Once you've tried it, you'll never want to do without it again.

HEINE binocular loupes
Overview

It goes without saying that all of our binocular loupes are premium products. But, still, they differ in one or two details. Read on for a summary of what these different details are and all their benefits:

	HR	HRP	C
Magnification | working distance	2.5 x | 340 mm 2.5 x | 420 mm 2.5 x | 520 mm	3.5 x | 420 mm 4 x | 340 mm 6 x | 340 mm	2.3 x | 340 mm 2.3 x | 450 mm
Mounting options	S-FRAME spectacle frame [01], professional L headband [02]		lightweight headband [04]
Further articles	protective lenses, close-up lenses (to reduce the working distance from 340 mm to 250 mm), LoupeLight2 [03] **(pages 135|136)**	protective lenses, LoupeLight2 [03] **(pages 135|136)**	protective lenses
Features	i-View function*, modular, water-resistant, achromatic optics, optional prescription correction		–
Catalogue page	**128-129**	**130-131**	**132**

*i-View function: Provides any angle of view and flips up the optics independently of the illumination beam.

[01]   [02]   [03]   [04]

HEINE binocular loupes
How to choose the correct loupe

Various magnifications (from 2.3 x to 6 x), working distances, wearing options (unique S-FRAME, Lightweight headband and Professional L headband) and LoupeLight2 illumination systems are available. They provide homogeneous, reflex-free illumination even in deep cavities. State-of-the-art LED[HQ] technology and design!

HEINE binocular loupes are used in many disciplines: e.g. general medicine, dermatology, surgery, cosmetic surgery, neurosurgery, ENT, ophthalmology, veterinary medicine, dentistry etc.
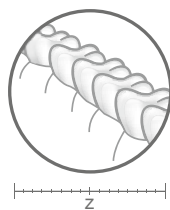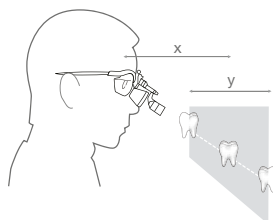
DEFINITIONS:

Working distance (x)
The distance, at which the optics of a loupe are sharply-focused.
Depth of field (y)
The range over which the image remains sharply-focused.
Field of view (z)
The area that can be seen under magnification at the nominal working distance.

CHOOSE YOUR MAGNIFICATION
Choose the lowest magnification that meets your needs. The lower the magnification, the larger the field of view and the easier the loupe will be to use.

CHOOSE YOUR OPTICS
HR: High resolution achromatic optics with excellent optical qualities.

HRP: High resolution prismatic optics with excellent optical qualities for 3.5 x magnification and higher.

C: Economy.

CHOOSE YOUR WORKING DISTANCE
This is an individual choice depending on the examiner's size and working position. The longer the working distance, the bigger the field of view.

CHOOSE YOUR MOUNTING OPTION
Spectacle frame or headband.

ADD ILLUMINATION
Coaxial bright light is especially-important when using magnification.

HEINE HR 2.5x high resolution binocular loupes
With i-View loupe mount

HR 2.5X OPTICS WITH i-VIEW

- **Achromatic optics** for crisp, bright images with colour-correction
- **Lightweight** (51 g)
- **Water-resistant**
- **Independent adjustment** of left and right optics for perfect PD adjustment
- **High magnification with a large field of view and excellent depth of field**
- **i-View loupe mount** provides any angle of view and flips up the optics independently of the optional LoupeLight2

HR 2.5x specifications

Working distance in mm	340	420	520
Field of view in mm	90	130	180
Depth of field in mm	110	180	260

Mounting options:
HEINE S-FRAME

Optional
clip-in correction frame

- **Maximum comfort** with a modern, ergonomic design
- **Malleable temples and nose pad** can be customized to fit any face perfectly
- **Innovative materials:** Carbon-Kynetium reduces weight (24 g)
- **Tough polycarbonate protective lenses**
- **Optional clip-in correction frame** for prescription lenses

HEINE PROFESSIONAL L HEADBAND WITH S-GUARD

Professional L headband
with S-GUARD

- **S-GUARD splash protection**
- **Ergonomic nose pad** for comfort during long procedures
- **Fully-adjustable for height and width to fit any head**
- **Hygienic and comfortable leather cushions**
- **Optional clip-in correction frame** for prescription lenses

HEINE PROFESSIONAL L HEADBAND WITHOUT S-GUARD

- **Ideal for spectacle-wearers in combination with their own spectacles**
- **Fully-adjustable for height and width to fit any head**
- **Hygienic and comfortable leather cushions**

Professional L headband
without S-GUARD

HEINE HR 2.5x high resolution binocular loupes
With i-View loupe mount

HR 2.5x sets with i-View loupe mount

Set A

Set B with S-GUARD

Set C without S-GUARD

Working distance in mm	340	420	520
Set A: HR 2.5x optics with i-View on S-FRAME protective lenses 2 sterilisable swivel levers retaining cord cleaning cloth carrying case	**C-000.32.355**	**C-000.32.356**	**C-000.32.567**
Set B: HR 2.5x optics with i-View on Professional L headband S-GUARD splash protection protective lenses 2 sterilisable swivel levers cleaning cloth	**C-000.32.365**	**C-000.32.366**	**C-000.32.367**
Set C (without S-GUARD): HR 2.5x optics with i-View on Professional L Kopfband protective lenses 2 sterilisable swivel levers	**C-000.32.865**	**C-000.32.866**	**C-000.32.867**

HEINE HRP high resolution prismatic binocular loupes
With i-View loupe mount

HRP OPTICS WITH i-VIEW

▶ **Achromatic optics** for crisp, bright images from edge-to-edge

▶ **Lightweight** (85 g)

▶ **Water-resistant**

▶ **Independent adjustment** of left and right optics for perfect PD adjustment

▶ **Highest magnification:** Choice of 3.5 x, 4 x and 6 x

▶ **i-View loupe mount** provides any angle of view and flips up the optics independently of the optional LoupeLight2

HRP specifications

Working distance in mm	HRP 3.5 x	420	HRP 4 x	340	HRP 6 x	340
Field of view in mm	65	50	40
Depth of field in mm	60	40	30

Optional
clip-in correction frame

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-Kynetium reduces weight (24 g)

▶ **Tough polycarbonate protective lenses**

▶ **Optional clip-in correction frame** for prescription lenses

with S-GUARD

HEINE PROFESSIONAL L HEADBAND WITH S-GUARD

▶ **S-GUARD splash protection**

▶ **Ergonomic nose pad** for comfort during long procedures

▶ **Fully-adjustable for height and width to fit any head**

▶ **Hygienic and comfortable leather cushions**

▶ **Optional clip-in correction frame** for prescription lenses

HEINE PROFESSIONAL L HEADBAND WITHOUT S-GUARD

▶ **Ideal for spectacle-wearers in combination with their own spectacles**

▶ **Fully-adjustable for height and width to fit any head**

▶ **Hygienic and comfortable leather cushions**

without S-GUARD

HEINE HRP high resolution prismatic binocular loupes
With i-View loupe mount

HRP sets with i-View loupe mount

Set A

Set B with S-GUARD

Set C without S-GUARD

Working distance in mm	HRP 3.5x|420	HRP 4x|340	HRP 6x|340
Set A: HRP optics with i-View on S-FRAME protective lenses 2 sterilisable swivel levers retaining cord cleaning cloth carrying case	C-000.32.430	C-000.32.431	C-000.32.432
Set B: HRP optics with i-View on Professional L headband S-GUARD splash protection protective lenses 2 sterilisable swivel levers cleaning cloth	C-000.32.440	C-000.32.441	C-000.32.442
Set C (without S-GUARD): HRP optics with i-View on Professional L headband protective lenses 2 sterilisable swivel levers	C-000.32.840	C-000.32.841	C-000.32.842

HEINE C2.3K binocular loupes
The cost-effective all-purpose loupe

Ideal for dental laboratories and general medical examination.

▶ **Crisp, clear images.** Multi-coated, scratch-resistant silica glass lenses produce crisp, clear images

▶ **Flexibility for precise adjustment.** Independently adjustable PD controls ensure precise alignment of the optics

▶ **The ideal all-purpose loupe.** The feather-light weight, low-profile design and low cost of the C2.3K loupe make it the ideal all-purpose loupe

▶ **Working distance.** 340 mm or 450 mm (13 or 18 inches)

Specifications	C2.3K|340 mm	C2.3K|450 mm
Magnification	2.3 x	2.3 x
Working distance	340 mm	450 mm
Field of view Ø	110 mm	130 mm
Weight	160 g	160 g
Depth of field	120 mm	190 mm

User's refractive error	Effective working distance C2.3 x|340 mm	Effective working distance C2.3 x|450 mm
+2	440 mm	670 mm
+1	390 mm	560 mm
0	340 mm	450 mm
–1	300 mm	420 mm
–2	270 mm	370 mm

Important information for those who wear glasses:
The C2.3K loupe can be worn with spectacles. Should you prefer to examine without glasses, the charts illustrate how your refractive error will affect the loupe working distance. If you are unsure of your prescription, please consult your eye care provider.

C2.3K binocular loupes

C2.3K|340 headband loupe in case	**C-000.32.230**
C2.3K|450 headband loupe in case	**C-000.32.231**

Detachable protective lenses for C2.3K to protect the optic	**C-000.32.097**

HEINE binocular loupes
Ordering information

Optics with i-View loupe mount for S-FRAME in carrying case

Working distance in mm	340 mm	420 mm	520 mm
HR 2.5 x	**C-000.32.595**	**C-000.32.596**	**C-000.32.597**

	340 mm	420 mm	520 mm
HRP 3.5 x	–	**C-000.32.720**	–
HRP 4 x	**C-000.32.721**	–	–
HRP 6 x	**C-000.32.722**	–	–

Optics with i-View and S-GUARD for Professional L headband

Working distance in mm	340 mm	420 mm	520 mm
HR 2.5 x	**C-000.32.585**	**C-000.32.586**	**C-000.32.587**

	340 mm	420 mm	520 mm
HRP 3.5 x	–	**C-000.32.710**	–
HRP 4 x	**C-000.32.711**	–	–
HRP 6 x	**C-000.32.712**	–	–

Optics with i-View for Professional L headband (without S-GUARD)

Working distance in mm	340 mm	420 mm	520 mm
HR 2.5 x	**C-000.32.733**	**C-000.32.734**	**C-000.32.735**

	340 mm	420 mm	520 mm
HRP 3.5 x	–	**C-000.32.736**	–
HRP 4 x	**C-000.32.737**	–	–
HRP 6 x	**C-000.32.738**	–	–

Accessories for HEINE binocular loupes
Ordering information

Mounting options

S-FRAME* for HR and HRP binocular loupes incl. retaining cord [01]	**C-000.32.302**
Professional L headband for HR and HRP optics [02]	**C-000.32.549**

* with protective lenses, large (lg).

Accessories for optics

HR close-up lenses in case for HR 2.5 x	340 mm. The close-up lenses reduce the working distance of the binocular loupes HR 2.5 x	340 mm to 250 mm [03]	**C-000.32.523**

Protective lenses to protect the optics of the HR and the HRP loupes

protective lenses for HR loupes (5 pairs) [04]	**C-000.32.537**
protective lenses for HRP loupes [05]	**C-000.32.027**
sterilisable swivel levers for HR and HRP loupes with i-View [06]	**C-000.32.551**
carrying case for binocular loupe optics or for all sets with S-FRAME [07]	**C-000.32.552**

Carrying cases and storage cases may deviate in shape and colour.

Accessories for S-FRAME

S-FRAME retaining cord [08]	**C-000.32.305**
S-FRAME replacement part set with side rubbers, nose pad (1 piece) and screw [09]	**C-000.32.308**
clip-in correction frame for prescription lenses [10]	**C-000.32.309**
protective lenses, large (lg), 1 pair (standard) [11]	**C-000.32.306**
protective lenses, small (sm), 1 pair	**C-000.32.307**

[01]

[02]

[03]

[04]

[05]

[06]

[07]

[08]

[09]

[10]

[11]

HEINE LoupeLight2
Compact LED^{HQ} headlight

- ▶ **There's LED. And there's LED^{HQ}.** HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. **That's what we call LED in HEINE quality – or LED^{HQ}**
- ▶ **Compact, lightweight (50 g).** Ensures perfect comfort
- ▶ **Aluminium housing.** Exclusive aluminium housing protects the optics against dust and moisture to ensure an extraordinary long lifespan and optimal thermal management
- ▶ **Coaxial illumination.** Compact coaxial design ensures a completely shadow-free image and allows for excellent illumination of difficult to see areas
- ▶ **Optional filter.** Polarisation filter P2 improves contrast and yellow filter reduces blue light
- ▶ **Replaceable connecting cord** with high-quality splashproof threaded connector with a length of 1.5 m. Connects the LoupeLight2 with the mPack mini
- ▶ **Incl. coloured attachment clips for personalisation.** To fixate the cable and to identify your LoupeLight

Technical specification

Illumination	typ. 55,000 lux*
Colour temperature	typ. 4,000 kelvin
LED operating life	typ. 50,000 hours
Spot size	the illuminated field is designed to complement the HR|HRP loupes. 81 mm Ø at 420 mm, 95 mm Ø at 520 mm working distance
Angle of declination	stepless and individually adjustable for every examination
Operating time	typ. 9 h with mPack mini (in continuous operation at full power typ. 4 hours)

*Measured at a working distance of 180 mm from the light emission to the object.

[01] Conventional system
[02] HEINE precision 4-lens system

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

HEINE LoupeLight2 sets
with mPack mini and E4-USB plug-in transformer

LoupeLight2 sets with HR binocular loupes

Magnification | working distance in mm	HR 2.5x|340	HR 2.5x|420	HR 2.5x|520
HR 2.5 x optics with i-View on S-FRAME and LoupeLight2 detachable yellow filter mPack mini mPack mini belt clip E4-USB plug-in transformer connecting cord protective lenses 2 sterilisable levers retaining cord, cleaning cloth, case	C-008.32.450	C-008.32.451	C-008.32.452

LoupeLight2 sets with HRP binocular loupes

Magnification | working distance in mm	HRP 3.5x|420	HRP 4x|340	HRP 6x|340
HRP optics with i-View on S-FRAME and LoupeLight2 detachable yellow filter mPack mini mPack mini belt clip E4-USB plug-in transformer connecting cord protective lenses 2 sterilisable levers retaining cord, cleaning cloth, case	C-008.32.453	C-008.32.454	C-008.32.455

Carrying cases and storage cases may deviate in shape and colour.

▶ For further information on the mPack mini, please see
▶ Power supplies may deviate in size and shape.

HEINE LoupeLight2 and accessories
Ordering information

LoupeLight2

LoupeLight2 for HR / HRP loupes for i-View loupe mount* [01]	**C-008.32.226**

detachable yellow filter [02]	**C-000.32.241**
polarisation filter P2 for LoupeLight2 and HR loupes [03] + [04]	**C-000.32.535**
spare polarisation filter P2 for HR loupes (2 pairs) [04]	**C-000.32.536**
connecting cord SC1 (1.5 m | Ø 2.4 mm) for LoupeLight2	mPack mini [05]	**C-000.32.240**
connecting cord SC2 (1.5 m | Ø 3.2 mm) for LoupeLight2	mPack mini [06]	**C-000.32.243**

LoupeLight2 with power source for i-View loupe mount (HR | HRP)

LoupeLight2 with mPack mini and E4-USB plug-in transformer* [07]	**C-008.32.265**
mPack mini belt clip [08]	**X-000.99.006**

*Not suitable for HR | HRP loupes with a rigid loupe mount.

[01] [02] [03] [04] [05] [06] [07] [08]

HEINE mPack mini
Compact and lightweight power source
for LoupeLight2 | MicroLight2

▶ **Operating time typ. 9 hours.** In continuous operation at full power typ. 4 hours
▶ **Charging time typ. 4 hours**
▶ **Compact and lightweight.** With a weight of just 95 g and dimensions of 44 x 23 x 101 mm the power source can be easily stowed

HEINE headlights
Overview

It goes without saying that all of our headlights are premium products. But, still, they differ in one or two details. Read on for a summary of what these different details are and all their benefits:

	MicroLight2	ML4 LED HeadLight
Illumination	LED^HQ	
Light intensity*	typ. 55,000 lux	typ. 90,000 lux
Colour temperature (kelvin)	typ. 4,000 K	typ. 5,500 K
Spot size	81 mm	30 – 80 mm
Power sources | operating time	mPack mini | typ. 9 hours	mPack UNPLUGGED | typ. 3.5 hours mPack | typ. 8.5 Std.
Weight	80 g with S-FRAME spectacle frame 190 g with Lightweight headband	260 g 460 g with mPack UNPLUGGED
Angle of declination	fully-adjustable	
Brightness control	0 – 100 %	
Features	waterproof, optional yellow filter, head- or spectacle-worn,	adjustable spot size, optional yellow filter, polarisation filter, expandable with HR and HRP loupes, head-worn,
Catalogue page	139-140	143-144

*Measured at a working distance of 180 mm from the light emission to the object.

HEINE MicroLight2
Compact LED^{HQ} headlight
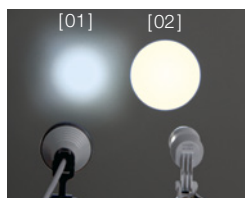

▶ **There's LED. And there's LED^{HQ}.** HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. **That's what we call LED in HEINE quality – or LED^{HQ}**

▶ **Compact and lightweight.** Ensures perfect comfort

▶ **Aluminium housing.** Exclusive aluminium housing protects the optics against dust and moisture to ensure an extraordinary long lifespan and optimal thermal management

▶ **Coaxial illumination.** Compact coaxial design ensures a completely shadow-free image and allows for excellent illumination of difficult to see areas

▶ **Homogeneity.** An absolutely bright light spot that is uniform from edge-to-edge for the perfect illumination in all examination situations

▶ **Replaceable connecting cord** with high-quality splashproof threaded connector with a length of 1.5 m. Connects the MicroLight2 with the mPack mini

▶ **Incl. coloured attachment clips for personalisation.** To fixate the cable on the S-FRAME and to identify your headlight

Technical specification

Illumination	typ. 55,000 lux*
Colour temperature	typ. 4,000 kelvin
LED operating life	typ. 50,000 hours
Weight	80 g together with S-FRAME, 190 g together with lightweight headband
Angle of declination	stepless and individually adjustable for every examination
Operating time	typ. 9 h with mPack mini (in continuous operation at full power typ. 4 hours)

*Measured at a working distance of 180 mm from the light emission to the object.

[01] Conventional system
[02] HEINE precision 4-lens system

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

HEINE MicroLight2
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-Kynetium reduces weight (80 g together with MicroLight2)
- ▶ **Tough polycarbonate protective lenses**

HEINE LIGHTWEIGHT HEADBAND

- ▶ **Lightweight** (190 g together with MicroLight2). Ideal for spectacle wearers
- ▶ **Fully-adjustable for width to fit any head**
- ▶ **Hygienic and comfortable leather cushions**

HEINE mPack mini
Compact and lightweight power source for
LoupeLight2 | MicroLight2

- ▶ **Freedom from cables** that tie the user to desk, wall or static power supplies
- ▶ **Operating time typ. 9 hours.** In continuous operation at full power typ. 4 hours
- ▶ **Charging time typ. 4 hours**
- ▶ **Charge status indicator.** Display of remaining battery power with three LEDs. The flashing of the last LED indicates that immediate charging is required. During charging the LEDs light up one after the other
- ▶ **Stepless light intensity control.** Optimum brightness setting between 100 % and 3 % reduces reflexes
- ▶ **USB cord** with E4-USB medical approved plug-in power supply
- ▶ **The integrated galvanic separation module** protects the battery and the user against the consequences of defective power supplies, thus preventing the possibility of the full mains voltage flowing directly to the housing. We recommend the use of a medical approved plug-in power supply
- ▶ **Simple cleaning.** Closed housing, no seams at the sides, few edges
- ▶ **Compact and lightweight.** With a weight of just 95 g and dimensions of 44 x 23 x 101 mm the power source can be easily stowed
- ▶ **Optimised mPack mini belt clip** for easy attachment of the power source to the belt or coat pocket. The mPack mini can also be charged in the belt clip [01]
- ▶ **Li-ion technology.** No „memory effect", without worrying about charge level or battery condition
- ▶ **Integrated rechargeable battery.** Can be exchanged at authorised specialist dealers

[01]

HEINE MicroLight2
Ordering information

MicroLight2

on S-FRAME with mPack mini, mPack mini belt clip, E4-USB plug-in transformer with USB cord, connecting cord, retaining cord, in case [01]	**J-008.31.276**
on Lightweight headband with mPack mini, mPack mini belt clip, E4-USB plug-in transformer with USB cord, connecting cord, in case [02]	**J-008.31.277**

[01]

detachable yellow filter [03]	**C-000.32.241**
connecting cord SC1 (1.5 m | Ø 2.4 mm) for MicroLight2	mPack mini [04]	**C-000.32.240**
connecting cord SC2 (1.5 m | Ø 3.2 mm) for MicroLight2	mPack mini [05]	**C-000.32.243**

Carrying cases and storage cases may deviate in shape and colour.
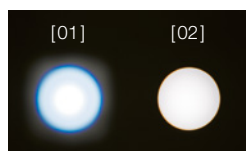
[02]

[03]   [04]

[05]

HEINE ML4 LED HeadLight
Ultra bright coaxial LED^{HQ} illumination

▶ **There's LED. And there's LED^{HQ}.** HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. **That's what we call LED in HEINE quality – or LED^{HQ}**

▶ **Adjustable illumination spot size:** 30 mm to 80 mm spot size range (at 420 mm working distance) to fit any examination situation

▶ **Bright and homogenous illumination.** Absolutely bright light spot that is uniform from edge-to-edge for the perfect illumination in all examination situations

▶ **Flexibility.** Flexible power source options: 100 % mobility with a choice of cable-free mPack UNPLUGGED head-worn battery or mPack belt-worn battery pack

▶ **Comfortable and secure fit.** The Professional L headband has multiple adjustment points and soft padding for comfort and stability – even during long examinations

▶ **Optional filters.** Polarisation filter P2 improves contrast and yellow filter reduces blue light

[01] Competitor product
[02] HEINE ML4 LED HeadLight

Technical specification

Illumination	typ. 90,000 lux*
Colour temperature	typ. 5,500 kelvin
LED operating life	typ. 50,000 hours
Spot adjustment	30 mm to 80 mm at 420 mm working distance
Angle of declination	stepless and individually adjustable for every examination
Rheostat	headband-mounted
Operating time	typ. 8.5 hours with mPack and typ. 3.5 hours with mPack UNPLUGGED of continuous ON time at full power

*Measured at a working distance of 180 mm from the light emission to the object.

HEINE ML4 LED HeadLight
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 typ. 8.5 hours of continuous ON time at full power
- ▶ **Fast charge.** Charges to full capacity in typ. 2 hours
- ▶ **Charge status indicator.** Always lets you know how much operating charge you have left
- ▶ **Brightness control.** Optimal adjustment of light intensity
- ▶ **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 – 240 V compatible transformer** incl. 4 plugs for world wide compatibility

HEINE mPACK UNPLUGGED
HEADBAND-MOUNTED RECHARGEABLE BATTERY

- ▶ **Wireless.** 100 % mobility for absolute freedom of movement
- ▶ **Rechargeable battery integrated on the headband**
- ▶ **Lightweight with balanced weight distribution.** High level of comfort
- ▶ **Charge status indicator** indicates remaining operating time
- ▶ **Intelligent.** Can be used as mains power supply even in "charge" mode
- ▶ **Fast charge.** Charges to full capacity in typ. 2 hours. Operating time typ. 3.5 hours of continuous ON time at full power
- ▶ **Top safety standards.** Integrated charge and performance checks during operation. Lithium polymer technology. UL compliant

HEINE ML4 LED HeadLight
Ordering information

[01]

[02]

[03]

ML4 LED HeadLight with Professional L headband

ML4 LED HeadLight (without power source) [01]	**J-008.31.410**
ML4 LED HeadLight with plug-in transformer [01] + [02]	**J-008.31.411**
ML4 LED HeadLight with mPack and plug-in transformer [01]+[03]	**J-008.31.413**
ML4 LED HeadLight with mPack UNPLUGGED and plug-in transformer UNPLUGGED [01] + [04]	**J-008.31.415**
ML4 LED HeadLight with wall mounted EN 50 UNPLUGGED charger and 2 x mPack UNPLUGGED [01] + [05]	**J-008.31.416**

ML4 LED 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**
polarisation filter P2 for ML4 LED and HR loupes [08] + [09]	**J-000.31.326**
spare polarisation filter P2 for HR loupes (2 pairs) [09]	**C-000.32.536**

Power supplies may deviate in size and shape.

[04]

[05]

[06]   [07]

[08]   [09]

HEINE ML4 LED HeadLight
with HR|HRP binocular loupes

The ML4 LED HeadLight is optionally supplied with HR|HRP binocular loupes incl. i-View loupe mount and with or without 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 for ML4 LED HeadLight:** Provides any angle of view and flips up the optics independently of the illumination beam

ML4 LED HeadLight kits with S-GUARD and power source
The following kits contain: ML4 LED HeadLight on Professional L headband, HR|HRP optics with i-View and S-GUARD, mPack and plug-in transformer

Kit 1:	with HR binocular loupe	2.5x|340mm	**J-008.31.440**
Kit 2:	with HR binocular loupe	2.5x|420mm	**J-008.31.441**
Kit 11:	with HR binocular loupe	2.5x|520mm	**J-008.31.450**
Kit 3:	with HRP binocular loupe	3.5x|420mm	**J-008.31.442**
Kit 4:	with HRP binocular loupe	4x|340mm	**J-008.31.443**
Kit 5:	with HRP binocular loupe	6x|340mm	**J-008.31.444**

ML4 LED HeadLight kits with power source without S-GUARD
The following kits contain: ML4 LED HeadLight on Professional L headband, HR|HRP optics with i-View, mPack and plug-in transformer

Kit 1c:	with HR binocular loupe	2.5x|340mm	**J-008.31.452**
Kit 2c:	with HR binocular loupe	2.5x|420mm	**J-008.31.453**
Kit 11c:	with HR binocular loupe	2.5x|520mm	**J-008.31.463**
Kit 3c:	with HRP binocular loupe	3.5x|420mm	**J-008.31.454**
Kit 4c:	with HRP binocular loupe	4x|340mm	**J-008.31.456**
Kit 5c:	with HRP binocular loupe	6x|340mm	**J-008.31.457**

HEINE ML4 LED HeadLight UNPLUGGED
with HR|HRP binocular loupes

ML4 LED HeadLight UNPLUGGED kits with S-GUARD and power source
The following kits contain: ML4 LED HeadLight on Professional L headband,
HR|HRP optics with i-View and S-GUARD, wall transformer EN 50 UNPLUGGED,
2 x mPack UNPLUGGED

Kit 6:	with HR binocular loupe	2.5 x	340 mm	**J-008.31.445**
Kit 7:	with HR binocular loupe	2.5 x	420 mm	**J-008.31.446**
Kit 12:	with HR binocular loupe	2.5 x	520 mm	**J-008.31.451**
Kit 8:	with HRP binocular loupe	3.5 x	420 mm	**J-008.31.447**
Kit 9:	with HRP binocular loupe	4 x	340 mm	**J-008.31.448**
Kit 10:	with HRP binocular loupe	6 x	340 mm	**J-008.31.449**

ML4 LED HeadLight UNPLUGGED kits with power source without S-GUARD
The following kits contain: ML4 LED HeadLight on Professional L headband,
HR|HRP optics with i-View, wall transformer EN 50 UNPLUGGED,
2 x mPack UNPLUGGED

Kit 6c:	with HR binocular loupe	2.5 x	340 mm	**J-008.31.458**
Kit 7c:	with HR binocular loupe	2.5 x	420 mm	**J-008.31.459**
Kit 12c:	with HR binocular loupe	2.5 x	520 mm	**J-008.31.464**
Kit 8c:	with HRP binocular loupe	3.5 x	420 mm	**J-008.31.460**
Kit 9c:	with HRP binocular loupe	4 x	340 mm	**J-008.31.461**
Kit 10c:	with HRP binocular loupe	6 x	340 mm	**J-008.31.462**

HR | HRP binocular loupes – retrofitting sets
For HEINE ML4 LED HeadLight

Pos. 1

Retrofitting set HR | HRP binocular loupes for ML4 LED HeadLight
The sets enable you to equip your existing ML4 LED HeadLight with a binocular loupe. The set contains HR | HRP optics with i-View splash protection

		with S-GUARD splash protection	without S-GUARD splash protection
with HR binocular loupe	2.5 x | 340 mm	**J-000.31.370**	J-000.31.287
with HR binocular loupe	2.5 x | 420 mm	**J-000.31.371**	J-000.31.288
with HR binocular loupe	2.5 x | 520 mm	**J-000.31.365**	J-000.31.292
with HRP binocular loupe	3.5 x | 420 mm	**J-000.31.372**	J-000.31.289
with HRP binocular loupe	4 x | 340 mm	**J-000.31.373**	J-000.31.290
with HRP binocular loupe	6 x | 340 mm	**J-000.31.374**	J-000.31.291

Pos. 2

5 sterilisable swivel levers for i-View loupe mount for ML4 LED HeadLight [01]	**C-000.32.399**

[01]

HEINE ML4 LED HeadLight
Power sources

mPack and plug-in transformer [01]	**X-007.99.672**
Plug-in transformer for ML4 LED HeadLight [02]	**X-095.16.330**
mPack with EN 50 table | wall unit (incl. 90° angled adaptor, instrument support for Professional L headband) [03]	**X-095.17.302**

Power supplies may deviate in size and shape.

[01]

[02]

[03]