

SLIT LAMPS
SL9800 | SL9900 | SL9900 ELITE

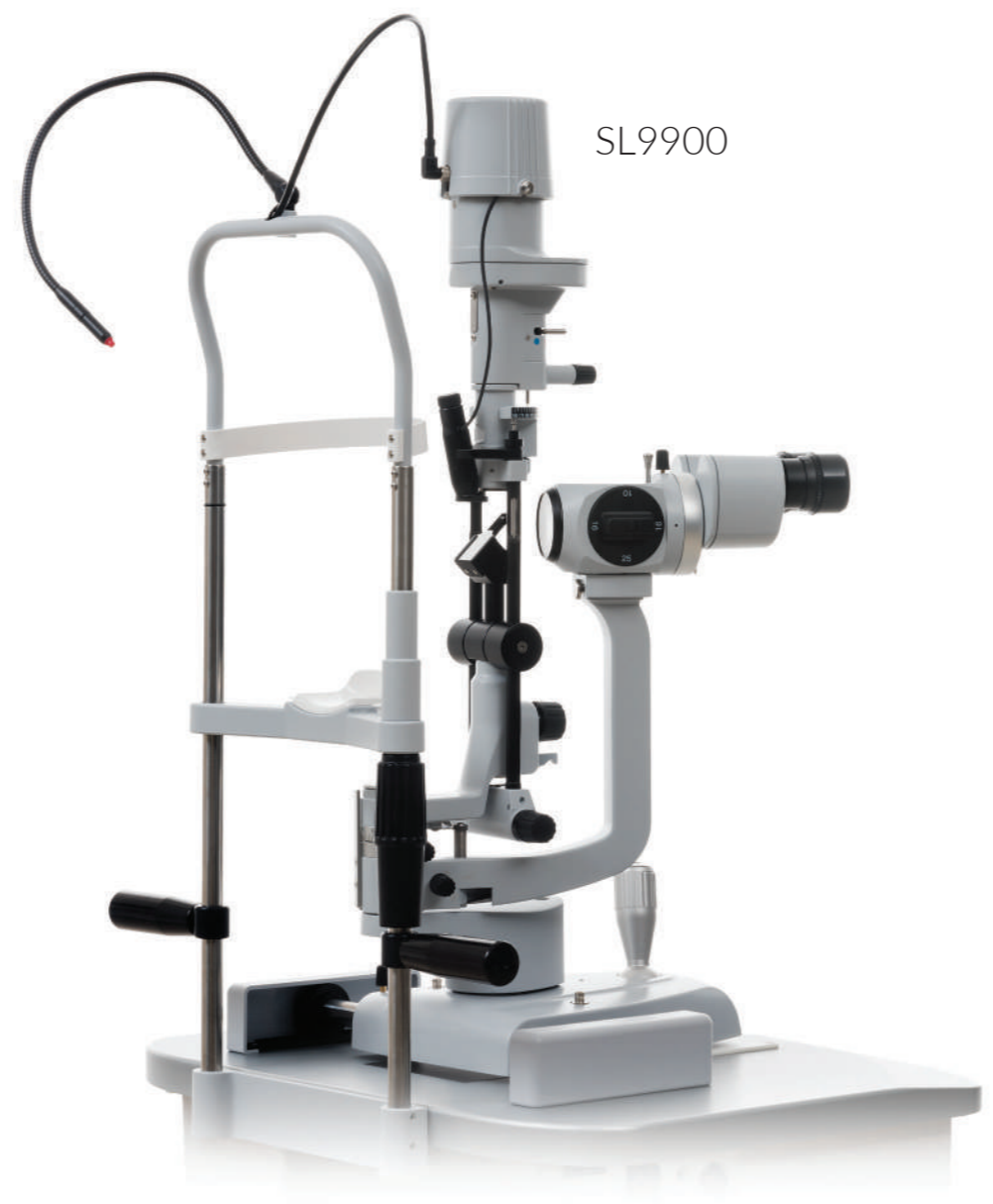
CSO slit lamps are engineered to the highest European quality standards and come equipped with LED illumination. Ergonomic design, high quality optics and precision mechanical parts provides the user with an unparalleled experience while conducting a slit lamp examination.

LED LIGHT SOURCE

LED illumination provides comfort to the patient during the examination due to the lack of heat. Image colour temperature is maintained at all illumination levels. Our LED technology has an estimated life of 50000 hours of continuous use, you will never need to replace a light bulb again.



SL9800



SL9900



SL9900 ELITE



MICROSCOPE
 3X | 5X | ZOOM

Converging microscope optics provides comfort to the user when using the slit lamp. All the microscopes have a yellow filter to improve the image quality during fluorescein tests.



TONOMETERS (OPTIONAL)
 A900 | F900 | Z800

All CSO slit lamps are compatible with applanation tonometers.



POLARIS (OPTIONAL)
 Advanced analysis of the tear film

Polaris enables the user to evaluate the stability and quality of the tear film through the measurement of the non-invasive break up time. Polaris integrates with the Phoenix software system so the patient data can be recorded for later review.



MICROSCOPE 2X

A converging microscope with 10x and 16x magnifications is also available for the SL9800 and SL9900.

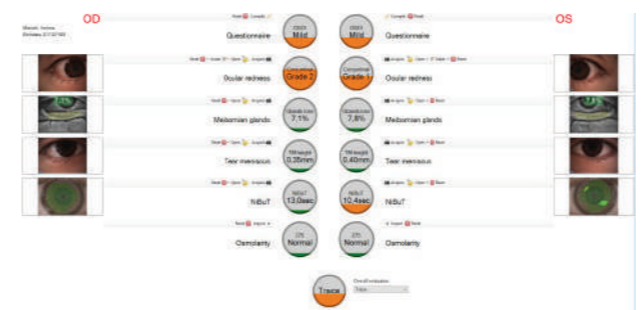
FEATURES OF THE SOFTWARE PHOENIX

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



DRY EYE REPORT

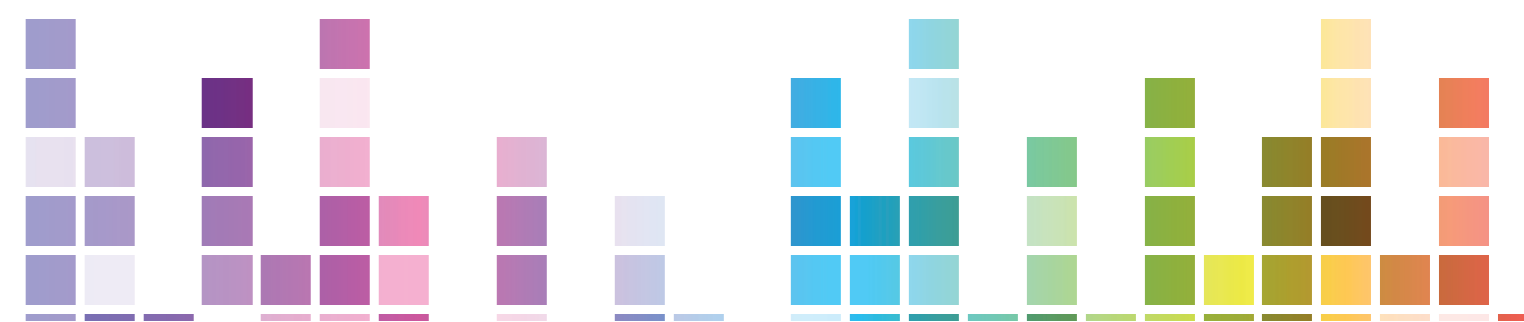
Based on the Ocular Surface Disease Index questionnaire (OSDI), limbal and conjunctival hyperaemia, Meibomian glands analysis, tear meniscus analysis, NIBUT, and tear osmolarity, calculated merging together all partial scores, provides an overall evaluation of the clinical condition of the patient for a comprehensive diagnosis of the dry eye disease.



DIGITAL VIDEO CAMERA* (OPTIONAL)

All CSO slit lamps can be equipped with the CSO Digital Vision HR camera. This high performance camera can capture and record the smallest details, while conducting a slit lamp examination. When connected to the Phoenix patient management software, it is possible to store high quality images or video for further review.

* (not compatible with 2X microscope)



Slit lamps

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TECHNICAL DATA

	SL9800	SL9900 SL9900 ELITE
Slit projection	1.3X	1X
Slit width (setting continuous)	0 - 15 mm	0 - 12 mm
Slit length (setting continuous)	1 - 15 mm	1 - 12 mm
Slit length (max)	15 mm	12 mm
Apertures	15, 9, 5.5, 0.3 mm	12, 9, 5.3, 1, 0.2 mm
Filters	Blue, Red, Green (Red free)	Blue, Red, ND50%, Green (Red free)
Light Diffuser	light diffuser	light diffuser
Background light	only with Digital Vision HR	only with Digital Vision HR
Slit rotation	± 90° continuous, on the TABO system	
Slit angle	0° horizontal	variable 0° 5° 10° 15° 20°
Rotation interval of the slit projection	±90°, angular scale, reference on 0°	±90°, angular scale, reference on 0° and ±10°
Working distance	69.5 mm	80 mm
Joystick push button	only with Digital Vision HR	
Left/Right detection	only with Digital Vision HR	
Voltage	15V DC 1A	
Light source	White LED	
Brightness	284000 LUX continuous adjustment	
Color temperature	3100 K	
Dimensions (HxWxD)	440 x 313 x 335mm	675 x 313 x 335mm
Weight	7 kg	7.8 kg

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MICROSCOPE	2X	3X	5X	Zoom
Type	Convergent	Galileian convergent with magnification change system		Galileian convergent with variable magnification
Eyepiece convergence angle	13°	6°		
Eyepiece	10X	12.5X	12.5X	12.5X
Eyepiece adjustment	±8 D.			
Magnifications	10X 16X	10x 16x 25x	6x 10x 16x 25x 40x	7X 30X
Corresponding real magnifications		8,5x 14,8x 25,6x	5,6x 8,5x 14,8x 25,6x 39,3x	
Field of view	18,5mm 12mm	26mm to 8,5mm	41mm to 5,7mm	30mm to 7,4mm
Interpupillary distance	51,5mm to 87mm	50mm to 80mm		
Barrier filter	yellow			

DIGITAL CAMERA SL9900 | SL9800

Camera type of sensor is	CCD
Camera resolution	1624x1232
A/D conversion	14 bit per pixel
Max FPS at full resolution	15fps
Max frame rate	98MB/s
Camera interface	USB 3.0
Video mode	RGB 24bit, YUV 4:2:2
Shutter	Control 100 µs to 0.4s, 100 µs per setp
Gain	Control 0 to 21dB
Controls	shutter(auto/man) gain, white balance (auto, man) gamma

MINIMUM SYSTEM REQUIREMENT(VERSION DIGITAL HR)

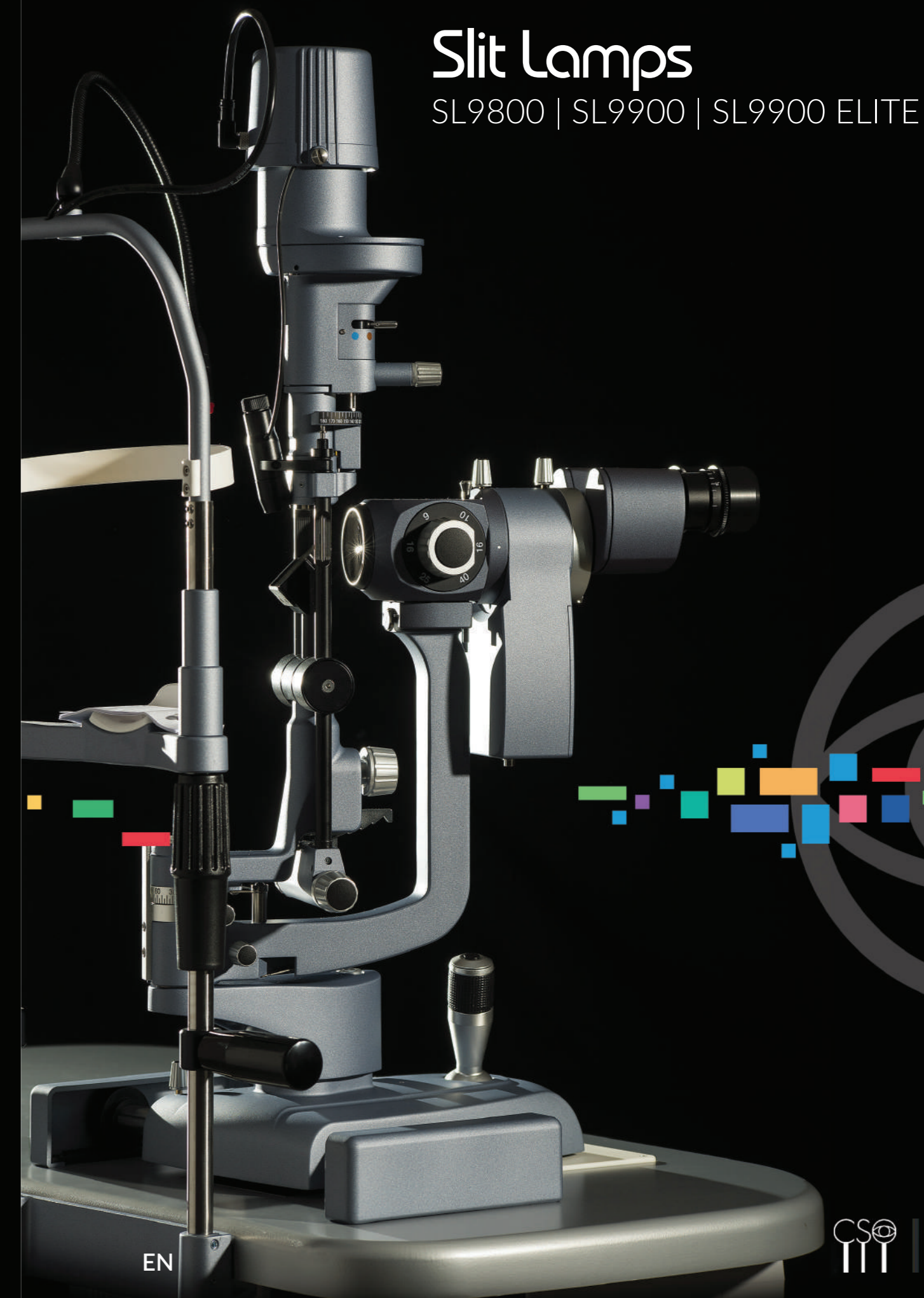
PC: CPU: I3 or higher (suggested I5) - CHIP SET: intel
RAM: 4 Gbyte or higher (suggested 8 Gbyte) -
GRAPHIC VIDEO BOARD: 1 Gbyte not shared
RESOLUTION: 1280x960 or higher - USB 3.0 port
Operating System: Windows 10 (64bit)

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

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