

## ·HEINE Binocular Loupes and Illumination

Powerful LED illumination and highly-magnified crisp images.





## •HEINE Binocular Loupes and Illumination

Comfort, Performance, Flexibility.

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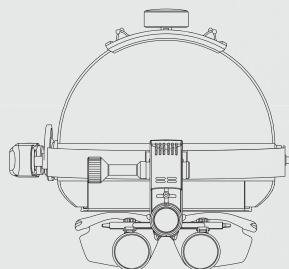
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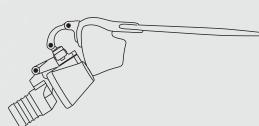
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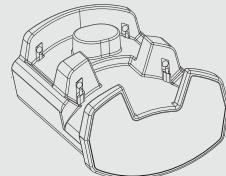
[02]



[03]



[04]

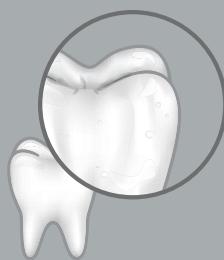


[05]



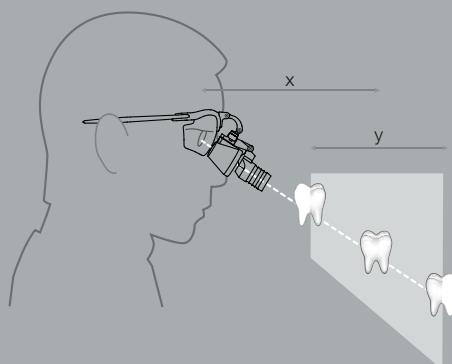
## : Everything you need to know about binocular loupes.

Ergonomic and optical factors.



### Magnification

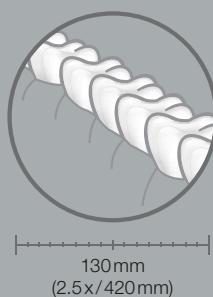
The most commonly used magnification is 2.5x. This applies to dentistry as well as other specialist medical areas. The 2.5 is equally suitable for novices and experienced users. With more experience, higher magnifications can be used, particularly for micro-surgery. The complete range of HEINE loupes covers magnifications from 2x to 6x.



### Working distance (x)/depth focus (y)

HEINE offers the ideal working distance for every application and user, from 250 mm to 520 mm. The optimum working distance is not based on the loupe, but on the size of the user and the type of treatment.

The depth of focus for loupes is very simple to determine: You measure the closest and furthest distance in which an object can be seen in focus. The advantage of HEINE loupes is that, due to an extremely high depth of focus of up to 290mm, you can choose the working distance which is best and most ergonomic for you – regardless of your size.



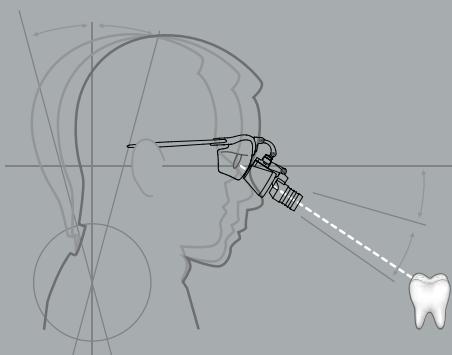
### Field of view

HEINE loupe systems have two considerable advantages: An extremely large and balanced field of view as well as ideal positioning of the oculars in front of the eye. Only flip-up systems like those from HEINE offer this large field of vision whilst simultaneously taking into account the ergonomic requirements of a loupe system.

High-quality optical magnification offers many advantages during treatment. Along with a considerable improvement in the sharpness of the image, you will also experience healthier, ergonomic body posture.

HEINE high-tech optics, fitted with achromatic lenses, give incomparably clear and brilliant images with no colour distortion. The high quality image in all HEINE systems is the result of the best optical components, manufactured by HEINE, allowing exact and individual adjustment of the optics. Our exclusive coating system ensures great results for a brilliant and bright image.

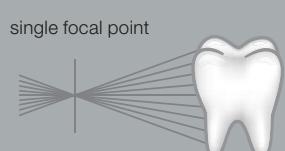
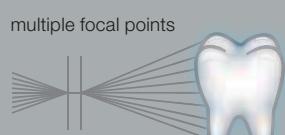
When choosing a magnification system, it is important to consider several factors. The two most important points to remember are optical performance and ergonomics.



#### Ergonomics

The declination angle is the angle between the line of sight in the normal eye position and the line of sight given by the user's lowered eyes. If the user has to rest his chin on his chest, the declination angle of the loupe used is too small. If the user has to look down too far or tilt his head back, the declination angle is too large. The ideal declination of the head is achieved when the neck and eye muscles are as relaxed as possible.

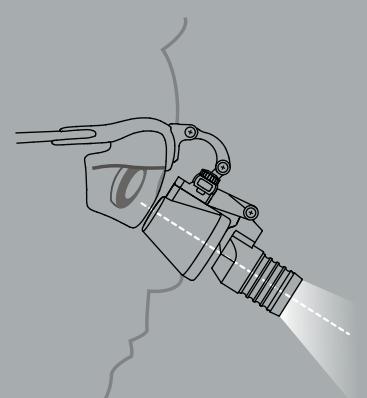
Comfort is no problem for HEINE loupe systems. The adjustable declination angle and our extraordinary optical quality avoid strain on the neck and eye muscles. Weight is an important factor here; loupes and frames, including the coaxial LED lighting, are extremely light and therefore comfortable to wear, even over longer periods of time. The secret is that the weight is distributed evenly by the modern S-Frame.



#### Optical quality

HEINE loupes offer the brightest image of all comparable binocular loupes of this type.

Our optics are enhanced by a special anti-reflection coating. This multiple coating reduces the light reflection to around 0.3 %. The result is as clear as it is satisfying. The alignment of the achromats or prisms is adjusted for optimum performance, resulting in extremely sharp images and a field of view which is free of distortion right to the edge – as well as an excellent depth of focus.



#### Coaxial lighting

With HEINE LED lighting, you will be working with 100 % coaxial, white and homogenous light. For dental applications, a yellow filter can be used, preventing premature hardening of composite materials.

Not all blessings come from above: Even an extremely bright and well positioned ceiling light may cast a shadow during some examinations. Only an additional coaxial light, i.e. fitted between the eyes, allows shadow-free lighting of, for example, a cavity.



## ▪ HEINE LED LoupeLight®

Compact LoupeLight for HR-C,  
HR and HRP Binocular Loupes.



How to choose the correct Loupe:

### ▪ 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 3.5x magnification and higher.

**HR-C:** High Quality optics in compact size (only 17 grams!).

### ▪ 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

Co-axial bright light is especially important when using magnification.



## HEINE Binocular Loupes

	HR	HR-C	HRP
			
<b>Magnification</b>			
2x	<input type="checkbox"/>		
2.5x	<input type="checkbox"/>	<input type="checkbox"/>	
3.5x			<input type="checkbox"/>
4x			<input type="checkbox"/>
6x			<input type="checkbox"/>
<b>Working distance</b>			
250mm (with close-up lenses)	<input type="checkbox"/>	--	--
340 mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
420 mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
450 mm	--	--	--
520 mm	<input type="checkbox"/>	<input type="checkbox"/>	--
<b>Mounting options</b>			
S-Frame 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lightweight Headband 	--	<input type="checkbox"/>	--
Professional Headband 	<input type="checkbox"/>	--	<input type="checkbox"/>
<b>Accessories</b>			
Close-up Lenses	<input type="checkbox"/> (for 340mm)	--	--
Protective Lenses	<input type="checkbox"/>	--	<input type="checkbox"/>
<b>LED LoupeLight (Pages 018/019)</b>	 	<input type="checkbox"/>	<input type="checkbox"/>
<b>Features</b>			
i-View Function*	<input type="checkbox"/>	--	<input type="checkbox"/>
Modular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water-resistant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achromatic Optics	<input type="checkbox"/>	--	<input type="checkbox"/>
Optional Prescription Correction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page	008-011	014	012-013

\*i-View Function: Provides any angle of view and flips up the optics independently of the illumination beam of the LED LoupeLight.



## HEINE HR® 2x High Resolution Binocular Loupes with i-View loupe mount



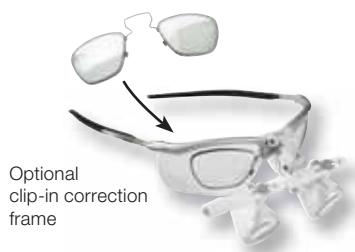
- Multi-coated Achromatic Optics
- Exceptional Focal Range
- Crisp, High-Resolution Image
- Unique i-View Loupe Mount

### HR 2x 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.
- **Largest field of view and greatest depth of field**.
- **i-View loupe mount** provides any angle of view and flips up the optics independently of the optional LED LoupeLight.

### HR 2x Specifications

Working distance in mm	340	420	520
Field of view in mm	130	190	250
Depth of field in mm	130	200	290



### 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 (24 g).
- **Tough polycarbonate protective lenses**.
- **Optional clip-in correction frame** for prescription lenses.



#### ▪ 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**.
- **Ergonomic nose pad** for comfort during long procedures.
- **Fully-adjustable for height and width to fit any head**.
- **Hygienic and comfortable leather cushions**.

## HEINE HR® 2x High Resolution Binocular Loupes with i-View loupe mount



Set A

Set B  
with S-GuardSet C  
without  
S-Guard

### HR 2x Set with i-View loupe mount

Working distance in mm	340	420	520
<b>Set A:</b> HR 2x optics with i-View on S-Frame Protective lenses 2 sterilisable swivel levers Retaining cord Cleaning fluid Cleaning cloth Carrying case	C-000.32.375	C-000.32.376	C-000.32.377
<b>Set B:</b> HR 2x optics with i-View on Professional L Headband S-Guard splash protection Protective lenses 2 sterilisable swivel levers Cleaning fluid Cleaning cloth	C-000.32.378	C-000.32.379	C-000.32.380
<b>Set C (without S-Guard):</b> HR 2x optics with i-View on Professional L Headband Protective lenses 2 sterilisable swivel levers	C-000.32.878	C-000.32.879	C-000.32.880



## HEINE HR® 2.5x High Resolution Binocular Loupes with i-View loupe mount



- Multi-coated Achromatic Optics
- Exceptional Focal Range
- Crisp, High-Resolution Image
- Unique 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 LED LoupeLight.

### HR 2.5x Specifications

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



### 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 (24g).
- **Tough polycarbonate protective lenses**.
- **Optional clip-in correction frame** for prescription lenses.



#### ▪ 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.



NEW!

#### ▪ HEINE Professional L® Headband without S-Guard

- **Ideal for spectacle-wearers in combination with their own spectacles**.
- **Ergonomic nose pad** for comfort during long procedures.
- **Fully-adjustable for height and width to fit any head**.
- **Hygienic and comfortable leather cushions**.

## HEINE HR® 2.5x High Resolution Binocular Loupes with i-View loupe mount



Set A

Set B  
with S-GuardSet C  
without  
S-Guard

### HR 2.5x Sets with i-View loupe mount

Working distance in mm	340	420	520
<b>Set A:</b> HR 2.5x optics with i-View on S-Frame Protective lenses 2 sterilisable swivel levers Retaining cord Cleaning fluid Cleaning cloth Carrying case	C-000.32.355	C-000.32.356	C-000.32.567
<b>Set B:</b> HR 2.5x optics with i-View on Professional L Headband S-Guard splash protection Protective lenses 2 sterilisable swivel levers Cleaning fluid Cleaning cloth	C-000.32.365	C-000.32.366	C-000.32.367
<b>Set C (without S-Guard):</b> HR 2.5x optics with i-View on Professional L Headband 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



- Multi-coated Achromatic Optics
- Prismatic for highest magnification
- Crisp, High-Resolution Image
- Unique i-View Loupe Mount

### HRP Optics with i-View

- **Achromatic optics** for crisp, bright images from edge to edge.
- **Lightweight** (85g).
- **Water-resistant**.
- **Independent adjustment** of left and right optics for perfect PD adjustment.
- **Highest magnification:** Choice of 3.5x, 4x and 6x.
- **i-View loupe mount** provides any angle of view and flips up the optics independently of the optional LED LoupeLight.

### HRP Specifications

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

### 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 (24 g).
- **Tough polycarbonate protective lenses**.
- **Optional clip-in correction frame** for prescription lenses.



#### ▪ 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**.
- **Ergonomic nose pad** for comfort during long procedures.
- **Fully-adjustable for height and width to fit any head**.
- **Hygienic and comfortable leather cushions**.



## HEINE HRP® High Resolution Prismatic Binocular Loupes with i-View loupe mount



Set A

Set B  
with S-GuardSet C  
without  
S-Guard

### HRP Sets with i-View

Working distance in mm	HRP 3.5x/420	HRP 4x/340	HRP 6x/340
<b>Set A:</b> HRP optics with i-View on S-Frame Protective lenses 2 sterilisable swivel levers Retaining cord Cleaning fluid Cleaning cloth Carrying case	C-000.32.430	C-000.32.431	C-000.32.432
<b>Set B:</b> HRP optics with i-View on Professional L Headband S-Guard splash protection Protective lenses 2 sterilisable swivel levers Cleaning fluid Cleaning cloth	C-000.32.440	C-000.32.441	C-000.32.442
<b>Set C (without S-Guard):</b> 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 HR-C® 2.5x High Resolution Binocular Loupes with rigid loupe mount



- Multi-coated Optics
- Compact and lightweight



### HR-C 2.5x Optics

- **Multi-Coated optics** for crisp, bright images.
- **Super-compact lightweight** (17g).
- **Water-resistant**.
- **Independent adjustment** of left and right optics for perfect PD adjustment.

### HR-C 2.5x Specifications

Working distance in mm	340	420
Field of view in mm	60	70
Depth of field in mm	110	140

### Mounting Option:

#### ▪ 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 (24g).
- **Tough polycarbonate protective lenses**.
- **Optional clip-in correction frame** for prescription lenses.



### HR-C 2.5x Set with rigid loupe mount

Working distance in mm	340	420
HR-C 2.5x optics	C-000.32.290	C-000.32.291
S-Frame		
2 sterilisable swivel levers		
Retaining cord		
Cleaning fluid		
Cleaning cloth		
Carrying case		



## 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 2x	C-000.32.555	C-000.32.556	C-000.32.557
HR 2.5x	C-000.32.595	C-000.32.596	C-000.32.597
HRP 3.5x			C-000.32.720
HRP 4x	C-000.32.721		
HRP 6x	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 2x	C-000.32.558	C-000.32.559	C-000.32.560
HR 2.5x	C-000.32.585	C-000.32.586	C-000.32.587
HRP 3.5x			C-000.32.710
HRP 4x	C-000.32.711		
HRP 6x	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 2x	C-000.32.730	C-000.32.731	C-000.32.732
HR 2.5x	C-000.32.733	C-000.32.734	C-000.32.735
HRP 3.5x			C-000.32.736
HRP 4x	C-000.32.737		
HRP 6x	C-000.32.738		



## Optics with rigid loupe mount for S-FRAME and LIGHTWEIGHT HEADBAND

Working distance in mm	340 mm	420 mm	520 mm
HR-C 2.5x	C-000.32.265	C-000.32.266	

## HEINE Binocular Loupes Accessories

## Ordering Information



## Mounting options

## S-Frame\*

For **HR-**, **HRP-**, **HR-C** Binocular Loupes incl. retaining cord and cleaning fluid

**C-000.32.302**

\* with protective lenses, large (lg).

## Professional L Headband

For **HR** and **HRP** optics

**C-000.32.549**

## Lightweight Headband

For **HR-C** optics with rigid loupe mount

**C-000.32.516**

## Accessories for optics



## HR Close-up Lenses in case

HR 2x/340mm and HR 2.5x/340mm to 250mm. The close-up lenses reduce the working distance of the binocular loupes.

**C-000.32.521**

Close-up Lenses for **HR 2x/340mm** optics

**C-000.32.523**



[01]



[02]

## Protective Lenses

To protect the optics of the **HR** and the **HRP** loupes

**C-000.32.537**

Protective Lenses for **HR** loupes (5 pairs) [01]

**C-000.32.027**



[03]



[04]

## Sterilisable Swivel Levers

For **HR** and **HRP** loupes with i-View [01]

**C-000.32.551**

For **HR-C** loupes with rigid loupe mount [02]

**C-000.32.524**



## Carrying Case

For Binocular Loupe optics or for all sets with S-Frame

**C-000.32.552**



## Miscellaneous accessories

## Universal Clip

For **HR-C** optics with rigid loupe mount to fit any spectacles

**C-000.32.518**



## Dental Adapter

For **HR-C** optics with rigid loupe mount. For a viewing direction from 20° to 35°. It prevents neck and back strain due to poor posture.

**C-000.32.528**



## HEINE Binocular Loupes Accessories

## Ordering Information



## Accessories for S-Frame

S-Frame retaining cord	C-000.32.305
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## S-Frame replacement part set

with side rubbers, nose pad (1 piece) and screw	C-000.32.308
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## Clip-in correction frame

for prescription lenses	C-000.32.309
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## Protective lenses, large (lg), 1 pair (Standard)

C-000.32.306

## Protective lenses, small (sm), 1 pair

C-000.32.307

## Cleaning fluid for lenses, pack of 2

C-000.32.542

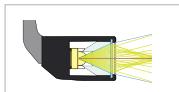


## HEINE LED LoupeLight®

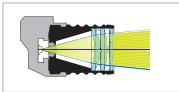
### Compact LED LoupeLight, ideal for ENT and dental use

- **Advanced LED Technology.** White, homogenous light, ideal for all surgical and dental applications.
- **Coaxial Illumination.** Shadow-free illumination of cavities, ideal for ENT and dental applications. Perfect co-axial viewing with all compatible HEINE Loupes.
- **Compact, lightweight (24 g).** Ensures perfect comfort.
- **Aluminium housing.** Compact and long lasting with advanced heat management. Reduces heat build-up.
- **Waterproof design.** Easy to clean.
- **Individual adjustment of the angle of view.** The right angle for every situation.
- **Optional yellow filter** reduces blue light. Avoids premature hardening of composites.

### Technical Specification



Conventional System [01]



HEINE Precision  
Lens System [02]

Illumination	40,000 Lux at a working distance of 250 mm
Colour Temperature	6,250 Kelvin
LED Operating Life	1W Super-High Output LED rated at <b>50,000 hours operating life</b>
Spot Size	The illuminated field is designed to complement the HR/ HRP loupes. <b>81 mm dia. at 420 mm, 95 mm dia. at 500 mm working distance</b>
Angle of Declination	Individually-adjustable for every examination
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.

## 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 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.
- **100-240 V Compatible Transformer** incl. 4 plugs for world wide compatibility.





## HEINE LED LoupeLight® and Accessories

### Ordering Information

#### LED LoupeLight

LED LoupeLight for HR/HRP Loupes with i-View loupe mount [02]	C-008.32.236
LED LoupeLight for HR-C Loupes with rigid loupe mount [01]	C-008.32.238

#### Detachable Yellow Filter [03]

C-000.32.241

#### LED LoupeLight with Power Source

	For i-View loupe mount (HR / HRP)	For rigid loupe mount (HR-C)
LED LoupeLight with mPack LL and EN 50 [01]	C-008.32.381	C-008.32.382
LED LoupeLight with mPack LL and plug-in transformer [02]	C-008.32.384	C-008.32.385

#### LED LoupeLight Sets with HR Binocular Loupes



Magnification and 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 LED LoupeLight Detachable Yellow Filter mPack LL Charger EN 50 Protective lenses 2 sterilisable levers Retaining cord Cleaning fluid Cleaning cloth Carrying case	C-008.32.355	C-008.32.356	C-008.32.357



#### LED LoupeLight Sets with HRP Binocular Loupes

Magnification and working distance in mm	HRP 3.5x/420	HRP 4x/340	HRP 6x/340
HRP optics with i-View on S-Frame LED LoupeLight Detachable Yellow Filter mPack LL Charger EN 50 Protective lenses 2 sterilisable levers Retaining cord Cleaning fluid Cleaning cloth Carrying case	C-008.32.430	C-008.32.431	C-008.32.432

# Headlights

 LED

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

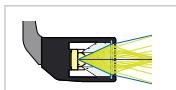


Technical Data	
Type of Light	LED
Light Intensity (at 250 mm working distance)	<b>40,000 Lux</b>
Colour Temperature (Kelvin)	<b>6,250 K</b>
Spot Size (at 420 mm working distance)	<b>81 mm</b>
Power Sources / operating time	mPack LL <b>17 hours</b>
Weight	<b>50 g</b> with S-Frame <b>165 g</b> with Lightweight Headband
Angle of Declination	Fully-adjustable
Light Intensity Control	<b>0 – 100 %</b>

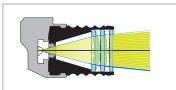
Features	
Adjustable Spot Size	--
Waterproof	<input type="checkbox"/>
Optional Yellow Filter	<input type="checkbox"/>
Expandable with HR and HRP Loupes	--
Optional Video Version	--
Head-worn	<input type="checkbox"/>
Spectacle-worn	<input type="checkbox"/>
Page	022/023
	024–028



- **Lightweight**
- **Individual height adjustment**
- **40.000 Lux/250 mm working distance**



Conventional System [01]



HEINE Precision Lens System [02]



## HEINE LED MicroLight®

### Ultra-light, Universal Headlight

- **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 420 mm, approx. 95 mm at 500 mm working distance.

#### Technical Specification

Illumination	40.000 Lux at a working distance of 250 mm
Colour Temperature	6,250 Kelvin
LED Operating Life	1W Super-High Output LED rated at <b>50,000 hours operating life</b>
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** (165 g 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.



## 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



[03]



3S LED HeadLight

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

## HEINE 3S LED HeadLight®

### Ultra-bright 3SLED HeadLight for powerful, coaxial illumination

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

[01]



[02]



[03]



[04]



[05]



[06]



[07]

**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 EN 50 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, 2m [07]	X-000.99.668



## HEINE 3SLED 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 <b>HR</b> Binocular Loupe 2.5x / 340mm	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 <b>HRP</b> Binocular Loupe 3.5x / 420mm	J-008.31.347
Kit 4:	with HRP Binocular Loupe 4x / 340mm	J-008.31.348
Kit 5:	with HRP Binocular Loupe 6x / 340mm	J-008.31.349

**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 <b>HR</b> Binocular Loupe 2.5x / 340mm	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 / 520mm	J-008.31.353
Kit 3c:	with <b>HRP</b> Binocular Loupe 3.5x / 420mm	J-008.31.357
Kit 4c:	with HRP Binocular Loupe 4x / 340mm	J-008.31.358
Kit 5c:	with HRP Binocular Loupe 6x / 340mm	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 EN 50 UNPLUGGED [03], 2x mPack UNPLUGGED, Cleaning Fluid [02]

Kit 6:	with <b>HR</b> Binocular Loupe 2.5x / 340mm	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 / 520mm	J-008.31.376
Kit 8:	with <b>HRP</b> Binocular Loupe 3.5x / 420mm	J-008.31.392
Kit 9:	with HRP Binocular Loupe 4x / 340mm	J-008.31.393
Kit 10:	with HRP Binocular Loupe 6x / 340mm	J-008.31.394

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

The following Kits contain: 3SLED HeadLight, HR/HRP optics with i-View, Wall transformer EN 50 UNPLUGGED [03], 2x mPack UNPLUGGED

Kit 6c:	with <b>HR</b> Binocular Loupe 2.5x / 340mm	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 / 520mm	J-008.31.375
Kit 8c:	with <b>HRP</b> Binocular Loupe 3.5x / 420mm	J-008.31.372
Kit 9c:	with HRP Binocular Loupe 4x / 340mm	J-008.31.373
Kit 10c:	with HRP Binocular Loupe 6x / 340mm	J-008.31.374

## Retrofitting Sets for HEINE 3S LED HeadLight® with HR/HRP



## Retrofitting Set incl. HR/HRP Binocular Loupes for 3S LED HeadLight

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

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

5 Steri-levers for i-View Loupe Mount for 3S LED [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 EN 50 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 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 an 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).
- **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]



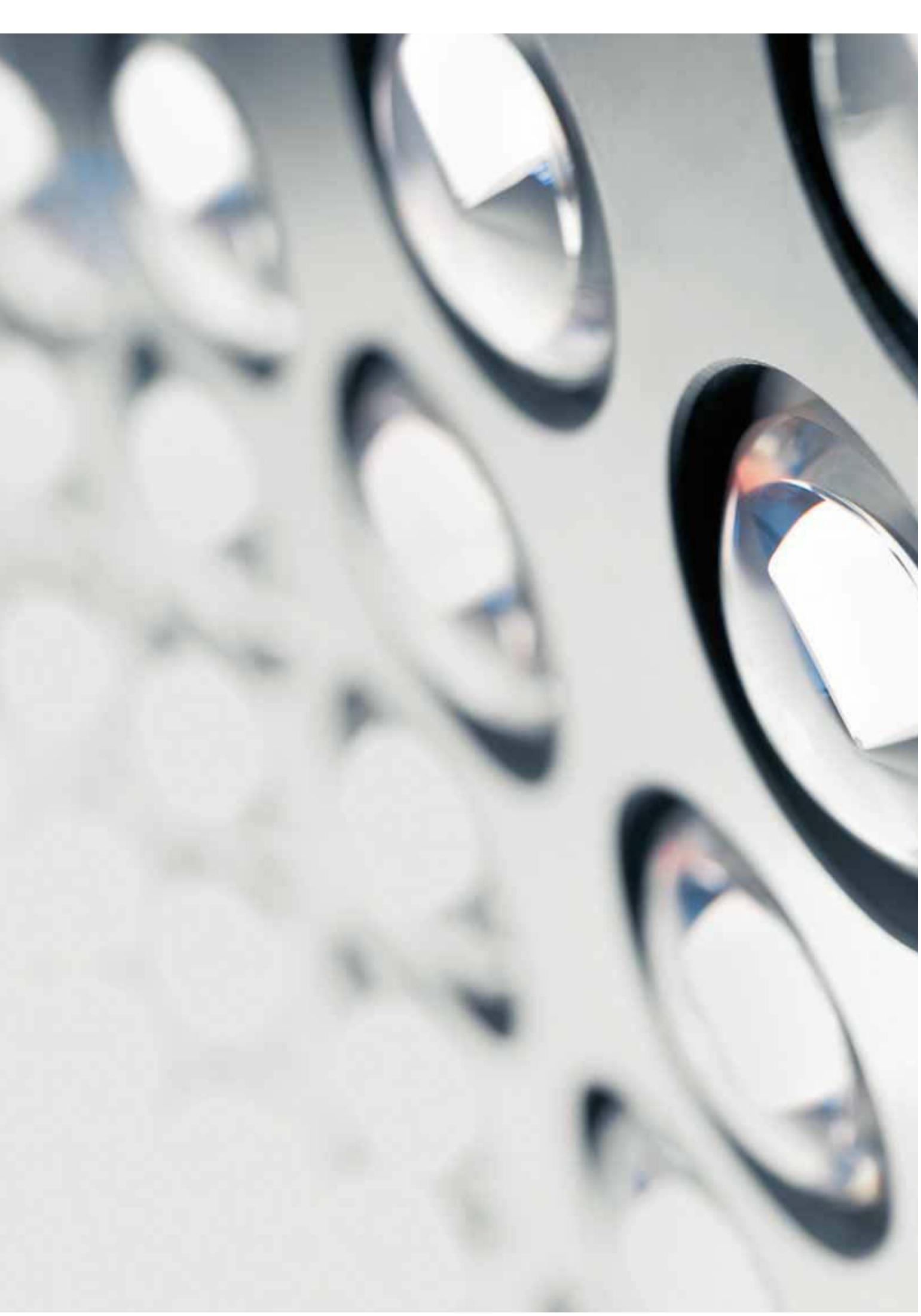
[02]

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 2 m (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]	<b>J-000.31.320</b>
A-CAM camera with processor [02] (available systems: PAL or NTSC, please specify when ordering).	<b>J-000.31.201</b>





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■ HEINE REPRESENTATIVES

**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.

[www.heine.com](http://www.heine.com)

**GERMANY**

HEINE Optotechnik GmbH & Co. KG  
82211 Herrsching  
Kientalstr. 7  
Tel. +49 (0) 81 52-38 0  
Fax +49 (0) 81 52-3 82 02  
E-Mail: info@heine.com

**NORTH AMERICA**

HEINE USA LTD.  
10 Innovation Way  
Dover, NH 03820  
Tel. (603)7 42-71 03  
Fax (603)7 42-72 17  
Toll Free (800) 367-4872  
E-Mail: service@heine-na.com

**AUSTRALIA**

HEINE AUSTRALIA PTY. LTD.  
Unit 9, 98 Old Pittwater Road  
P.O. Box 717 Brookvale 2100  
New South Wales  
Tel. +61 (0) 2-99 38 95 00  
Fax +61 (0) 2-99 39 23 05  
E-Mail: info@heine.com.au

**SWITZERLAND**

HEINE (Schweiz) AG  
Tobeläckerstraße 9  
CH-8212 Neuhausen am Rheinfall  
Tel. +41 (0) 52-6 72 22 66  
Fax +41 (0) 52-6 72 63 77  
E-Mail: heine-schweiz@schaffhausen.ch

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