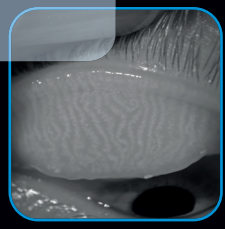
Digital Slitlamp

SL9900_99K Elite

Perfection in every detail: premium diagnostics redefined







bon

Digital Slit Lamp CSO SL9900_99K Elite

The new premium class for the highest demands



DIN EN ISO 13485 certified quality

CSO slit lamps are engineered since 1967 to the highest European quality standards and come equipped with LED illumination.

Ergonomic design, high quality optics and precision mechanical parts provides the user with an unparalleled experience while conducting a slit lamp examination.

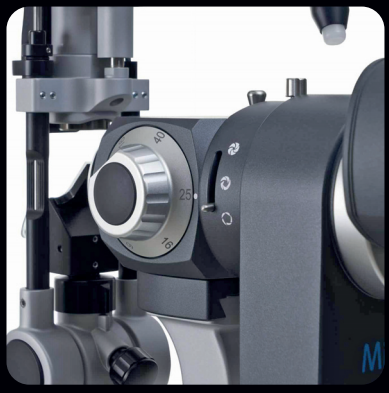
Hand crafted by CSO in Florence - Italy, the SL9900_99K Elite features the highest quality of optics, material, design, and precision. It will be your most enjoyable yet durable asset for years to come.

Capture the moment exactly as you see it.

The Elite model comes fitted with the MIZAR 5 MP video camera as standard. It is unrivalled for its high performance and exceptional colour rendering. During biomicroscopic examination, the MIZAR camera allows users to display the finest details and acquire high-resolution images and videos for live or future review.

The SL9900_99K Elite adapts exposure in real-time and switches between photo and video modes effortlessly. - Without missing any critical details.

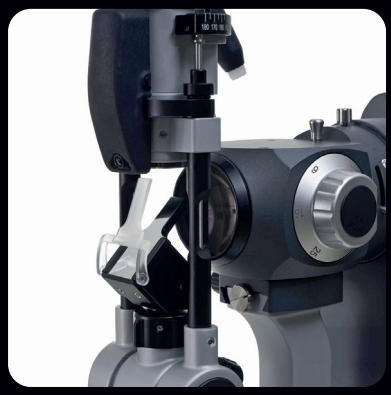




Microscope

The five-step Galilean microscope offers magnifications from 6x up to 40x. It associates the magnification with the image captured by the camera in real-time during the slit lamp examination.

To enhance the depth of field in images, the slit lamp is equipped with a **diaphragm** that also integrates with the application software.



LED illumination

The **main LED illumination** source, with its low thermal emission, provides high comfort for the patient during biomicroscopic examination. The color temperature of the light emission remains constant regardless of its intensity.

The **auxiliary LED light source** provides background illumination to optimize image capture with the camera.

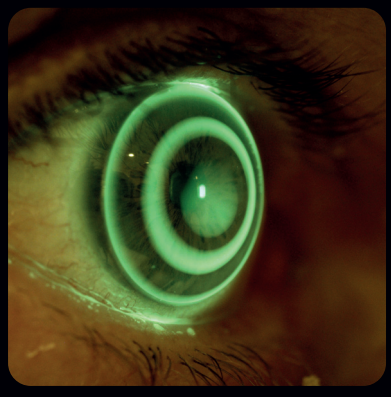
The LED technology has an estimated life of 50000 hours of continuous use - you will never need to replace a light bulb again.

Ergonomy

A **dual-function potentiometer** allows for the adjustment of the slit and background light sources directly at the instrument base.

The **multifunctional joystick** allows for image capture, exposure adjustment and seamless switching between photo and video modes.





Yellow barrier filter

It allows to increase contrast during biomicroscopic examination with fluorescein.

15mm spot

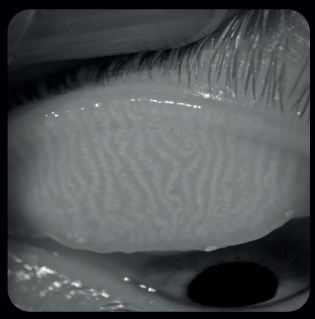
A wider-than-traditional light spot allows simultaneous illumination of the cornea and ocular adnexa, or the examination of large-diameter contact lenses such as mini-scleral and scleral lenses.



Slit Tilt and Decoupling

Thanks to its classic H-type design, the slit system can be tilted horizontally by up to ±10°, providing additional flexibility for specialized examination techniques. Vertical tilting of up to 20° is also possible.



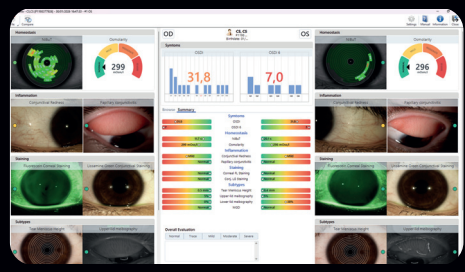


Meibography

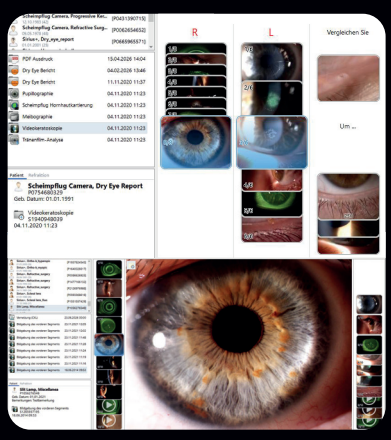
The SL9900_99K Elite features integrated IR-Meibography, enabling seamless switching between slit lamp and infrared imaging with a simple toggle.
This upgrade enhances diagnostic versatility, allowing practitioners to effortlessly transition from traditional slit lamp examination to detailed infrared visualization of the meibomian glands.

Dry-Eye Report

Based on the OSDI questionnaire and the parameters assessed with the slit lamp – including the evaluation of limbal and conjunctival hyperemia, analysis of the meibomian glands, and assessment of the tear meniscus – the software generates a comprehensive overall assessment. In addition, NIBUT values obtained from topography images and separately measured tear osmolarity values can be manually entered and incorporated into the analysis. This allows all relevant examination results to be combined in a comprehensive Dry-Eye Report. The structured assessment is aligned with the current recommendations of TFOS DEWS III and supports the evaluation of the clinical status of dry eye disease.



*) DEWS III-based reports available from software version Phoenix 4.1.10.5 onwards



Software integration

The Phoenix application software allows for SL9900_99K Elite management and for the integration of all CSO devices into a single platform for a shared storage of patients and exams.
Phoenix facilitates the analysis, comparison, and follow-up of patients' clinical conditions and merges data from different CSO devices to create combined diagnostic summaries.

The software is networking-capable and fully compatible with the standardized DICOM clinical exchange format.

Chin rest

In addition to enabling adjustments to the patient's head height during examination, thanks to a widened section arc, facilitates the observation of the patient with auxiliary lenses.



Technical Data	CSO SL9900_99K Elite
Illuminator	White LED (main and background)
Slit projection index	1,25 x
Slit length (continuous setting)	1 – 15 mm continuous
Slit width (continuous setting)	0 – 15 mm continuous and fixed apertures
Maximal length of the slit	15 mm
Aperture diaphragms	ø 15/10 / 5 / 3 / 1 / 0.2 mm
Filters	Blue, red, green (red free), ND50%
Slit rotation	±90° continuous on Tabo system
Rotation interval of the slit projecton	±90°, 0-180° tabo scale steps 10°, reference on 0°,45°,90°,135°,180° and ±10°
Vertical tilt	0° / 5° / 10° / 15° / 20°
Horizontal tilt	± 10° reference on 0°
Operation distance (mirror/patient's eye distance)	80 mm
Luminosity adjustment	Continuous adjustment
Luminous intensity	220000 Lux
Microscope type	Galilean convergent with 5 positions magnification change system
Ocular convergence angle	6°
Stereoscopic angle	10°
Overall magnification	6 ×, 10 ×, 16 ×, 25 ×, 40× (real 5,6x / 8,5x / 14,8x / 25,6x / 39,3x) magnifications are automatically recognized by Phoenix software when the user takes the pictures
Visual field	From 41 mm to 5.7 mm
Eyepiece magnification	12.5×
Range of adjusting eyepieces	+8 to –8 diopters
Inter pupillary distance	50 – 80 mm
Yellow filter	included
diaphragm	Adjustable by the user
Inclined eyepiece	Optional
Digital camera sensor size	2/3"
Resolution	2248×2048
Dynamic range (sensor)	73 dB
Frame rate (frames per second)	35
Interface	USB 3.0

C.S.O. S.r.l.,
Via degli Stagnacci 12/E,
50010, Badia a settimo (FI), Italy

Optional Slit Lamp Accessory



Applanation Tonometer

These precision measuring instruments are offering highest quality at a favorable bon price. You will feel no difference, neither in handling nor at accuracy.
All tonometers are using standard measuring prisms, also available as disposables.

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iCare ST500™
The revolution in IOP measurement



The ST500™ from iCare brings proven rebound technology to your slit lamp. The gentle measurement is barely noticeable and requires neither anaesthesia nor dye. This saves time and significantly increases patient comfort. The quick mode enables fast and precise measurements even with difficult compliance and thus noticeably optimises the workflow. You always get reliable, repeatable results with high accuracy and excellent compliance with applanation tonometry.

(NOTE: We sell iCare products exclusively in Germany.)



Ergonomic Viewing Angle

This eyepiece adapter is ideal for particularly tall users. It promises them relaxed working without neck pain.
The viewing angle is 20°. The angle piece can be easily mounted on all current **bon** slit lamp models.

Polaris
The next Generation „TearScope“



As a practical addition to your slit lamp, Polaris extends your diagnostic possibilities: With its LED cold light source, it enables you to perform interferometric analyses of the lipid layer of the tear film and a qualitative assessment of break-up time. It can simply be attached to the slit lamp base.

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iCare ST500: Icare Finland Oy, Äyritie 22, 01510 Vantaa, Finnland

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