

∴ **HEINE 3S LED HeadLight®**
HEINE HR®/HRP® Binocular Loupes

Powerful LED Illumination and highly-magnified crisp images.



∴ HEINE 3S LED HeadLight®

Powerful LED Illumination.

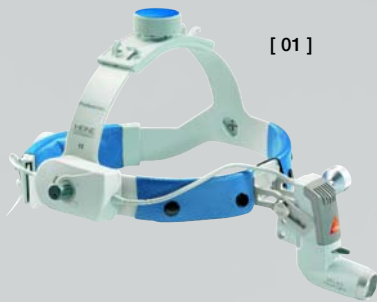
The NEW ultra bright and compact 3S LED HeadLight from HEINE for powerful, coaxial illumination.

30,000 Lux of bright, white light. With a reference Colour Temperature of 6,000 Kelvin and an extraordinary 30,000 Lux of Illumination, the 3S LED HeadLight is more than twice as bright as other standard LED and Conventional Headlights.

Compact and Light-Weight. The compact design ensures clear, unobstructed coaxial illumination. The 3S LED HeadLight weighs only 70 grams ensuring user comfort even during long periods of use.

Flexibility. Continuously adjustable spot size and brightness control. Mains or portable power supply. Integrated attachment options for HR/HRP Binocular Loupes and Prism for Video adaptation. Classification 1 M per EN 60825-1.





[01]



[02]

[01]
3S LED HeadLight
with headband Professional L

[02]
3S LED HeadLight
with headband Standard L

Technical Specifications 3S LED HeadLight:

- ✦ **Illumination:** 30,000 Lux at a working distance of 250 mm.
- ✦ **Colour Temperature:** Reference Colour Temperature of 6,000 Kelvin.
- ✦ **LED Operating Life:** 3W Super-High Output LED rated at 20,000 hours operating life (approx. 20 years at 4 hours use per working day).
- ✦ **Rheostat:** Headband mounted. Positive 'Off' switch. Illuminated 'On' indicator. Integrated voltage regulator.
- ✦ **Angle of Declination:** Fully-adjustable for precise user selection.
- ✦ **Spot Adjustment:** Continuously-adjustable Iris Aperture. Range of 20mm to 130mm illuminated field diameter (at 500mm). Small diameter is ideal for ENT and Dental Applications.
- ✦ **New Micro-Absorption System** (Patent Pending) for the Integrated Cooling Fan ensures quiet and vibration-free operation.
- ✦ **Optics:** Advanced multi-coated glass optics for maximum brightness.
- ✦ **Weight:** 70grams for 3S LED only. 90grams with rheostat and connection cable.
- ✦ **Operating Time:** 4 hours with mPack and Li-ion battery for 70 % more capacity than with conventional rechargeable batteries. mPack can be connected directly to mains power supply for unlimited operating time.

✦ **5 year warranty*.**

* against defects in manufacture and workmanship for a period of 5 years from the date of purchase.

3S LED HeadLight	6 V
3S LED HeadLight with headband Standard L	J-08.31.305
same, with headband Standard L, plug-in transformer and headband-mounted brightness control	J-08.31.306
same, with mPack and plug-in transformer	J-08.31.308
3S LED HeadLight with headband Professional L	J-08.31.310
same, with headband Professional L, plug-in transformer and headband-mounted brightness control	J-08.31.311
same, with mPack and plug-in transformer	J-08.31.313
3S LED HeadLight with headband Professional L with video camera and prism optics, EN50 Rheostat Control Module	J-08.31.327
mPack and plug-in transformer	X-07.99.672
HEINE plug-in transformer for 3S LED HeadLight	X-95.16.310
3S LED Prism Optics for CCD camera with C-mount	J-00.31.320
3S LED Adapter for HR/HRP Binocular Loupe	C-00.32.519
Detachable yellow filter (avoids premature composite hardening in dentistry)	J-00.31.321
Combi-case (Carrying case for 3S LED HeadLight and accessories)	C-79.03.000

3S LED/HR Binocular Loupe Kits	6 V
Recommended Product Order Configurations to ensure the most flexibility the 3S LED System has to offer. The following kits include main system elements but no carrying cases and ancillary accessories.	
Kit 1 3S LED with headband Professional L, mPack and plug-in transformer, headbandmounted brightness control, HR Binocular Loupe (optics only) 2.5x/340mm, adapter for Binocular Loupes	J-08.31.340
Kit 2 same, with HR Binocular Loupe 2.5x/420mm instead of 2.5x/340mm	J-08.31.341



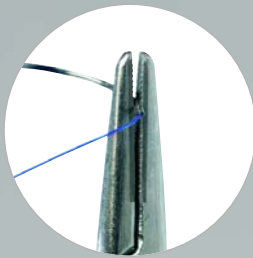
[03]

HEINE Binocular Loupes set new standards for innovative optics combined with high-tech materials and production techniques. A wide range of applications in many disciplines: General Medicine, Dermatology, minor and some major Surgery, Plastic Surgery, Neuro-Surgery, ENT, Ophthalmology, Veterinary Medicine, Dentistry etc.

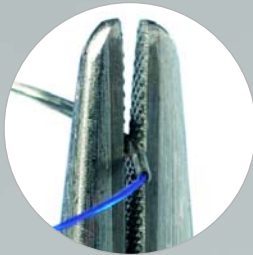
The use of magnifying loupes will increase your visual acuity and reduce eyestrain. Careful selection of working distance and correct viewing angle will avoid back and neck strain by allowing a comfortable working position.

[03]

3S LED HeadLight
with headband Standard L and HR Binocular Loupe



2x/340mm, field of view 130 mm
(field of view up to 250 mm)



2.5x/340mm, field of view 90 mm
(field of view up to 180 mm)

HR Binocular Loupe

✦ **The Brightest Image.**

Our exclusive coating technology reduces light reflection to 0.3%, providing the brightest image of any comparable loupe.

✦ **The Crispest Image with Colour Correction.**

State-of-the-art HEINE optics with achromatic lenses provide a new standard for image clarity, crispness and colour compared with conventional Galilean loupes.

✦ **Super-Wide, Super-Deep Field of View.**

Improvements in our HR (High Resolution) optical technology provide a super-wide, fully useable, distortion-free field of view (up to 250mm) and the greatest depth of field (up to 290mm) to eliminate eyestrain even over extended periods of use.

✦ **Dust- and Water-Resistant.**

All HR loupes are dust- and water-resistant to IP65/IEC 60529 (2000) to ensure ease of cleaning/disinfection, and years of trouble-free use.

✦ **Flexibility for Precise Adjustment.**

HEINE Binocular Loupes have independently adjustable optics left and right to select the exact inter-pupillary distance (PD). HR loupes can be adjusted precisely for each user for optimum optical performance by means of 5 different mounting positions on either frame or headband (with angled adapter).

✦ **Super Light.**

HR optics weigh only 42 grams for user-comfort even over extended periods.



Specifications HRP Binocular Loupe

Magnification	2 x	2 x	2 x	2 x
Nominal working distance	340mm	420mm	520mm	340/250mm*
Field of view dia.	>130mm	>190mm	>250mm	>90mm
	C-00.32.505	C-00.32.502	C-00.32.506	C-00.32.521*

Magnification	2.5 x	2.5 x	2.5 x	2.5 x
Nominal working distance	340mm	420mm	520mm	340/250mm*
Field of view dia.	>90mm	>130mm	>180mm	>60mm
	C-00.32.504	C-00.32.507	C-00.32.503	C-00.32.523*

* Close up lenses for 250 mm working distance



[04]

HRP Binocular Loupes of 3.5x magnification or higher are recommended for intricate surgical and dental procedures where high magnification is necessary, for example in endodontal, vascular, neuro, and intricate orthopedic surgery. HRP loupes have been designed to provide the largest field of view and best depth of field possible for each magnification.

[04]

3S LED HeadLight
with headband Professional L and HRP Binocular Loupe



6x/340mm, field of view 40mm

HRP Binocular Loupe

∴ **Prismatic Optics.**

Only top-quality, precision glass prisms are used to provide the highest resolution and clearest, crispest images over the entire field of view “edge-to-edge”.

∴ **The Brightest Image in Perfect Colour.**

Our exclusive coating technology reduces light reflection to 0.3% allowing for optimum light transmission, and ensuring perfect colour reproduction for brilliant, 3-dimensional images.

∴ **Compact Design.**

Although the higher magnification requires a more complex design, the weight of the HRP Loupes has been minimized. The 3.5x and 4x optics weigh only 78g, the 6x weighs only 89g. The headband mounting option is an ideal way to eliminate any weight concerns for those users not accustomed to wearing any type of glasses or spectacles.

∴ **Dust- and Water-Resistant.**

All HRP loupes are dust- and water-resistant to IP65/IEC 60529 (2000) to ensure ease of cleaning/disinfection, and years of trouble-free use.

∴ **Flexibility for Precise Adjustment.**

HRP loupes have independently adjustable optics for selecting the exact inter-pupillary distance (PD). HRP loupes can be adjusted precisely for each user for optimum optical performance by means of 5 different mounting positions on either frame or headband (with angled adaptor).

∴ **Wide Field of View at High Magnification.**

Advanced optical design ensures a wide field of view and a great depth of field even at high magnifications avoiding eyestrain over extended periods of use.



Specifications HRP Binocular Loupe

	3.5x	4x	6x
Magnification	3.5x	4x	6x
Nominal working distance	420mm	340mm	340mm
Field of view dia.	>65mm	>50mm	>40mm
	C-00.32.703	C-00.32.705	C-00.32.706

HEINE QUALITY
MADE IN GERMANY

A company makes history and gives a name to outstanding product quality: **HEINE**. Founded in 1946, family owned, rich in tradition and today international market leader in a complete range of diagnostic instruments. HEINE products meet all international standards (ISO/CE) and represent the leading edge in precision and ergonomic design. Ongoing dedication to research and development has created a solid and diverse technology base for continued quality and product leadership. Over 500 employees worldwide contribute to this success.



We reserve the right to change specification without notice.

Your distributor

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HEINE

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