Sirius
TOMOGRAPH AND CORNEAL TOPOGRAPHER
Combines placido disk topography with Scheimpflug to-
mography of the anterior segment. Sirius provides infor-
mation on pachymetry, elevations, curvature and dioptric
power of both corneal surfaces over a diameter of 12
mm. All biometric measurements of the anterior cham-
ber are calculated using 25 sections from the cornea.
Measurement speed reduces the effect of eye move-
ment producing a high quality accurate measurement.

In addition to the clinical diagnosis of the anterior seg-
ment, the most common uses are refractive and cata-
tact surgery, an ICL calculation module is available.
Objective examinations provide an accurate measure-
ment of pupil diameter in scotopic, mesopic and photopic con-
ditions. When combined with the corneal map they can be
used for refractive surgery planning and follow-up.

FEATURES OF THE PHOENIX SOFTWARE
Sirius uses the Phoenix software platform allowing pa-

tient data to be saved for future review and analysis, dra-

ned by all CSO devices.

INTRASTROMAL RINGS
On the basis of the pachymetry map and corneal aber-
rometric data, SIRIUS allows for intrastromal ring system
planning, which makes an option for the correction of
refractive defects and some forms of keratoconus.

PUPILGRAPHY
Syrup is based on pupillography measurement software.
The measurement of the pupil in scotopic (0.04 lux) and
mesopic (4 lux) conditions and in dynamic mode. Knowing
the center and the diameter of the pu-
pil, is essential for many clinical procedures which seek
to optimize vision quality.

IOL CALCULATION MODULE (OPTIONAL)
This module is based on Ray-Tracing techniques, regar-

dless of the state of the cornea (untreated or previously
treated for refractive purposes), provides the calculati-
on of the spherical and toric power of the intraocular lens.

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).

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.

CORNEAL ABERROMETRY
Aberrometric analysis offers a complete overview of the
corneal aberrations. It is possible to select the contribu-
tion of the anterior, posterior or total cornea for differ-
ent pupil diameters. The OPD/WFE maps and the visual si-
lumations (PSF, MTF, image convolution with optotype)
can help the clinician in understanding or explaining the
patient’s visual problems.

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.

GLAUCOMA SCREENING
The plumbed topography enables the measurement
of intra-corneal angles and pachymetry. These
two values are useful in the diagnosis of the disease.

KERATOKONIC SCREENING
Fascial tomography technology equipped with dioptric
maps helps the clinician with important information about
the patient’s cornea. Understanding this can help predict complications associated with ectasia before corneal surgery is undertaken.

CORNEAL ABERROMETRY
Aberrometric analysis offers a complete overview of the
corneal aberrations. It is possible to select the contribu-
tion of the anterior, posterior or total cornea for differ-
ent pupil diameters. The OPD/WFE maps and the visual si-
lumations (PSF, MTF, image convolution with optotype)
can help the clinician in understanding or explaining the
patient’s visual problems.
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data transfer</td>
<td>Firewire</td>
</tr>
<tr>
<td>Power supply</td>
<td>external power source in VAC</td>
</tr>
<tr>
<td>Power net ratio</td>
<td>2C: 24V</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>515 x 315 x 255mm</td>
</tr>
<tr>
<td>Weight</td>
<td>7 kg</td>
</tr>
<tr>
<td>Chin rest movement</td>
<td>±70mm ± 1mm</td>
</tr>
<tr>
<td>Minimum height of the chin cup from the table</td>
<td>24cm</td>
</tr>
<tr>
<td>Base movement (xy)</td>
<td>105 x 110 x 30mm</td>
</tr>
<tr>
<td>Working distance</td>
<td>20mm</td>
</tr>
<tr>
<td>LIGHT SOURCES</td>
<td></td>
</tr>
<tr>
<td>Placido disk</td>
<td>Led @635nm</td>
</tr>
<tr>
<td>Scheimpflug</td>
<td>Led @475nm UV-free</td>
</tr>
<tr>
<td>Pupilligraphy</td>
<td>Led @875nm</td>
</tr>
<tr>
<td>TOPOGRAPHY</td>
<td></td>
</tr>
<tr>
<td>Placido rings</td>
<td>22</td>
</tr>
<tr>
<td>Measured points</td>
<td>21632 (front surface) 16000 (rear surface)</td>
</tr>
<tr>
<td>Topographic covering</td>
<td>12mm</td>
</tr>
<tr>
<td>Dioptric measurement range</td>
<td>1D to 100D</td>
</tr>
<tr>
<td>Measurement accuracy</td>
<td>Class A according to UNI EN ISO 19980-2012</td>
</tr>
<tr>
<td>Compatibility with standard</td>
<td>DICOM v3 (IEC integration profile EYESAFE Workflow)</td>
</tr>
</tbody>
</table>

## MINIMUM SYSTEM REQUIREMENT
- PC: 4 GB RAM - Video Card 1 GB RAM (not shared) - resolution 1024 x 768 pixels - Firewire port.

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

Sirius
TOMOGRAPH AND CORNEAL TOPOGRAPHER

YOUR PROFESSIONAL PARTNER SINCE 1967

Via della Signora 12/E
50029 - Scandicci - FI - Italia
tel +39 055 72219 | fax +39 055 7215557
email cso@csoitalia.it | web www.csoitalia.it