

## **ELARA 900**The slit lamp. Reinvented.



#### ELARA 900

#### See more. Work smarter. Feel better.

As an ambitious eye care specialist, you demand superior visualization for all pathologies. You need a slit lamp that streamlines the examination workflow – while delivering outstanding comfort for both the examiner and the patient. You want a future-proof device designed to adapt to emerging trends in healthcare.

#### Meet Elara 900: Haag-Streit's slit lamp for the 21st century.

Powered by Haag-Streit's legendary Swiss-made optics, Elara 900 delivers superior clarity, contrast, and innovative illumination capabilities, ensuring that even the finest ocular details come into sharp focus. Benefit from its revolutionary projector "P-Type" light source illumination, which offers new possibilities for slit lamp examination.

Forget time-consuming manual adjustments: Elara 900 lets you customize your workflow with automated examination settings, allowing you to work with more precision and less effort. Switch seamlessly between examination modes for easy capture of videos and images and optimize efficiency with our motorized height adjustment for effortless positioning.

Slit lamp ergonomics play a crucial role in supporting your daily health and productivity. Elara 900 is designed with your comfort in mind, featuring inclined oculars for natural posture support, motorized adjustments to minimize strain, and a spacious headrest for enhanced patient comfort.

Combined, you are fully equipped to provide the best possible care – because every detail matters.



#### A superior clinical view

Break free from the ordinary and embrace the remarkable. Elara 900 redefines what's possible in slit lamp microscopy. Combining legendary Haag-Streit Swiss-made optics with the revolutionary "P-Type" illumination and a dual integrated camera for an immersive 3D\* experience: see with confidence across all parts of the eye.

#### Enhanced efficiency

Elara 900 increases workflow efficiency, allowing you to accelerate your clinical throughput while maintaining constant patient focus. Benefit from one touch "presets" that allow you to apply examination scenarios in a single touch, apply seamless magnification and height adjustments directly from your joystick, and capture 3D\* images and videos in 4K with the click of a button.

### Optimized ergonomics

Elara 900 boasts a wealth of ergonomic features including inclined oculars, motorized height adjustment, and a spacious headrest that prioritizes patient comfort. Complemented by an intuitive touchscreen layout for optimal system operation, Elara 900 potentially minimizes physical stress, promotes better posture, and improves the examination experience for patient and eye care specialist alike.

\*3D license required

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### A superior clinical view **See more – diagnose with confidence**

Built to withstand the most demanding slit lamp microscopy, Elara 900 is designed to provide outstanding optical performance, ensuring you can detect subtle ocular changes with ease. Featuring legendary Haag-Streit optics – your guarantee for high light transmission and optical excellence – all optics undergo rigorous inspections to ensure unrivaled quality.

Unlike modular microscopes, where interchangeable components must be balanced, Elara 900's key elements are optimized during the production process then seamlessly aligned into a single optical system. From lenses to illumination: the result is a clinical view you can trust.



LEGENDARY OPTICS, OPTIMIZED DESIGN

#### A clinical view you can trust

Whether assessing the anterior or posterior segment or working under unfavorable light conditions – benefit from a view that is both natural and high in contrast. Elara 900's Galilean microscope – with its five-step magnification range from 6.3x up to 40x – unveils more detail with every turn.

Simply switch on the integrated, motorized yellow filter to increase contrast in specific areas – or select different lighting colors to optimize specific examination scenarios ("presets.")

REVOLUTIONARY PROJECTOR ILLUMINATION

### The right light for every detail

Elara 900's revolutionary projector light source ("P-Type") can emit colors across the entire visible spectrum, allowing different color temperatures to be selected for individual pathologies. Offering more illumination modes than traditional LED or halogen sources, the result is a high-resolution, high-contrast examination that aids in the identification of ocular structures. Infrared\* illumination enables seamless Meibomian gland assessment, further boosting your workflow.

HIGH-RESOLUTION 3D IMAGE & VIDEO CAPTURE

#### See, save, share

Whether for follow-ups, referrals, or teaching, Elara 900's high-resolution imaging functionality preserves every ocular detail for review and comparison. The combination of the dual camera setup allows for optional 3D video and image capture in 4K for a truly immersive examination experience.

Stereoscopic visualization enhances ophthalmic education, allowing colleagues and students to experience examinations with exceptional depth and clarity.









### Enhanced efficiency More precision, less effort

Enhance efficiency without compromising precision. Elara 900's digital "presets" reduce the time spent on adjusting filters, modifying slit width or illumination intensity.

These automated examination scenarios reduce manual steps and transitions, allowing you to fully focus on your examination at the touch of a button.

Working in harmony with automation settings – Elara 900 features motorized height and magnification that allow routine adjustments to take place smoothly without disrupting your examination. Additionally, high-resolution images and videos can be captured directly from the device, supporting efficient documentation and record-keeping.



POWERFUL "PRESETS"

#### Streamline your workflow

Accurate settings are essential for a proper examination. Elara 900 accelerates your workflow by combining multiple manual actions into one step. Up to six individual exam scenarios – "presets" – enable you to summarize multiple manual steps into one single operation. Whether changing the illumination color, activating the yellow filter, adjusting the slit width, modifying slit width, or adjusting magnification: apply optimized settings with a single scroll of the "preset" wheel.



### Faster positioning, seamless adjustments

Frequent height adjustments are necessary to maintain the correct positioning when examining different ocular structures. Elara 900's motorized height adjustment speeds up this process, allowing quick and precise repositioning with minimal manual effort. This potentially reduces examination time and ensures smooth transitions, making patient assessments more efficient.

Additionally, Elara 900's motorized magnification changer enables seamless magnification adjustments directly from the joystick, delivering an uninterrupted diagnostic experience.

EFFICIENT DOCUMENTATION

### Capture & assign media to patient records

Elara 900 supports optimum patient flow in busy practices. Instantly record high-resolution images and videos with one click – then optionally assign captured content to the correct patient file, all while working within the device. For flexibility, Elara 900 can be integrated into many different environments: whether that's EyeSuite, or your EMR system which supports DICOM worklist modality\*.

Together, Elara 900 reduces the need for external manual data entry and complex system navigation, minimizing administration and improving collaboration.









# Optimized ergonomics Comfort for the examiner & the patient

Long hours at the slit lamp shouldn't come at the expense of your well-being. Elara 900 redefines slit lamp ergonomics to potentially minimize physical stress, promote natural posture, and enhance ease of use. Benefit from intuitive controls that put all your settings and adjustments within easy reach, with a purpose-built joystick, intuitive touchscreen layout, and motorized height adjustment that ensures optimal system navigation and smooth operation.

Designed with the comfort of the patient, as well as the examiner in mind, Elara 900 prioritizes proper positioning, with a height-adjustable chinrest and spacious headrest to create room and reduce body pressure. The result is a comfortable yet robust examination environment for patients of all body frames.



OPTIMIZED CONTROL LAYOUT

#### Everything within reach

The joystick and illumination controls are the primary touchpoints in slit lamp operation. To improve comfort and ease of use, control elements are intuitively repositioned around the joystick with a smart layout that ensures all essential adjustments can be made without shifting hand position.

Moreover, the distance from the ocular to the focus lens is reduced by 23% compared to slit lamps with a similar feature set. This reduction in the optical path length brings the patient even closer, further reducing physical strain during the examination.

OPTIMIZED VIEWING ANGLE & SMOOTHER POSITIONING

#### Natural posture, less fatigue

Without adequate support, long examination sessions can cause significant discomfort. Elara 900's inclined eyepiece encourages a natural head and neck position, enabling an ergonomic and fatigue-free working posture. Plus, the large numerical aperture – favored by Haag-Streit customers – provides a bright, detailed view through large exit pupils, reducing the need for constant refocusing and contributing to a more relaxed visual experience.

Elara 900's motorized height adjustment reduces repeated lifting movements that can strain the wrist and forearm, allowing for smoother and controlled positioning with minimal manual force. Together, Elara 900 reduces strain and supports long term comfort.

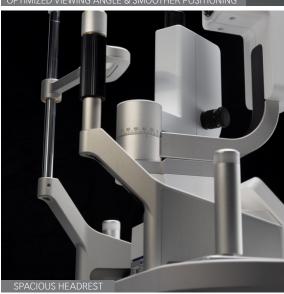
SPACIOUS HEADREST

#### Enhanced patient comfort

Patient positioning plays a key role in both comfort and cooperation during an exam. Elara 900's spacious headrest creates more room, reducing pressure on the upper body and improving the experience, particularly for patients with larger body frames. The result: patients remain at ease, allowing for smoother examinations, and more positive outcomes.









- 1. Mounting pin for Goldmann Tonometer ("R-Type")
- 2. Inclined oculars
- 3. Revolutionary "P-Type" illumination
- 4. Chinrest
- 5. Dual integrated camera
- 6. Height-adjustable chinrest
- 7. Illumination control elements
- 8. Multi-purpose joystick button
- 9. Motorized magnification change



## Technical specifications **Elara 900**

Illumination	Spectral range slit illumination	Visible spectrum: 420 – 660 nm Infrared spectrum: 780 – 900 nm (Elara 900 only)
	Slit image width	0 – 24 mm continuous
	Slit image height	0 – 15 mm continuous
	Slit image rotatability	± 90°
	Filters/colors	RGB
	Maximum irradiance	174 mW/cm2
Stereo microscope	Stereo angle	13°
	Magnification changer	6.3 × / 10 × / 16 × / 25 × / 40 ×
	Eyepiece magnification	12.5 ×
	Adjustment range of eyepieces	+8 to -8 dioptres
	Pupil distance	52 – 80 mm
	Total magnification	6.3 × / 10 × / 16 × / 25 × / 40 ×
	Object field ø in mm	32.0 / 20.0 / 12.7 / 8.0 / 5.1
	Eyepiece inclination angle	20°
Camera	Camera resolution	2 × 5 megapixel for stereoscopic view with up to 4K video and image output in stereo mode
	Camera beam	Can be defined in the software: Stereo, left or right.
	Frame rate	30 fps (frames per second)
	Automatic flip mirror	0% / 70% (transmission to camera)
	Image file format	jpg / bmp
	Image file compression	Format File size bmp lossless ~ 15 MByte jpeg high ~ 4.5 MByte jpeg med ~ 0.5 MByte jpeg low ~ 0.3 MByte
	Video file format	mp4
	Video file compression	Format File size (1 min) low mono 22.5 MByte low stereo 45.0 MByte med mono 37.5 MByte med stereo 75.0 MByte high mono 75.0 MByte high stereo 150.0 MByte
Instrument base	Operation	Single-handed operation of control lever in three dimensions
	Adjustment of instrument base	100 mm (length), 100 mm (side), 30 mm (height)
Wireless communication	Module	Intel Wireless-AC 9260
	Frequency	2.4 GHz (2.400 GHz to 2.483 GHz) The range may vary depending on the country
	Power	20 dBm (100 mW)
Power supply	Туре	CINCON Electronics Co. Ltd
	Model	TR160MA240-01-12E746 V
	Mains voltage	100 – 240 VAC
	Current consumption	159 VA
	Operating frequency	47 – 63 Hz
Dimensions (L × W × H)		560 mm × 401 mm × 330 mm
Weight		15.2 kg



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