



## HS Hi-R NEO 900

For first-class surgery

Look closer. See further.

 HAAG-STREIT  
GROUP

## HS Hi-R NEO 900

# First-class surgery

Enjoy high quality optical visualization with Haag-Streit's surgical microscope HS Hi-R NEO 900 for ophthalmology. It allows excellent depth perception and three-dimensional vision due to its 25 mm stereo base.

The microscope's integrated display gives instant feedback on all important settings. At a single glance, you find information on the positions of focus, zoom, and X-Y coupling as well as the level of illumination. To maximize the freedom of positioning the microscope, an inclination mechanism has been integrated ranging from  $-70^{\circ}$  to  $+90^{\circ}$ . Fine adjustments can be made in a sterile manner during surgery.

Modularity – this key word describes the accessory structure of the HS Hi-R NEO 900. On demand, the ophthalmoscopic system EIBOS 2 as well as the TOCULAR can be added. Standard accessories are available like observers, cameras, a recording system, a depth-of-field diaphragm, and foot switches. Take advantage of this modularity for patient care, cost efficiency, and a fast return on investment.



QUICK REFERENCE OF MICROSCOPE SETTINGS

LED ILLUMINATION

ASSISTANT SCOPE FOR TEACHING

OPHTHALMOSCOPIC SYSTEM EIBOS 2

HS MIOS 5

HS Hi-R NEO 900 A  
ON FLOOR STAND FS 2-25

FOOT SWITCH EF 5001

# HS Hi-R NEO 900

## Better vision – The key to higher precision



ABOUT THE RED REFLEX



ABOUT THE HS Hi-R NEO 900

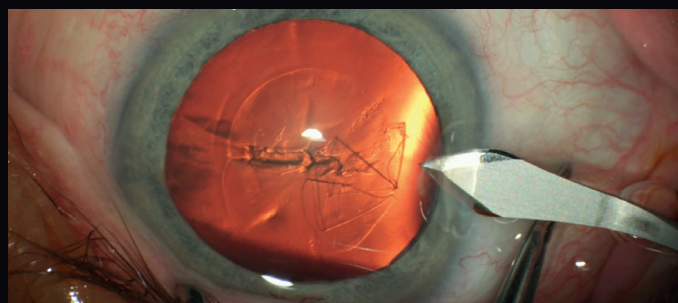
Precision optics and optical systems have been developed and manufactured since 1864. We work according to an elaborate and certified quality process, and the level of assurance of our optics exceeds the requirements of the relevant ISO standards.

A perfect example of the product's optical quality is the depth of field achieved by the HS Hi-R NEO 900. It limits focusing procedures to a minimum. To increase the depth of field in high magnification a Double Iris Diaphragm can be added. Looking through the oculars of the microscope HS Hi-R NEO 900 will be your key to higher precision.

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### C.RED 900

The red reflex enhancer can be individually adjusted to achieve a red glow as well as switched off for corneal surgery. For light hazard protection even at low illumination levels a bright reflex is visible.



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### HS Hi-R NEO 900A

The HS Hi-R NEO 900A offers the assistant full stereoscopic vision. The 0° assistant scope with its 12.5x oculars has its own magnification changer (5 steps) and focusing device allowing both surgeons to select the focal plane and magnification independently. It easily swivels laterally and, for relaxed working, the eyepiece head may be inclined and rotated into the most comfortable position.



# Accessories

## Optional equipment

EIBOS 2

### Fundus observation with integrated inverter

Important for vitreoretinal surgery is the non-contact wide angle ophthalmoscope EIBOS 2. Covered with a sterile drape, it is flipped down for the operation. The focus mechanism and the inverter are integrated.

The inverter body is extremely slim, which allows the surgeon, at low magnification, to simultaneously visualize the fundus and the incision area. Two ophthalmoscopic lenses are available: 90 D for macular procedures and the SPXL for wide angle observation. The high-quality optics allow excellent vision to the periphery of the visual field.



TOCULAR

### Precise angle alignment of toric IOLs

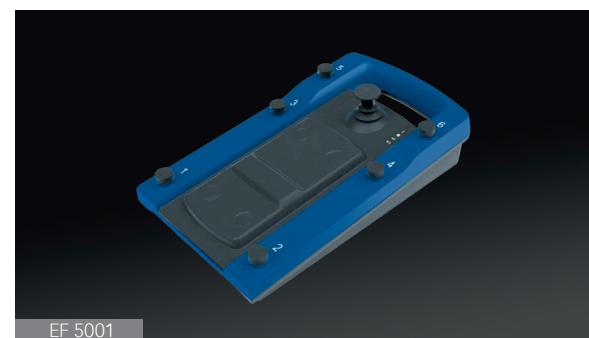
TOCULAR is a rotatable wide angle ocular with an integrated reticle. This can be rotated manually via a sterilizable knob to precisely adjust the implantation angle for alignment of toric IOLs.



EF 5000 AND EF 5001

### Ergonomic control

For the most ergonomic control of the microscope, Haag-Streit Surgical offers the corrosion-proof foot switches. While the EF 5000 is connected to the floor stand via a cable, the EF 5001 offers wireless control of 14 functions of the microscope.



# Imaging possibilities

## Observe and document

HS MIOS 5

### Intuitive and comprehensive recording

MIOS stands for Microscope Imaging and Operation System. Its prime functions are the recording of operation scenes as well as the capturing and recording of snapshots, together with proper identification of patient and hospital data. Images and video streams can be stored on DVD-R/-RW, HDD, USB flash drive, and external USB hard disk drive, or transmitted to the hospital PACS via DICOM.

The image data can also be edited for presentations with the optional module M.AED. When the snapshot button is pressed, a sequence of the video stream is marked. In the archive, all saved video sequences are merged into one video.

C.MOR HD/HD<sup>3</sup> AND C.MON HD

### Compact HD camera and display

C.MOR HD is a full HD color video camera designed for the Haag-Streit Surgical microscope. Its ultra-compact camera head houses a 1/3" CMOS sensor that meets very high standards. Choose our one chip HD or three chip HD<sup>3</sup> camera and benefit from a colorful, crisp, and sharp image. The camera is able to react very quickly to environmental changes and always provides you with a precise image under all conditions.

With its flat design and 21.5" size, the brilliant HD monitor C.MON HD can easily be attached to the microscope's floor stand. Its touch function can be operated even with surgical gloves. Due to the planar screen and glass surface, it can be disinfected easily. For the safety of the system, the C.MON HD is fully approved for medical use.



HS MIOS



CMOR HD/HD<sup>3</sup>



C.MON HD

# Floor stand More than just a carrying system



HS Hi-R NEO 900A  
ON FLOOR STAND FS 2-25

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## High-tech solution

Electromagnetic brakes in the floor stand FS 2-25 (LED) support the smooth movements of the HS Hi-R NEO 900.

The system is computer-controlled with a graphic display for modifying the individual start settings of the operating surgeons and the surgical procedures. The microscope parameters and brightness are also adjustable and controlled on the graphic display.

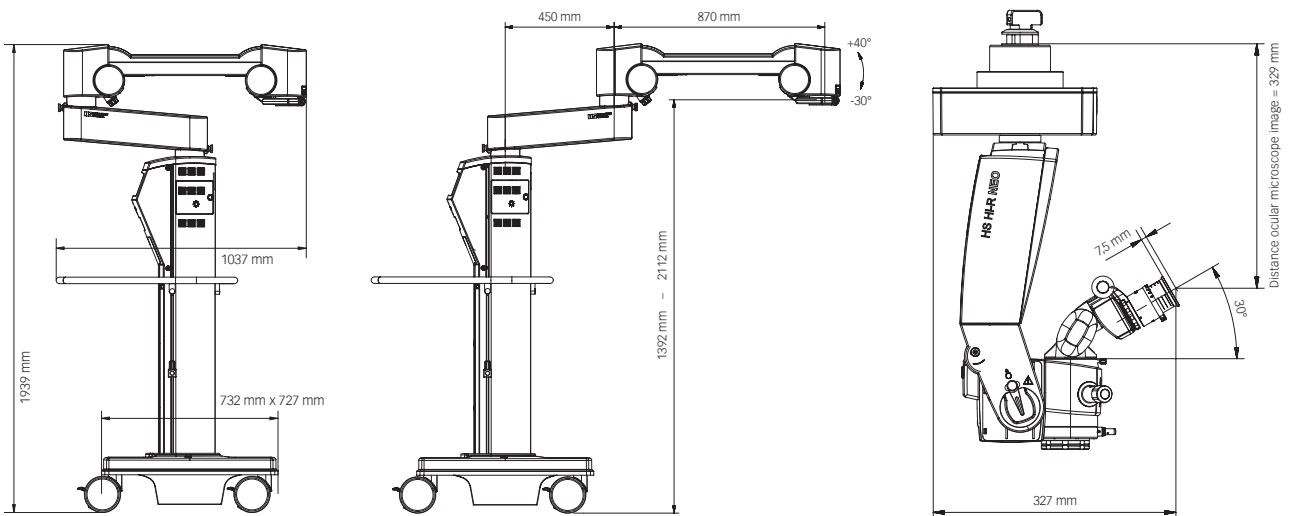
The shape and internal reinforcements of the column make the floor stands extremely stable against vibrations. The cables are inside a cable duct. A plastic cover protects the base of the floor stand against corrosive liquids.

A holder for a foot switch can be mounted directly to the column, as can trays for the camera control units or other equipment. The front side accepts a high-resolution monitor (optional).

# HS Hi-R NEO 900

## Technical specifications

Operating microscope	HS Hi-R NEO 900	HS Hi-R NEO 900A
Stereoscopic observer	Inclinable eyepiece 160° Optional fixed eyepiece head	
Optics	Apochromatic properties	Apochromatic properties
Stereo base	25 mm	25 mm
Focusing	+17 mm to -33 mm	+17 mm to -33 mm
Working distance	200 mm (optional 175 mm)	175 mm (optional 200 mm)
Magnification (mot. zoom 1:6x)	3.9x to 23.2x	4.4x to 26.6x
Diameter visual field	9.0 mm to 54.2 mm	7.9 mm to 47.4 mm
Illuminated field	31 mm to 59 mm	27 mm to 51 mm
Inclinable eyepiece head	200°, 10x wide angle oculars Optional 160°, 10x wide angle oculars Optional 200°, 12.5x oculars	200°, 10x wide angle oculars Optional 160°, 10x wide angle oculars Optional 200°, 12.5x oculars Assistant Scope: 160°, 12.5x oculars
Diopter settings	+5 D to -8 D	+5 D to -8 D
Inclination angles	Coarse -70° to +90°, fine +/-10°	Coarse -70° to +90°, fine +/-10°
Rotation	540°, electromagnetic	540°, electromagnetic
X-Y coupling	60 mm x 60 mm	60 mm x 60 mm
Filter	UV, soft light, daylight, blue, slit illumination	UV, soft light, daylight, blue, slit illumination
Weight (without accessories)	9.2 kg	11.5 kg
Pupillary distance	55–75 mm	55–75 mm



Floor stand	FS 2-25
Arm reach (max.)	1320 mm
Swivel area	2x 270°
Door height	1939 mm
Floor stand carriage	732 mm x 727 mm
Carrying capacity	5.5 kg to 17.0 kg
Brakes	Electromagnetic
Balancing	Mechanical, sensor-aided
Height at oculars	1063 mm to 1783 mm
Illumination	2x 50 W LED
Protection filter	UV, IR
Operating voltage	100 VAC, 115 VAC, 230 VAC; 50/60 Hz; selectable
Max. power consumption	800 VA
Weight	230 kg
Foot switch	14 functions





Individual configuration exactly for  
your needs and ergonomic demands

Impressive optical image quality

Extraordinary movability and precise  
positioning

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