SIRIUS + SCHEIMPFLUG
Tomographer & Topographers

Made in Italy
ABOUT SIRIUS+

SIRIUS examinations provides 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. All biometric measurements of the anterior chamber are calculated using 25 sections from the cornea.
INCLUDED:
1. Chinrest Module
2. Head Rest
3. Capturing Channel
4. Resolution (1280x960)
5. Chinrest Cup
6. Knob Adjuster
7. Patient’s Handle
8. Device Blocking Knob
9. Capturing Trigger Joystick
10. Slide Guide Guards

OPTIONAL:
11. Tools Storage
12. HP Monitor
13. Adjustable Stand
14. Custom Colors Available
15. Single & Double Work Stations
16. Table Height Adjuster
17. Elevation Column
18. Cogged Wheels
SIRIUS is a fully featured multi-functional placido disk topographer and Scheimpflug’s tomographer with a dedicated software designed to help in the detection and analysis of Dry Eyes.
SIRIUS is able to obtain the accurate measurement of elevations, curvature, power and thickness for the whole cornea surfaces over a 12mm in diameter.

The most common uses are for refractive and cataract surgery, and IOL calculation module is available. Photos and videos with blue & white diffuse light.

**CORNEAL Measurements**

**ILLUMINATION**

- Placido Disk: LED @400-700nm
- Scheimpflug: LED @475nm UV-free
- Pupillography: LED @940nm
- Auxiliary Lighting: LED 400-700nm
- Fluorescence Lighting: LED @470nm
SIRIUS+ uses the Phoenix Software platform allowing patient data to be saved for future review and analysis, shared by all CSO devices. Enables both comfort and flexibility with CSO's optional single and double electrical tables designed for all ophthalmic instruments.
ANTERIOR SEGMENT DIAGNOSTICS

Anterior and posterior corneal topography information are available for diagnosis, for refractive/ cataract pre-operative planning or for follow up purposes.

What does it do?

- Map of Anterior Chamber Depth & Analysis
- Refractive & Cataract Surgery Planning Tools
- IOL calculation with Ray Tracing Techniques
- Automatic Calculation of Iridocorneal Surface and works with already treated eyes (e.g. LASIK)

- Advanced Topography Ring Editing System
- Corneal Pachymetry (12 mm diameter)
- Contact Lenses Application Module
- OPD Analysis and Visus Simulation
- Scheimpflug’s Images Comparison
- Summary of Acquisition Reliability
- Intra Stromal Rings Summary
- Phoenix Software Platform
- IOP Correction Formulas
- 4 maps + image summary
- 24 Rings Placido’s Disk
- Contact Lenses Autofit
- Keratoconus Summary
- Corneal Aberrometry
- Glaucoma Summary
- Videokeratoscope
- Cataract Summary
Thanks to the new color camera, allows the measure of tear film break-up time, meibomian glands analysis, conjunctival, limbar hyperemia and tear meniscus height. In addition, all functionalities merge together for all partial score to provide a complete Dry Eye report for comprehensive assessment of the patients corneal condition and helping the diagnosis of the Dry Eye Disease DED.
ADVANCED ANALYSIS OF THE TEAR FILM

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

CORNEAL ABERROMETRY

Offers a complete overview of the corneal contribution to the vision. Anterior, posterior or total corneal aberration are selectable for several pupil diameters. The OPD/ WFE map and the simulated vision functions (Spot Diagram, PSF, MTF, Image convolution) help the clinician understanding and explaining the visual discomfort to the patient.

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.
PUPILLOGRAPHY

Sirius has built-in pupillography with pupil measurement of 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.

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.

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.
INTRASTROMAL RINGS
On the basis of the pachymetry map and corneal alti-metric data, SIRIUS allows for intrastromal rings system planning, with variable options for the correction of refractive defects and some forms of keratoconus.

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

KERATOCONUS SCREENING
Keratoconus screening provides the clinician with important information about the patient’s cornea. This will help prevent complications associated with ectasia before corneal surgery is undertaken.
**PRODUCT SPECIFICATIONS**

**Made in Italy**

---

### Technical Data

- **Data Transfer**: USB 3.0
- **Power Supply**: External power source 24 VCC
- **Power net cable**: IEC C14 plug
- **Dimensions (HxWxD)**: 515 x 315 x 255mm
- **Weight**: 7 Kg
- **Chin rest movement**: 70mm ± 1mm
- **Base movement (xyz)**: 105 x 110 x 30mm
- **Working distance**: 74mm

---

### Light Source

- **Placido Disk**: LED @400-700nm
- **Scheimpflug**: LED @475nm UV-free
- **Pupilligraphy**: LED @940nm
- **Fluoresceine Lighting**: LED @470nm
- **Auxiliary Lighting**: LED 400-700nm

---

### Accessories

- **Light Diffuser Filter**: Auxiliary illumination & magnetic
- **Yellow Barrier Filter**: Magnetic 530 nm filter
- **Additional Lens**: Magnetic -6D lens
- **Calibration Tool**: R8 mm calibration tool

---

### Topography

- **Placido rings**: 22
- **Topographic Coverage**: 12mm
- **Measured Points**: Class A according to UNI EN ISO 19980-2012
- **Dioptric Measurement range**: 1D to 100DT
- **Measurement accuracy**: Class “A” as per “ISO19980:2005 (E)
- **Power frequency**: (50/60Hz) magnetic field IEC 61000-4-8
- **Power cable**: Four-core cable conductors