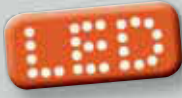


Headlights






A range of highly innovative and highest quality headlights featuring the latest LED technology and Xenon or halogen light sources.

Selected HEINE headlights also feature a choice of magnification and video technology.





HEINE Headlights

	LED MicroLight	3S LED HeadLight	MD 1000 Headlight
			
Technical Data			
Type of Light	LED	LED	F.O.
Light Intensity (at 250mm working distance)	40,000 Lux	50,000 Lux	100,000 Lux with XENON Projector 35,000 Lux with HK 7000 Projector
Colour Temperature (Kelvin)	6,250 K	6,250 K	6,000 K with XENON Projector 3,300 K with HK 7000 Projector
Spot Size (at 420mm working distance)	81 mm	30 – 80 mm	40 – 150 mm
Power Sources / operating time	mPack LL 17 hours	mPack UNPLUGGED 5.5 hours mPack 12.5 hours	F.O. Projector
Weight	50 g with S-Frame 165 g with Lightweight Headband	336 g 532 g with mPack UNPLUGGED	435 g
Angle of Declination	Fully-adjustable	Fully-adjustable	Fully-adjustable
Light Intensity Control	0 – 100%	0 – 100%	0 – 100%
Features			
Adjustable Spot Size	--	<input type="checkbox"/>	<input type="checkbox"/>
Waterproof	<input type="checkbox"/>	--	--
Optional Yellow Filter	<input type="checkbox"/>	<input type="checkbox"/>	--
Expandable with HR and HRP Loupes	--	<input type="checkbox"/>	<input type="checkbox"/>
Optional Video Version	--	<input type="checkbox"/>	<input type="checkbox"/>
Head-worn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spectacle-worn	<input type="checkbox"/>	--	--
Page	133/134	135–139	140–142



HEINE LED MicroLight®

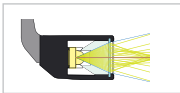
Ultra-light, Universal Headlight



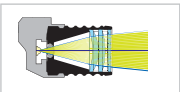
∴ **Lightweight**

∴ **Individual height adjustment**

∴ **40.000 Lux/250mm working distance**



Conventional System [01]



HEINE Precision LensSystem [02]



- ∴ **Advanced LED Technology.** White, homogenous light, ideal for all surgical and dental applications.
- ∴ **Compact and lightweight.** Ensures perfect comfort.
- ∴ **Aluminium Housing:** Compact and long lasting with advanced heat management. Housing does not heat up.
- ∴ **Waterproof design.** Easy to clean.
- ∴ **Individual adjustment of height and angle of view.** 100% coaxiality for shadow-free light.
- ∴ **Homogenous illumination of the whole field of view.** Approximately 81 mm illumination field at 420mm, approx. 95 mm at 500mm working distance.

Technical Specification

Illumination	40.000 Lux at a working distance of 250mm
Colour Temperature	6,250 Kelvin
LED Operating Life	1W Super-High Output LED rated at 50,000 hours operating life
Weight	50 g together with S-Frame, 165 g together with Lightweight Headband
Angle of Declination	Individually-adjustable for every examination and 100% coaxiality
Operating Time	17 hours (with mPack LL)

- ∴ **Precision multiple lens optical system** consisting of four high-quality lenses. Completely homogenous illumination of the whole field of view, and a clearly defined light spot.

Mounting Options:

∴ HEINE S-Frame®

- ∴ **Maximum comfort** with a modern, ergonomic design.
- ∴ **Malleable temples and nose pad.** Can be customized to fit any face perfectly.
- ∴ **Innovative materials** – Carbon-Kinetium reduces weight (50g together with LED MicroLight).
- ∴ **Tough polycarbonate protective lenses.**



∴ HEINE Lightweight® Headband

- ∴ **Lightweight** (165g together with LED MicroLight.) Ideal for spectacle wearers.
- ∴ **Fully-adjustable for width to fit any head.**
- ∴ **Hygienic and comfortable leather cushions.**





HEINE mPack LL®

Power Source



- ∴ **Portable power pack.** Does not tie the user to desk, wall or static power supplies.
- ∴ **Li-ion Technology.** Triple capacity compared with current NiCd systems. No memory effect, autonomy for 17 hours.
- ∴ **Fast Charge.** Charges to full capacity in 2 hours.
- ∴ **Charge Status Display.** Always lets you know how much operating charge you have left.
- ∴ **Stepless light intensity control.** Optimum brightness setting prevents reflexes.
- ∴ **Flexible Charging Options:** EN 50 Desk and wall charger, or plug-in transformer.
- ∴ **Intelligent.** Can be used as mains power supply even while in “charge” mode.
- ∴ **100-240V Compatible Transformer** incl. 4 plugs for world wide compatibility.



For the optional EN50 table/wall unit please see page 153.



HEINE LED MicroLight®

Ordering Information



[01]

[02]

LED MicroLight

on S-Frame with mPack LL, plug-in transformer and retaining cord in case [01]	J-008.31.290
on Lightweight Headband with mPack LL and plug-in transformer in case [02]	J-008.31.295

Detachable Yellow Filter [03]	C-000.32.241
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[03]



HEINE 3S LED HeadLight®

Ultra-bright 3SLED HeadLight for powerful, coaxial illumination



3S LED HeadLight

- ⚡ Attachment options for loupes
- ⚡ 50,000 Lux at 250 mm
- ⚡ LED operating life: 50,000 hours
- ⚡ Adjustable spot size

- ⚡ **50.000 Lux of bright, white light.**
- ⚡ **Stepless light intensity control.** Optimal brightness setting prevents reflexes.
- ⚡ **Precision iris aperture adjustment.** Small diameter is ideal for ENT and Dental Applications.
- ⚡ **Flexibility.** Mains or portable power supply. Integrated attachment option for HR/HRP Binocular Loupes and Prism optics for Video adaption.
- ⚡ **Viewing Angle adjustable over a wide range.**
- ⚡ **Multi-coated glass optics** for maximum brightness.
- ⚡ **Optional yellow filter** reduces blue light. Avoids premature hardening of composites.

Technical Specification

Illumination	50 000 Lux at a working distance of 250 mm.
Colour Temperature	6,250 Kelvin
LED Operating Life	1 W Super-High Output LED rated at 50,000 hours operating life
Spot Adjustment	30 mm to 80 mm at 420 mm working distance
Angle of Declination	Individually-adjustable for every examination
Rheostat	Headband-mounted
Operating Time	12.5 hours with mPack and 5.5 hours with mPack UNPLUGGED

Power Options:



⚡ HEINE mPack®

- ⚡ **Portable power pack.** Does not tie the user to desk, wall or static power supplies.
- ⚡ **Li-ion Technology.** Triple capacity compared with current NiCd systems. No memory effect, autonomy for 10 hours.
- ⚡ **Fast Charge.** Charges to full capacity in 2 hours.
- ⚡ **Charge Status Display.** Always lets you know how much operating charge you have left.
- ⚡ **Flexible Charging Options:** EN50 Desk and wall charger, or plug-in transformer.
- ⚡ **Intelligent.** Can be used as mains power supply even while in "charge" mode.
- ⚡ **100-240V Compatible Transformer** incl. 4 plugs for world wide compatibility.

For the optional EN50 table/wall unit please see page 153.

⚡ HEINE mPack® UNPLUGGED. Headband-mounted rechargeable battery.

- ⚡ **Wireless. 100 % mobility for absolute freedom of movement.**
- ⚡ **Rechargeable battery integrated on the headband.** No inconvenient cable connections.
- ⚡ **Lightweight with balanced weight distribution.** High level of comfort.
- ⚡ **Charge Status Display** indicates remaining operating time.
- ⚡ **Intelligent.** Can be used as mains power supply even in "charge" mode.
- ⚡ **Fast Charge.** Charges to full capacity in only 2 hours. Operating time 4 hours.
- ⚡ **Top Safety Standards.** Integrated charge and performance checks during operation. Lithium polymer technology (selected non-flammable materials). UL compliant.





HEINE 3SLED HeadLight®

Ordering Information



3SLED HeadLight with Headband Professional L and Power Sources

3SLED HeadLight without power source [01]	J-008.31.310
3SLED HeadLight with plug-in transformer and headband-mounted brightness control [01] + [02]	J-008.31.311
3SLED HeadLight with mPack and plug-in transformer [01] + [03]	J-008.31.313
3SLED HeadLight with mPack UNPLUGGED and plug-in transformer UNPLUGGED [01] + [04]	J-008.31.315
3SLED HeadLight with wall mounted EN50 UNPLUGGED charger and 2x mPack UNPLUGGED [01] + [05]	J-008.31.316

3SLED HeadLight accessories

Detachable Yellow Filter [06]	J-000.31.321
Extension Cord from plug-in transformer UNPLUGGED to mPack UNPLUGGED, 2 m [07]	X-000.99.668



HEINE 3S LED HeadLight® with HR/HRP Optics

The 3S LED HeadLight is optionally supplied with HR / HRP Binocular Loupes incl. i-View loupe mount and with or without S-Guard, if preferred. The binocular loupe is fully adjustable for every examiner and for every examination axis.

- **HEINE S-Guard®:** Rapid and simple symmetric adjustment of binocular loupes with splash protection by protective lenses.
- **HEINE i-View® for 3SLED HeadLight:** Provides any angle of view and flips up the optics independently of the illumination beam of the LED LoupeLight.



3SLED HeadLight Kits with S-Guard and Power Source

The following Kits contain: 3SLED HeadLight, HR/HRP optics with i-View and S-Guard, mPack and plug-in transformer [01], Cleaning Fluid [02]

Kit 1:	with HR Binocular Loupe 2.5x / 340 mm	J-008.31.345
Kit 2:	with HR Binocular Loupe 2.5x / 420 mm	J-008.31.346
Kit 11:	with HR Binocular Loupe 2.5x / 520 mm	J-008.31.354
Kit 3:	with HRP Binocular Loupe 3.5x / 420 mm	J-008.31.347
Kit 4:	with HRP Binocular Loupe 4x / 340 mm	J-008.31.348
Kit 5:	with HRP Binocular Loupe 6x / 340 mm	J-008.31.349



NEW



3SLED HeadLight Kits with Power Source without S-Guard

The following Kits contain: 3SLED HeadLight, HR/HRP optics with i-View, mPack and plug-in transformer [01]

Kit 1c:	with HR Binocular Loupe 2.5x / 340 mm	J-008.31.355
Kit 2c:	with HR Binocular Loupe 2.5x / 420 mm	J-008.31.356
Kit 11c:	with HR Binocular Loupe 2.5x / 520 mm	J-008.31.353
Kit 3c:	with HRP Binocular Loupe 3.5x / 420 mm	J-008.31.357
Kit 4c:	with HRP Binocular Loupe 4x / 340 mm	J-008.31.358
Kit 5c:	with HRP Binocular Loupe 6x / 340 mm	J-008.31.359



3SLED HeadLight UNPLUGGED Kits with S-Guard and Power Source

The following Kits contain: 3SLED HeadLight, HR/HRP optics with i-View and S-Guard, Wall transformer EN50 UNPLUGGED [03], 2x mPack UNPLUGGED, Cleaning Fluid [02]

Kit 6:	with HR Binocular Loupe 2.5x / 340 mm	J-008.31.390
Kit 7:	with HR Binocular Loupe 2.5x / 420 mm	J-008.31.391
Kit 12:	with HR Binocular Loupe 2.5x / 520 mm	J-008.31.376
Kit 8:	with HRP Binocular Loupe 3.5x / 420 mm	J-008.31.392
Kit 9:	with HRP Binocular Loupe 4x / 340 mm	J-008.31.393
Kit 10:	with HRP Binocular Loupe 6x / 340 mm	J-008.31.394



NEW



3SLED HeadLight UNPLUGGED Kits with Power Source without S-Guard

The following Kits contain: 3SLED HeadLight, HR/HRP optics with i-View, Wall transformer EN50 UNPLUGGED [03], 2x mPack UNPLUGGED

Kit 6c:	with HR Binocular Loupe 2.5x / 340 mm	J-008.31.370
Kit 7c:	with HR Binocular Loupe 2.5x / 420 mm	J-008.31.371
Kit 12c:	with HR Binocular Loupe 2.5x / 520 mm	J-008.31.375
Kit 8c:	with HRP Binocular Loupe 3.5x / 420 mm	J-008.31.372
Kit 9c:	with HRP Binocular Loupe 4x / 340 mm	J-008.31.373
Kit 10c:	with HRP Binocular Loupe 6x / 340 mm	J-008.31.374



Retrofitting Sets for HEINE 3SLED HeadLight® with HR/HRP



Retrofitting Set incl. HR/HRP Binocular Loupes for 3SLED HeadLight

The sets enable you to equip your existing 3SLED HeadLight with a binocular loupe. The set contains HR/HRP optics with i-View, S-Guard splash protection and cleaning fluid [01]

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

5 Steri-levers for i-View Loupe Mount for 3SLED [02]	C-000.32.399
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Power Sources and Accessories



mPack and plug-in Transformer [01]	X-007.99.672
Plug-in Transformer for 3SLED [02]	X-095.16.320

mPack with EN50 table/wall unit (incl. 90° Angled Adaptor, Instrument support for Professional L Headband) [03]	X-095.17.302
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HEINE 3SLED HeadLight® with A-Cam Video Camera

Technical specifications A-Cam



- ∴ **High-resolution A-Cam camera.** CCD 470,000 Pixel, 460 lines.
- ∴ **Image sensor.** 1/2" CCD, color.
- ∴ **Fully-integrated camera system.** No external brackets or prisms.
- ∴ **100 % dustproof system.** No maintenance required.
- ∴ **Waterproof camera head.** Can be placed in disinfectant solution (but cannot be autoclaved).
- ∴ **Optics specially-developed.** Maximum brightness.
- ∴ **Focus adjustable for any working distance.** From 250 to 800mm.
- ∴ **Automatic white balance.**
- ∴ **Automatic light metering at the center of the image.** Reduction in reflections.
- ∴ **Automatic light boost.** Boost function for examinations with low lighting.
- ∴ **Brilliant image** with an S-VHS monitor.
- ∴ **Processor will connect to various output devices,** such as: VCR's and printers.
- ∴ **Compact.** Lightweight design (65 g, camera head without cable, complete 250 g).
- ∴ **3SLED HeadLight can be supplied without a camera for users' own "C"-mount CCD cameras.**
- ∴ **Connecting cable.** 3m.
- ∴ **FBAS (composite) and Y/C (SVHS) outputs.** Extensive compatibility and high image quality.
- ∴ **Optional PAL or NTSC format.** Please specify when ordering.



[01]



[02]

3SLED HeadLight with A-Cam with Prism Optics, C-Mount and A-Cam Processor (available systems: PAL or NTSC, please specify when ordering), EN50 transformer table/wall unit with Rheostat Control Module, Extension Cord Cinch-Cinch 2m (available systems: PAL or NTSC, please specify when ordering). **J-008.31.336**

3SLED HeadLight accessories

Focusing Prism Optics with C-Mount for 3SLED [01]	J-000.31.320
A-CAM camera with processor [02] (available systems: PAL or NTSC, please specify when ordering).	J-000.31.201

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



- ∴ **Compact, high-tech optics** for homogeneous, coaxial, 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 HR and HRP Binocular Loupes** for magnification from 2x – 6x.
- ∴ **Can be fitted with a CCD camera.**
- ∴ **Light sources: HK 7000 F.O. and XENON 1000 F.O. Projector.**
Adaptors for other manufacturers' projectors available.

Light Sources: HK 7000 and XENON 1000 F.O. Projector. Please order separately, see pages 142 and 160.

Technical Specification

Illumination	100,000 Lux with XENON 1000 F.O. Projector, 35,000 Lux with HK 7000 F.O. Projector at a working distance of 250 mm
Colour Temperature	3,300 Kelvin with HK 7000 F.O. and 6000 Kelvin with XENON 1000 F.O. Projector
Light Sources	XENON 1000 F.O. or HK 7000 F.O. Projector
Spot Adjustment	Adjustable spot size from 20 mm to 70 mm at a distance of 200 mm and 45 mm to 180 mm at a distance of 500 mm
Angle of Declination	Individually-adjustable
Brightness control	Stepless brightness control on Light Source (HK 7000 F.O. or XENON 1000 F.O.)

MD1000 F.O. Headlight with Headband Professional L

with accessories

J-003.31.231

HEINE MD 1000® F.O. Headlight with HR/HRP Optics

The MD 1000 is optionally supplied with HR / HRP Binocular Loupes including i-View loupe mount and S-Guard. The binocular loupe is fully-adjustable for every examiner and for every examination axis.

- ∴ **HEINE S-Guard:** Rapid and simple symmetric adjustment of binocular loupes with splash protection by protective lenses.
- ∴ **HEINE i-View:** Provides any angle of view and flips up the optics independently of the illumination beam.



MD 1000 F.O. Headlight with HR / HRP Binocular Loupes

The following order numbers include: MD 1000 F.O. Headlight, HR/HRP optics with i-View and S-Guard, Cleaning Fluid

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

5 Steri-levers for i-View loupe mount	C-000.32.399
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Please order the projector separately. See pages 142 and 160.



HEINE MD 1000® F.O. Headlight with A-Cam Video Camera

Technical specifications A-Cam



- ✦ **For video documentation and teaching.**
- ✦ **High-resolution A-Cam camera.** CCD 470,000 Pixel, 460 lines.
- ✦ **Image sensor.** 1/2" CCD, colour.
- ✦ **Fully integrated camera system.** No external brackets or prisms.
- ✦ **100% dustproof system.** No maintenance required.
- ✦ **Waterproof camera head.** Can be placed in disinfectant solution (but cannot be autoclaved).
- ✦ **Optics specially-developed.** Maximum brightness.
- ✦ **Focus adjustable for any working distance.** From 250 to 800 mm.
- ✦ **Automatic white balance.**
- ✦ **Automatic light metering at the center of the image.** Reduction in reflections.
- ✦ **Automatic light boost.** Boost function for examinations with low lighting.
- ✦ **Brilliant image with a S-VHS monitor.**
- ✦ **Processor will connect to various output devices,** such as: VCR's and printers.
- ✦ **Compact.** Lightweight design (65g, camera head without cable, complete 250g).
- ✦ **MD 1000 can be supplied without a camera for users' own "C"-mount CCD cameras.**
- ✦ **Connecting cable.** 3m.
- ✦ **Brilliant image** with an S-VHS monitor.
- ✦ **FBAS (composite) and Y/C (SVHS) outputs.** Extensive compatibility and high image quality.
- ✦ **Optional PAL or NTSC format.** Please specify when ordering.



[01]

[02]

MD 1000 Headlight, A-CAM with Prism Optics, C-Mount and A-CAM Processor (Please specify PAL or NTSC when ordering!)

J-003.31.236

MD 1000 F.O. accessories

Focusing Video Prism Optics for MD 1000 F.O. [01]

J-000.31.208

A-Cam camera with processor [02]

(Please specify PAL or NTSC system when ordering!)

J-000.31.201

Light Sources for MD 1000 F.O. Headlight and Accessories



[01]

[02]

HK 7000 F.O. Projector 150W, complete [01]

Y-096.15.121

XENON 1000 F.O. Projector 100W, complete [02]

Y-096.15.117

Spare Bulb for HK 7000 F.O. Projector

Y-096.15.102

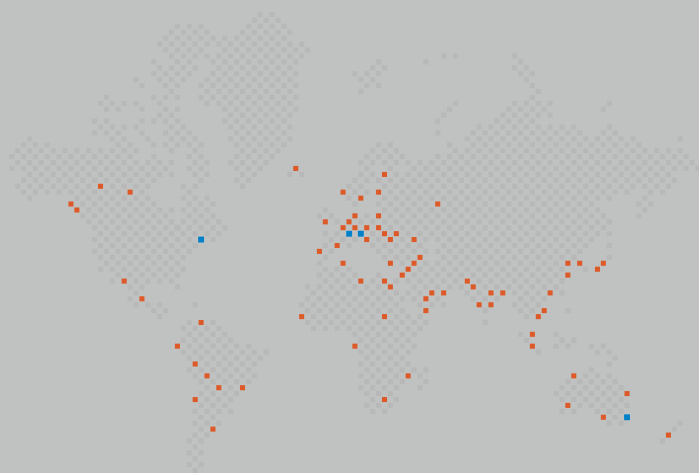
Spare Bulb for XENON 1000 F.O. Projector

Y-096.15.108

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.

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