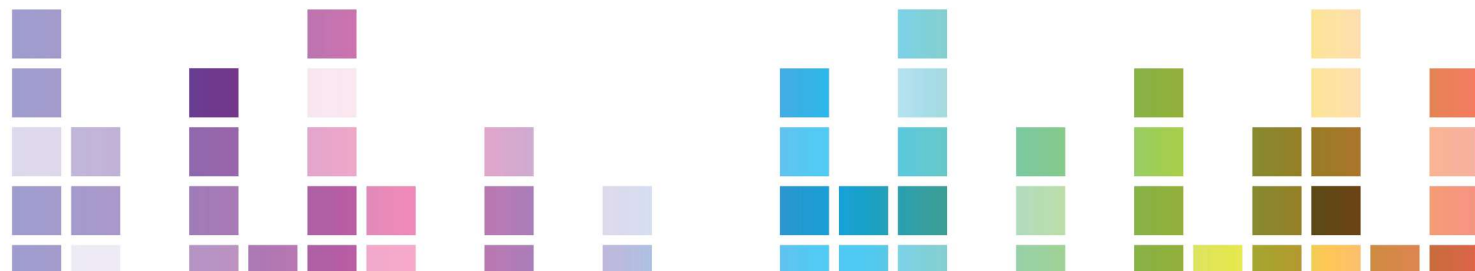
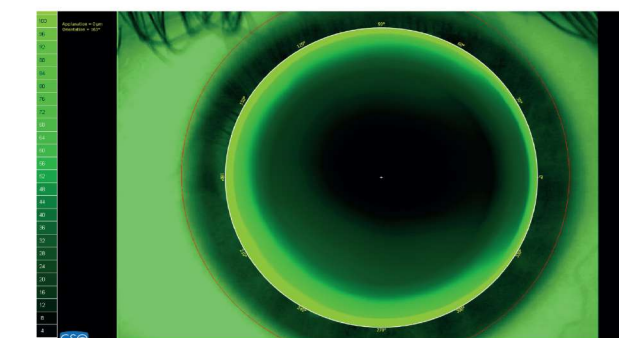
### KERATOCONOUS SCREENING

Keratoconous 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.



### CONTACT LENSES APPLICATION MODULE

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



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## TECHNICAL DATA

Data transfer	Firewire
Power supply	external power source 24 VCC In: 100-240Vac - 50/60Hz - 0.9-05A - Out: 24Vdc - 40W
Power net cable	IEC C14 plug
Dimensions (HxWxD)	515 x 315 x 255mm
Weight	7 Kg
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 @635nm
Scheimpflug	Led @475nm UV-free
Pupilligraphy	Led @875nm

## TOPOGRAPHY

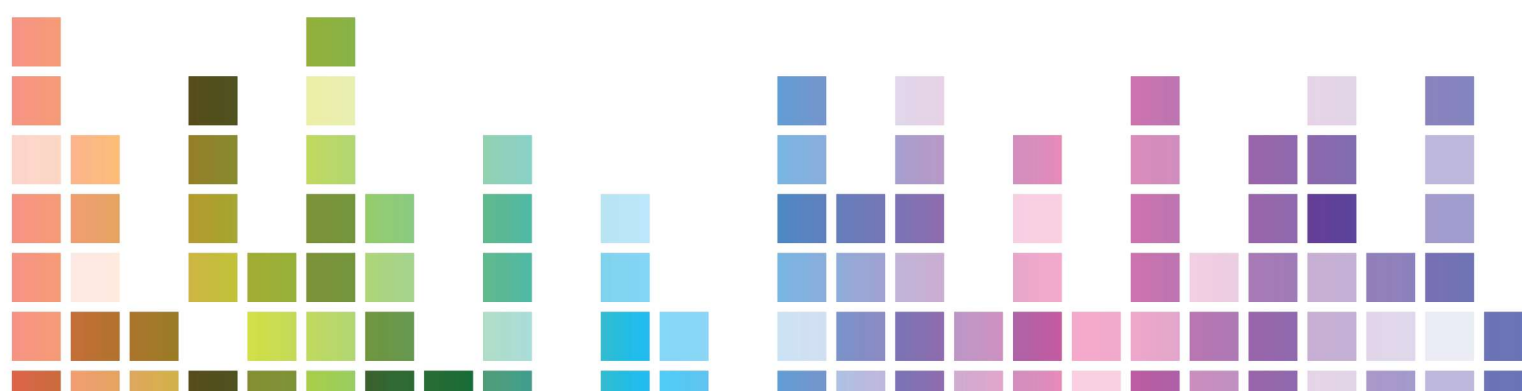
Placido rings	22
Measured points	21632 (front surface) 16000 (rear surface)
Topographic covering	12mm
Dioptric measurement range	1D to 100D
Measurement accuracy	Class A according to UNI EN ISO 19980-2012
Compatibility with standard	DICOM v3 (IHE integration profile EYECARE Workflow)

## MINIMUM SYSTEM REQUIREMENT

PC: 4 GB RAM - Video Card 1 GB RAM (not shared) resolution 1024 x 768 pixels - Firewire port.  
Operating system: Windows XP, Windows 7 and Windows 10 (32/64 bit).

*\*The specifications and the images are not contractually binding and can be modified without notice. Windows® is a Microsoft Corporation trade mark.*

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