HEINE 3S LED HeadLight®

Powerful LED Illumination

3S LED HeadLight
with headband Professional L

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

:· **50,000 Lux of bright, white light.** With a reference Colour Temperature of 6,250 Kelvin and an extraordinary 50,000 Lux of Illumination.
:· **Compact and lightweight.** The compact design ensures clear, unobstructed co-axial illumination. The 3SLED 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 optics for Video adaptation.
:· **Micro-Absorption System** for the Integrated Cooling Fan ensures quiet and vibration-free operation.
:· **Optional yellow** filter reduces blue light. Can be selected to avoid premature hardening of composite materials.

3S LED HeadLight
with headband Standard L

:· **Attachment options for Loupes**

:· **50,000 Lux at 25 cm**

:· **LED operating life: 50,000 hours**

:· **Adjustable spot size**

Technical Specification

Illumination	**50 000 Lux** at a working distance of 250 mm.
Colour Temperature	Reference Colour Temperature of **6,250** Kelvin
LED Operating Life	1 W Super-High Output LED rated at 50,000 hours operating life
Spot Adjustment	Continuously-adjustable Iris Aperture, 20 mm to 100 mm illuminated field diameter (at 500 mm). Small diameter is ideal for ENT and Dental Applications.
Angle of Declination	Fully Adjustable for precise user selection.
Rheostat	Headband-mounted. Positive 'Off' Switch. Illuminated 'On' indicator. Integrated voltage regulator.
Optics	Advanced multi-coated glass optics for maximum brightness
Operating Time	10 hours with mPack and Li-ion battery for 70 % more capacity than with conventional rechargeable batteries. 4 hours with mPack UNPLUGGED. Unlimited operating time when connected directly to mains power supply.
Power Sources	Plug-in transformator, mPack, EN 50, mPack UNPLUGGED, EN 50 UNPLUGGED

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Expansion options:

The 3S LED is optionally supplied with **HR/HRP Binocular Loupes** incl. i-View LoupeBracket and S-Guard splash protection (see 3S LED/HR, HRP Kit).
The binocular loupe is fully adjustable for every examiner and for every examination axis.

:· **HEINE S-Guard®** [01]. Rapid and simple adjustment of binocular loupes while on the head thanks to S-Guard with splash protection by means of protective lenses. Once set, the binocular loupe always stays in the ideal position. The fixed position of the binocular loupes on the S-Guard splash protection and the rigid connection between the headband and the nose pad ensure that the binocular loupes do not slip once their position has been set. The ergonomic nose pad also ensures a comfortable and secure position for the binocular loupe. Small protective lenses are optional.

:· **HEINE i-View® LoupeBracket for 3S LED.** The headlight and binocular loupes can be moved independently. If no magnification is required during the examination, the binocular loupe can be retracted without changing the previously-selected setting. The illumination remains fixed on the point where light is required. The synchronized adjustment mechanism allows simple single-handed operation to return the binocular loupes to exactly the same position, i.e. all previously selected settings remain. Possible to mount a sterilizable lever [01].

[01]

:· **Video application.** Ideally-suited for teaching, research, patient education, digital patient history. 3S LED HeadLight with A-Cam video camera, A-Cam Processor and prism optics. Optional PAL or NTSC format. Please specify when ordering.

3S LED HeadLight with headband Professional L	
3S LED HeadLight with headband Professional L	J-008.31.310
with headband Professional L, plug-in transformer and headband-mounted brightness control	J-008.31.311
same, with mPack and plug-in transformer	J-008.31.313

3S LED HeadLight with headband Professional L and video camera	
A-Cam and prism optics, with C-Mount and A-Cam Processor, EN 50 Rheostat Control Module, e xtension Cord Cinch-Cinch, 2 m. PAL or NTSC format (please specify)	J-008.31.336

Monitor and binocular loupes not included.

Power sources and accessories	
mPack and plug-in transformer	X-007.99.672
HEINE plug-in transformer for 3S LED HeadLight / OMEGA 500	X-095.16.320
Detachable yellow filter	J-000.31.321
Combi-case	C-079.03.000
Prism Optics with C-mount for 3S LED HeadLight	J-000.31.320
A-Cam camera with processor (available systems: PAL or NTSC, please specify when ordering)	J-000.31.201

Loupes & Loupelights

HEINE 3S LEDH eadLight® UNPLUGGED

with headband battery (rechargeable) - mPack UNPLUGGED

100 % mobility – for absolute freedom of movement!
The 3S LED HeadLight with mPack UNPLUGGED allows one-of-a-kind mobility without restriction or hindrance caused by cables, cords, or similar connections.

:· **Rechargeable battery integrated on the headband.** No interfering cable connections.
:· **Lightweight with balanced weight distribution.** High level of comfort. Lightweight and compact.
:· **Charge status indicator.** Indication of remaining operating time.
Can be charged by **wall or plug-in transformer.**
:· **Direct operation possible while charging** through the use of the mobile plug-in transformer.
:· **Charging time** 2 hours.
:· **mPack UNPLUGGED rechargeable battery.** Operating time 4 hours.
:· **Intelligent charging system.** Automatic changeover from operating to charging mode (in the wall unit). Battery-friendly charging.
:· **Top safety standards.** Integrated charge and performance checks during operation. Lithium polymer technology (selected non-flammable materials). UL-compliant.
:· **System compatibility** with mPack for even greater capacity.

:· 100 % freedom of movement

:· Low weight

:· LED charge status indicator

3S LED HeadLight UNPLUGGED	
on Professional L headband	
with mPack UNPLUGGED and plug-in transformer	**J-008.31.315**
with wall unit EN 50 UNPLUGGED and 2 x mPack UNPLUGGED	**J-008.31.316**

Extension Cord UNPLUGGED-UNPLUGGED, 2 m	**X-000.99.668**

HEINE 3S LED HeadLight® Kits and UNPLUGGED Kits

Recommended 3S LED/HR, HRP Kits

Recommended Product Order Configurations to ensure the most flexibility the 3S LED/ HR/HRP System has to offer. The following kits include main system elements but no carrying case or ancillary accessories:

Consisting of 3S LED with headband Professional L, mPack and plug-in transformer, headband-mounted brightness control, S-Guard splash protection, i-View Loupe Bracket, cleaning fluid

Kit 1: with HR Binocular Loupe 2.5 x / 340 mm	**J-008.31.345**
Kit 2: with HR Binocular Loupe 2.5 x / 420 mm	**J-008.31.346**
Kit 3: with HRP Binocular Loupe 3.5 x / 420 mm	**J-008.31.347**
Kit 4: with HRP Binocular Loupe 4 x / 340 mm	**J-008.31.348**
Kit 5: with HRP Binocular Loupe 6 x / 340 mm	**J-008.31.349**

Recommended 3S LED UNPLUGGED/HR, HRP Kits

Contents similar to 3S LED/HR, HRP Kits 1-5 but with:
Wall unit EN 50 UNPLUGGED with 2 x mPack UNPLUGGED.

Kit 6: with HR Binocular Loupe 2.5 x / 340 mm	**J-008.31.390**
Kit 7: with HR Binocular Loupe 2.5 x / 420 mm	**J-008.31.391**
Kit 8: with HRP Binocular Loupe 3.5 x / 420 mm	**J-008.31.392**
Kit 9: with HRP Binocular Loupe 4 x / 340 mm	**J-008.31.393**
Kit 10: with HRP Binocular Loupe 6 x / 340 mm	**J-008.31.394**

Retrofitting set incl. HR/HRP binocular loupe

The retrofit set allows you to also equip your 3S LED HeadLight with a binocular loupe, S-Guard splash protection and i-View LoupeBracket:

Consisting of S-Guard splash protection, i-View LoupeBracket, sterilizable swivel lever, cleaning fluid

with HR Binocular Loupe	2.5 x / 340 mm	**J-000.31.370**
with HR Binocular Loupe	2.5 x / 420 mm	**J-000.31.371**
with HRP Binocular Loupe	3.5 x / 420 mm	**J-000.31.372**
with HRP Binocular Loupe	4 x / 340 mm	**J-000.31.373**
with HRP Binocular Loupe	6 x / 340 mm	**J-000.31.374**

5 Steri-levers for i-View LoupeBracket	**C-000.32.399**
Yellow filter for dental applications [01]	**J-000.31.321**

[01]

Loupes & Loupelights

HEINE MD 1000® Fiber Optic (F.O.) Headlight

:∙ **Compact, high-tech optics** for homogeneous, exceptionally-bright illumination.
:∙ **Ultra-light, highly-flexible fiber optic cable** with gown clips, length 3 m.
:∙ **Height and angle of illumination adjustable by a single control.**
:∙ **Lightweight, flexible headband: Professional L.** Adjustable for height and width with detachable soft leather forehead cushion.
:∙ **Adjustable light spot** with sterilizable lever.
:∙ **Can be combined with HEINE High Resolution Binocular Loupes** for magnification from 2 x – 6 x.
:∙ **Can be fitted with a CCD camera.**
:∙ **Light sources: HK 7000, XENON 1000 F.O. Projector.**
   Length of the F.O. cable: 3m.
   Adaptors for other manufacturers' projectors available.
:∙ **50,000 lux light output at 20 cm** with HK 7000 projector.

For more information about F.O. projectors, see page 130.

:∙ Ultra light F.O. Headlight
:∙ 50,000 lux light output at 20 cm
:∙ Adjustable light spot

Expansion options:

The MD 1000 F.O. is optionally supplied with HR / HRP binocular loupes incl. i-View LoupeBracket and S-Guard splash protection (see MD 1000 F.O. / HR, HRP Kit).
The binocular loupe is fully adjustable for every examiner and for every examination axis.

[01]

:∙ **HEINE S-Guard® Splash protection** [01]. Rapid and simple adjustment of binocular loupes while on the head thanks to S-Guard with splash protection by means of protective lenses. Once set, the binocular loupe always stays in the ideal position. The fixed position of the binocular loupes on the S-Guard splash protection and the rigid connection between the headband and the nose pad ensure that the binocular loupes do not slip once their position has been set. The ergonomic nose pad also ensures a comfortable and secure position for the binocular loupe. Small protective lenses optional.

:∙ **HEINE i-View® LoupeBracket for MD 1000.** The headlight and binocular loupe can be moved independently. If no magnification is required during the examination, the binocular loupe can be retracted without changing the previously-selected setting. The illumination remains fixed on the point where light is required. The synchronized adjustment mechanism allows simple, single-handed operation to return the binocular loupe to exactly the same position, i.e. all previously selected settings remain. Possible to mount a sterilizable lever.

:∙ **Video application.** Ideally-suited for teaching, research, patient education, digital patient history. MD 1000 F.O. Headlight with A-Cam video camera, with A-Cam Processor and prism optics.

230V is the standard mains voltage. If a different voltage is required, e. g. 120V, please specify when ordering.

HEINE MD 1000® Fiber Optic (F.O.) Headlight

MD 1000 F.O. Headlight fitted with prism optics and C-mount CCD camera A-Cam.

MD 1000 F.O. Headlight with headband Professional L

MD 1000 F.O. Headlight with sterilizable adjuster sleeve and three gown clips	**J-003.31.231**
MD 1000 Headlight with video A-Cam camera and prism optics, with C-Mount and A-Cam Processor, without projector	**J-003.31.236**

Light sources and accessories

HK 7000 F.O. Projector, complete	**Y-096.15.121**
XENON 1000 F.O. Projector, complete	**Y-096.15.117**
Spare bulb for XENON 1000 F.O. Projector, 100 W	**Y-096.15.108**
Spare bulb for HK 7000 F.O. Projector, 150 W	**Y-096.15.102**

Adaptor MD 1000 for HR/HRP/HR-C series loupes	**J-000.31.212**
Video prism optics for MD 1000 F.O.	**J-000.31.208**
A-Cam camera with processor (available systems: PAL or NTSC, please specify when ordering)	**J-000.31.201**

Recommended MD 1000 F.O./ HR 2.5 x/HRP Kits

Recommended Product Order Configurations to ensure the most flexibility the MD 1000 F.O. /HR, HRP System has to offer. The following kits include main system elements but no carrying cases or ancillary accessories.
Please order desired projector separately:
Consisting of MD 1000 F.O. with headband Professional L,
S-Guard splash protection, i-View LoupeBracket, cleaning fluid

Kit 1: with HR Binocular Loupes 2.5 x/340 mm	**J-003.31.245**
Kit 2: with HR Binocular Loupes 2.5 x/420 mm	**J-003.31.246**
Kit 3: with HRP Binocular Loupes 3.5 x/420 mm	**J-003.31.247**
Kit 4: with HRP Binocular Loupes 4 x/340 mm	**J-003.31.248**
Kit 5: with HRP Binocular Loupes 6 x/340 mm	**J-003.31.249**

Retrofitting set incl. HR 2.5 x/HRP binocular loupes

The retrofit set allows you to also equip your MD 1000 F.O. Headlight with a binocular loupe, S-Guard splash protection and i-View LoupeBracket:
Consisting of S-Guard splash protection, i-View LoupeBracket,
sterilizable swivel lever, cleaning fluid

with HR Binocular Loupes	2.5 x/340 mm	**J-000.31.270**
with HR Binocular Loupes	2.5 x/420 mm	**J-000.31.271**
with HRP Binocular Loupes	3.5 x/420 mm	**J-000.31.272**
with HRP Binocular Loupes	4 x/340 mm	**J-000.31.273**
with HRP Binocular Loupes	6 x/340 mm	**J-000.31.274**

5 Steri-levers for i-View LoupeBracket	**C-000.32.399**

Loupes & Loupelights