# Helping the human eye.

# **HEINE** direct ophthalmoscopes

### **Overview**

It goes without saying that all of our ophthalmoscopes 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:

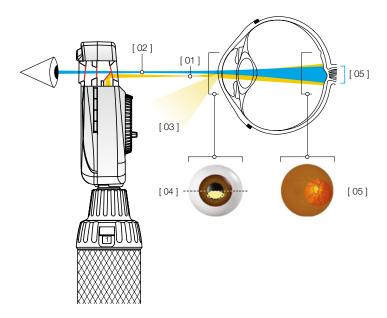




	BETA 200S	BETA 200	K180 Opt. 1	K180 Opt. 2	mini 3000
Optical system	as	spherical		conver	ntional
Illumination	XHL or LEDHQ	XHL or LEDHQ		XHL	XHL or LEDHQ
Apertures					00.00
Corrective lenses	- 36 to +38 D, 74 single diopter steps, 28 lenses	- 35 to +40 D,	. 27 diopter step	os, 27 lenses	- 20 to +20 D, 18 diopter steps, 18 lenses
Dust protection	d	ustproof	tproof dust protec		ptected
Frame system made of	al	uminium	minium plastic		tic
Instrument size		professiona	al		compact
Handle options   power sources	r	battery handle (XHL only), USB rechargeable handle, rechargeable handle with table charger, EN 200   EN 200-1		battery handle, rechargeable handle with table charger	
Catalogue page	42	44	46		48



# The "Aspherical Optical System" (AOS) from HEINE



- "Aspherical Optical System" (AOS) exclusively from HEINE eliminates corneal and iris reflexes to provide large, crisp and glare-free fundus images.
- ► Flat, elliptical illumination beam produced by HEINE's aspherical optical system [01]
- ► Observation path [02]
- ► Redirected iris and corneal reflexes [03]
- ➤ The elliptical light beam enters through the lower half of the cornea. The illumination beam has been separated from the observation beam (Gullstrand-Principle). All reflexes are diverted away from the observation beam due to the curvature of the reflective cornea. Due to the flat, compressed form of the light beam, a maximum amount of light enters through the pupil [04]
- ▶ Once past the anterior chamber, the light beam opens up dramatically to illuminate a large area of the retina [05]



HEINE AOS film

# HEINE BETA® 200S LED ophthalmoscope with outstanding durability, perfect for small pupils



Accurate diagnosis at first glance. Direct ophthalmoscope with special optical system that provides a particularly clear and bright image of the fundus. Sturdy and handy – ideal for mobile use. 7 different apertures – always the right setting for different examination situations. Particularly bright and dimmable due to LED<sup>HQ</sup> with virtually unlimited working life – no need to ever exchange the LED.

#### **RELIABLE DIAGNOSIS**

- ▶ Clear, bright and non-reflective image due to AOS (Aspherical Optical System)
- ► No light reflections, since the illumination beam and the observation path are separate
- ▶ The instrument head fits precisely to the eye socket, blocking out ambient light
- ► Very good refractive compensation due to 74 single step design on the non-continuous lens wheel (- 36 to + 38 D)
- ▶ This prevents extreme jumps from one dioptre to another
- Can be used for both dilated and non-dilated or particularly small pupils due to the pinhole aperture
- 7 different apertures can also be used with red-free filter

#### **OPTIMUM ILLUMINATION**

- ▶ Patented and exclusive continuous dimmability between 3 and 100 %
- ▶ No stray light thanks to the recessed, multi-coated viewing window
- ► Helpful when examining cloudy lenses, as LED<sup>HQ</sup> provides particularly bright illumination

#### **EXCEPTIONAL DURABILITY**

- ► Maintenance-free use due to dustproof design
- Impact-resistant due to a cast aluminium frame that the optical components are embedded in
- ▶ No need to ever exchange the LED thanks to LEDHQ
- ► 5-year guarantee

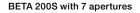
#### **EASY TO USE**

- Instrument can be operated with one hand
- ► Flexibility during the examination due to the ergonomic design

#### FLEXIBLE POWER SOURCE OPTIONS

- ▶ Rechargeable battery: with USB or table charger
- ► Full functionality of the BETA 200S LED is guaranteed with the current BETA rechargeable handles and the EN 200 | EN 200-1 wall transformers
- ► Also available with XHL xenon halogen illumination

  Bright illumination and authentic colour rendering; for other technical specifications see BETA 200S LED ophthalmoscope





Cobalt blue filter, fixation star with polar coordinates, large spot, small spot, pinhole, slit, hemispot



With red-free filter



### HEINE BETA® 200S ophthalmoscope

### Diagnostic sets | kits

#### Set includes: BETA 200S ophthalmoscope,

1 spare bulb for XHL version, hard case



[01]

	2.5V XHL	3.5V XHL	LED
BETA battery handle [01]	C-261.10.118	-	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	-	C-261.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-261.23.420	C-261.24.420



#### BETA 200S ophthalmoscope with

	LED
BETA4 USB rechargeable handle with USB cord and plug-in power supply [02]	C-010.28.388

# Set includes: BETA 200S ophthalmoscope and BETA 200 LED streak retinoscope, hard case, spare bulb for BETA 200S XHL ophthalmoscope



[03]

	2.5 V XHL   LED*	3.5V LED
BETA battery handle [03]	C-262.10.118	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-262.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-262.24.420

<sup>\*</sup>BETA 200S ophthalmoscope with XHL illumination and BETA 200 LED streak retinoscope with LED illumination

- ► For further information on the HEINE BETA 200 retinoscope, please see page 51.
- ► You can find information on our combined diagnostic sets and kits on pages 74 to 78.
- ► For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE BETA® 200 LED ophthalmoscope with outstanding durability



Accurate diagnosis at first glance. Direct ophthalmoscope with special optical system that provides a particularly clear and bright image of the fundus. Sturdy and handy – ideal for mobile use. 6 different apertures – always the right setting for different examination situations. Particularly bright and dimmable due to LEDHQ with virtually unlimited working life – no need to ever exchange the LED.

#### **RELIABLE DIAGNOSIS**

- ▶ Clear, bright and non-reflective image due to AOS (Aspherical Optical System)
- ► No light reflections, since the illumination beam and the observation path are separate
- ▶ The instrument head fits precisely to the eye socket, blocking out ambient light
- Good refractive compensation due to 27 single step design on the non-continuous lens wheel (- 35 to + 40 D)
- 6 different apertures can also be used with red-free filter

#### **OPTIMUM ILLUMINATION**

- ▶ Patented and exclusive continuous dimmability between 3 and 100 %
- ▶ No stray light thanks to the recessed, multi-coated viewing window
- ► Particularly bright due to LEDHQ

#### **EXCEPTIONAL DURABILITY**

- ► Maintenance-free use due to dustproof design
- ► Impact-resistant due to a cast aluminium frame that the optical components are embedded in
- ▶ No need to ever exchange the LED thanks to LEDHQ
- ► 5-year guarantee

#### BETA 200 with 6 apertures



Slit, fixation star with polar coordinates, cobalt blue filter, large spot, small spot, hemispot



With red-free filter

#### **EASY TO USE**

- Instrument can be easily operated with one hand
- Flexibility during the examination due to the ergonomic design

#### **FLEXIBLE POWER SOURCE OPTIONS**

- ▶ Rechargeable battery: with USB or table charger
- ► Full functionality of the BETA 200 LED is guaranteed with the current BETA rechargeable handles and the EN 200 | EN 200-1 wall transformers

#### ▶ Also available with XHL xenon halogen illumination

Bright illumination and authentic colour rendering; for other technical specifications see BETA 200 LED ophthalmoscope



### HEINE BETA® 200 ophthalmoscope Diagnostic sets|kits

#### Set includes: BETA 200 ophthalmoscope,

1 spare bulb for XHL version, hard case



[01]

•			
	2.5V XHL	3.5V XHL	LED
BETA battery handle [01]	C-144.10.118*	_	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-144.27.388	C-144.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-144.23.420	C-144.24.420

<sup>\*</sup>Also available with large battery handle X-001.99.120 (doesn't fit into hard cases). Please specify with your order



#### [02]

#### Kit includes: BETA 200 ophthalmoscope with

	2.5V XHL	LED
BETA battery handle [02]	C-011.10.118	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-011.28.388

# Set includes: BETA 200 ophthalmoscope and BETA 200 LED streak retinoscope, hard case, spare bulb for BETA 200 XHL ophthalmoscope



[03]

	2.5 V XHL   LED**	3.5V LED
BETA battery handle [04]	C-145.10.118	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-145.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-145.24.420

 $<sup>^{\</sup>star\star}$  BETA 200 ophthalmoscope with XHL illumination and BETA 200 LED streak retinoscope with LED illumination

- ► For further information on the HEINE BETA 200 LED retinoscope, please see page 51.
- You can find information on our combined diagnostic sets and kits on pages 74 to 78.
- ► For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE K180 ophthalmoscope Standard instrument for a smaller budget



Sturdy ophthalmoscope with XHL (xenon halogen illumination) and low-reflection optics for reliable diagnosis. Bright, white light, for a clear image of the fundus. High functionality and good value for money.

#### **RELIABLE DIAGNOSIS**

- ▶ Low-reflection view due to spherical precision optics
- ► Ambient light is blocked out thanks to the instrument head's precise fit to the eye socket
- ► Good refractive compensation due to 27 single step design on the non-continuous lens wheel (- 35 to + 40 D)
- ▶ 5 different apertures in 2 variants

#### **EXCELLENT ILLUMINATION**

- Can be used for both dilated and non-dilated pupils
- ► Xenon halogen illumination XHL

#### **HIGH DURABILITY**

- ► Dustproof, sturdy polycarbonate housing
- ▶ 5-year guarantee

#### **FLEXIBLE POWER SOURCE OPTIONS**

- ► Rechargeable battery: with USB or table charger
- ► EN 200 | EN 200-1 wall transformer
- ► Replaceable batteries



Aperture wheel 1 slit, red-free filter, fixation star with polar coordinates, large spot, small spot



Aperture wheel 2 slit, red-free filter, cobalt blue filter, large spot, small spot



### HEINE K180 ophthalmoscope Diagnostic sets|kits

Set includes: K180 ophthalmoscope with aperture wheel 1, soft pouch



	2.5V XHL	3.5V XHL
BETA battery handle [01]	C-182.10.118	-
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-182.27.388

Set includes: K180 ophthalmoscope with aperture wheel 2, soft pouch



	2.5V XHL	3.5V XHL
BETA battery handle [02]	C-183.10.118	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-183.27.388

<sup>►</sup> You can find information on our combined diagnostic sets and kits on pages 74 to 78.

<sup>►</sup> For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE mini 3000<sup>®</sup> LED ophthalmoscope Maximum quality with minimum dimensions



Modern pocket ophthalmoscope with LEDHQ. Concentrated, bright light for optimum illumination, a brilliant image and authentic colour rendering. Fixation star aperture with grey filter to reduce light intensity. Excellent optics and outstanding colour rendering with the smallest dimensions – perfect for when you're out and about and on your rounds. Can be combined with the mini 3000 handle system. Available in black or blue.

#### **RELIABLE DIAGNOSIS**

- ► Simple examination process possible without pupil dilation
- ▶ Clear, high-resolution image with minimal reflections
- ▶ 18 lenses ranging from 20 to + 20 D prevent higher refractive errors
- Fixation star including grey filter for patients who are sensitive to light
- ▶ 5 different apertures

#### **INTUITIVE OPERABILITY**

- ▶ Switches off automatically as soon as it is clipped to the pocket
- ► Practical one-finger operation
- ▶ Handle and head are in 2 parts for easy servicing and expandability

#### **FLEXIBLE POWER SOURCE OPTIONS**

- ▶ Rechargeable battery with mini NT table charger
- ▶ Replaceable batteries
- ▶ Also available with XHL xenon halogen illumination.

Bright illumination and authentic colour rendering; for other technical specifications see mini 3000 LED ophthalmoscope





# HEINE mini 3000® LED ophthalmoscope Diagnostic sets|kits



Set includes: mini 3000 ophthalmoscope, hard case

	2.5V XHL	2.5V LED
mini 3000 battery handle (with batteries) [01]	D-852.10.021	D-885.21.021



Kit includes: mini 3000 ophthalmoscope with

	2.5V XHL	2.5V LED
mini 3000 battery handle (with batteries) [02]	D-001.71.120	D-008.71.120
mini 3000 rechargeable handle (please order mini NT table charger separately)	_	D-008.71.200



- ► You can find information on our combined diagnostic sets and kits on pages 74 to 78.
- ► Available in black or blue. Please specify the colour you prefer when ordering. If not otherwise specified, we will supply black instruments.
- ► To upgrade to a rechargeable instrument with mini NT table charger, please see <u>page 161.</u>

# HEINE ophthalmoscopes Further articles | accessories





BETA 200S ophthalmoscope head	2.5V XHL	3.5V XHL	LED
without handle and accessories	C-001.30.120	C-002.30.120	C-008.30.120





BETA 200 ophthalmoscope head	2.5 V XHL	3.5V XHL	LED
without handle and accessories	C-001.30.100	C-002.30.100	C-008.30.100





K180 ophthalmoscope head	2.5 V XHL	3.5V XHL
with aperture wheel 1, without handle accessories	C-001.30.206	C-002.30.206
with aperture wheel 2, without handle accessories	C-001.30.207	C-002.30.207





mini 3000 ophthalmoscope head	2.5V XHL	2.5V LED
without handle and accessories*	D-001.71.105	D-008.71.105

<sup>\*</sup>Available in black and blue. Please specify the colour you prefer when ordering. If not otherwise specified, we will supply black instruments.



XHL xenon halogen spare bulb	2.5V XHL 3.5V XHL
for BETA 200S, BETA 200 and for BETA 200 M2	X-001.88.069 X-002.88.070
for K180	X-001.88.084 X-002.88.086
for mini 3000	X-001.88.106 –



<sup>►</sup> For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE BETA® 200 LED retinoscope with HEINE ParaStop® Quick and easy observation of the fundus reflex



Hand-held retinoscope for objective refraction with totally even LED<sup>HQ</sup> illumination for a precise streak. Enables quick and easy recognition of the fundus reflex.

#### **RELIABLE DIAGNOSIS**

- ▶ Reliable measurement of the eye's refraction
- Precise adjustment of the parallel beam path due to ParaStop
- ► Very bright and clearly visible fundus reflex due to a very bright, precise streak with a line width of typically 1.1 mm (ISO 12865 standard < 1.5 mm) and a line length of 35 mm
- ▶ Particularly bright and even light due to LEDHQ
- ▶ Patented and exclusive continuous dimmability between 3 and 100 %
- ▶ Polarisation filter eliminates stray light and internal reflections
- ▶ Minimised light leaks due to good eye socket coverage

#### **ENHANCED DURABILITY**

- ► Exceptional durability due to metal controls
- ► Maintenance-free and dustproof
- ► LED<sup>HQ</sup> with virtually unlimited working life
- ▶ 5-year guarantee

#### **INTUITIVE OPERABILITY**

- ► Practical one-finger operation
- ► Convenient thumb operation with a single control for vergence and line rotation
- ► Holder for fixation cards for dynamic retinoscopy (optional)

#### **FLEXIBLE POWER SOURCE OPTIONS**

- ▶ Rechargeable battery: with USB or table charger
- ► Full functionality of the BETA 200 LED is guaranteed with the current BETA rechargeable handles and the EN 200 | EN 200-1 wall transformers

# HEINE BETA® 200 LED retinoscope

### Diagnostic sets | kits

#### Set includes: BETA 200 LED streak retinoscope, hard case



[01]

	2.5V LED	3.5V LED
BETA battery handle	C-034.10.118*	_
BETA4 USB rechargeable handle with USB cord and plug-in power supply [01]	-	C-034.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-034.24.420

<sup>\*</sup>Also available with large battery handle X-001.99.120 (doesn't fit into hard cases). Please specify with your order

#### Kit includes: BETA 200 LED streak retinoscope



	2.5V LED	3.5V LED
BETA battery handle	C-014.10.118	-
BETA4 USB rechargeable handle with USB cord and plug-in power supply [02]	-	C-014.28.388

# Set includes: BETA 200S ophthalmoscope and BETA 200 LED streak retinoscope, hard case, spare bulb for BETA 200S XHL ophthalmoscope



[03]

	2.5 V XHL   LED**	3.5V LED
BETA battery handle [03]	C-262.10.118	-
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-262.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-262.24.420

# Set includes: BETA 200 ophthalmoscope and BETA 200 LED streak retinoscope, hard case, spare bulb for BETA 200 XHL

ophthalmoscope



[04]

	2.5V XHL   LED**	3.5V LED
BETA battery handle [04]	C-145.10.118	-
BETA4 USB rechargeable handle with USB cord and plug-in power supply	-	C-145.28.388
BETA4 NT rechargeable handle with NT4 table charger	-	C-145.24.420

 $<sup>^{\</sup>star\star}$  BETA 2008 | BETA 200 ophthalmoscope with XHL illumination and BETA 200 LED streak retinoscope with LED illumination



# HEINE HSL 150 hand-held slit lamp The lightest slit lamp of its kind



Portable hand-held slit lamp for examining the anterior segment of the eye. Compact and lightweight – ideal for situations in which a conventional slit lamp is not available or is impractical. For human and veterinary medicine.

#### **RELIABLE DIAGNOSIS**

- ► Continuously variable gap size from 0.2 mm x 10 mm to 4 mm x 14 mm
- ▶ Detailed view due to 6 x magnification
- ► Switchable blue interference filter (FITC) for examining the cornea
- ▶ Optimum light transmission due to multi-coated optics
- ► Precise view due to particularly bright, white light comparable to the light intensity of a classic slit lamp
- ► Xenon halogen illumination XHL

#### LIGHTWEIGHT AND PORTABLE

- ► The head weighs only approx. 70 g
- ▶ Ideal for home visits and flexible use

#### **FLEXIBLE POWER SOURCE OPTIONS**

- ► Rechargeable battery with table charger
- ► Replaceable batteries



Set includes: HSL 150 hand-held slit lamp, soft pouch

	2.5V XHL
BETA SLIM battery handle [01]	C-252.10.105



Set includes: HSL 150 hand-held slit lamp, spare bulb, hard case

	3.5V XHL
BETA4 SLIM NT rechargeable handle and NT4 table charger* [02]	C-266.20.471

\*NT4 table charger incl. reducer insert

► For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE LAMBDA 100 retinometer A precision instrument for looking into the future



High diagnostic reliability and easy handling. The LAMBDA 100 retinometer is the first compact instrument for determining a patient's potential visual acuity after surgery to treat cataracts or other opacities.

#### SIMPLE AND SAFE DIAGNOSIS

- ► Glare-free examination due to brightness control
- ► Easy examination due to clear controls
- ► Three steps to determine potential visual acuity:
  - Switch on the instrument, select the visual acuity level, set the line pattern, and darken the room
  - Rest the retinometer against the patient's forehead. Search for a gap in the cloudy media by moving the red dots of light until the patient recognises the line pattern
  - ➤ Make the lines finer and finer by changing the orientation until the patient can no longer distinguish between them. The last value the patient recognises is their potential visual acuity
- Xenon halogen illumination XHL
- ➤ Available in two configurations: Kit 1 with 20 | 300 to 20 | 25 fraction scale (scale 2), Kit 2 with 0.06 to 0.8 decimal scale (scale 1)

#### LIGHTWEIGHT AND PORTABLE

- ► Compact dimensions
- ► Flexible use also for bedridden patients, for example

#### PRACTICAL CHARGING OPTION

▶ USB rechargeable handle with USB 2.0 cord and plug-in power supply



#### Kit includes: Kit enthält: LAMBDA 100 retinometer,

1 patient card, BETA4 USB rechargeable handle with USB cord and plug-in power supply, spare bulb

	3.5V XHL
kit 1: acuity scale 20 300 to 20 25 (scale 2)	C-037.27.388
kit 2: decimal scale 0.06 to 0.8 (scale 1)	C-038.27.388



# HEINE ophthalmic examination lamp For examination of the anterior segment and cornea in focal light



- ▶ Small and light. Ideal for house calls and rounds
- ▶ 5 different apertures. Helps detect erosion, edema and foreign bodies on the cornea
- ▶ Apertures focused at 100 mm working distance

#### Kit includes: ophthalmic examination lamp with

	3.5V XHL
BETA4 USB rechargeable handle with USB cord and plug-in power supply [01]	C-018.27.388



cobalt blue filter for fluorescence examination



► For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

# HEINE Finoff transilluminator For scleral transillumination



#### Detachable cobalt blue filter, suitable for fluorescence examinations.

Finoff transilluminator for scleral transillumination with

	LED
BETA4 USB rechargeable handle with USB cord and plug-in power supply [01]	C-019.27.388
BETA4 NT rechargeable handle (without NT4 table charger)	C-019.23.396





### Further articles | accessories HEINE ophthalmic instruments







Fixation cards for BETA 200 LED retinoscope	
fixation cards with holder for dynamic retinoscopy, without instrument [02]	C-000.15.360

	74 94
Ψ.	[02]
	-

 LED module
 2.5 V LED
 3.5 V LED

 for BETA 200 retinoscope [03]
 X-028.88.130
 X-008.88.131

[03]

HSL 150 hand-held slit lamp head

HIS 100
V

without handle [04] C-001.14.602 C-002.14.602

### HSL 10 x loupe attachment for HSL 150

loupe attachment with 10x magnification, without instrument [05]	C-000.14.606
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XHL xenon halogen spare bulb	2.5V XHL	3.5V XHL
for HSL 150 hand-held slit lamp [06]	X-001.88.098	X-002.88.099

b	-
	[06]

<sup>►</sup> For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

### Further articles | accessories HEINE ophthalmic instruments



LAMBDA 100 retinometer head	2.5V XHL	3.5 V XHL
with acuity scale 20 300 to 20 25 (scale 2), without handle [01]	C-001.35.015	C-002.35.015
with decimal scale 0.06 to 0.8 (scale 1), without handle	C-001.35.010	C-002.35.010



#### Patient card for LAMBDA 100 retinometer

patient card [02]	C-000.35.005



XHL xenon halogen spare bulb	2.5V XHL	3.5V XHL
for LAMBDA 100 retinometer [03]	X-001.88.077	X-002.88.078



Ophthalmic examination lamp head	2.5V XHL	3.5V XHL
without handle [04]	C-001.14.400	C-002.14.400



XHL xenon halogen spare bulb	2.5V XHL	3.5V XHL
for ophthalmic examination lamp [05]	X-001.88.032	X-002.88.047



Finoff transilluminator head	LED
Finoff for scleral transillumination, without handle [06]	C-002.17.080

#### Aperture for Finoff transilluminator

aperture with cobalt blue filter for Finoff transilluminator	C-000.17.081
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► For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.



### **HEINE** indirect ophthalmoscopes

### **Overview**

It goes without saying that all of our indirect ophthalmoscopes 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:







	OMEGA 600	OMEGA 500	SIGMA 250	SIGMA 250 M2
Convergence and parallax adjustment	synchr	ronized	sep	arate
Apertures				
Integrated filters			red-free filter is in aperture row	ntegrated in
Illumination		LED <sup>HQ</sup>		
Wearing options	head	lband	S-FRAME spect	acle frame
Further articles	teaching m fundus cha		teaching mirror, blue filter and ye diffusor, fundus charts	llow filter,
Product variants	-	with integrated camera		_
Brightness control	on the instrument; visionBOOST	on the instrument	on the power so	urce
Mobile power supply   operating time	rechargeable battery integrates into the headband   typ. 8 hours	headband-mounted battery mPack UNPLUGGED typ. 7 hours, mPack typ. 13 hours	mPack mini typ.	11 hours
Stationary power supply	CW1 wall charger, CC1 charging case, E4-USBC power supply	EN 50 table- or   wall transformer, plug-in transformer		_
Catalogue page	<u>60</u>	<u>62</u>	<u>64</u>	

### HEINE OMEGA® 600 binocular indirect ophthalmoscope Discover more. With less weight



#### THE LIGHTEST HIGH-END INDIRECT **OPHTHALMOSCOPE WORLDWIDE**

- ► Best wearing comfort
- ▶ Personalized fit
  - ▶ Ergonomic positioning of controls and levers
  - ▶ Adaptable for right and left handed users
  - ▶ Flip-up optics unit





Red-free, yellow and cobalt blue filter



Diffuser HEINE, small spot, medium and large



#### MOST PRECISE DIAGNOSTIC, **UP TO THE FAR RETINAL PERIPHERY**

- ► Significantly better diagnostics due to unique visionBOOST even in dense cataracts
- Sharpest fundus image due to superior glass optics
- ▶ Brightest fundus image with true colour rendering thanks to our unique LEDHQ - now in even more natural colours
- ► Best 3D imaging due to our unique stereoscopic adjustment technology in dilated and undilated pupils
  - ▶ even with prematures and newborns



**HEINE OMEGA 600** operation film

#### LONG-LASTING INVESTMENT **DUE TO ITS ROBUST DESIGN**

- ► Maintenance-free, dustproof optics
- ► Legendary HEINE durability
- ► 5-year guarantee

#### **EASY AND EFFECTIVE DISINFECTION** THANKS TO SMOOTHSURFACE

- ▶ No openings
- ► Integrated electronics



Flip-up function of the optics unit For more convenient patient interactions



Eyepieces To best accommodate your view, exchange the initially mounted eyepieces +2 D with the neutral lenses 0 D (supplied with the instrument)



Width adjustment



### **HEINE OMEGA® 600**

## Sets | kits



OMEGA 600 sets	LED
OMEGA 600 wall charger set: indirect ophthalmoscope (with battery and +2 D eyepiece) [01], E4-USBC [02], eyepiece 0 D*, CW1 wall charger [03]	C-008.33.612



OMEGA 600 traveller set: indirect ophthalmoscope (with battery and +2 D eyepiece), E4-USBC, eyepiece 0 D*, traveller bag [04]	C-008.33.613
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OMEGA 600 student set: indirect ophthalmoscope (with battery and +2 D eyepiece), E4-USBC, eyepiece 0 D*, TM2 teaching mirror [05], traveller bag	C-008.33.61
traveller bag	



OMEGA 600 kit: indirect ophthalmoscope (with battery and +2 D eyepiece), C-008.33.610 E4-USBC, eyepiece 0 D\*



OMEGA 600 charging set: CC1 charging case, X-000.99.090 CB1 charging battery [06]





[06]

<sup>\*</sup>Eyepieces: To best accommodate your view, you can exchange the initially mounted eyepieces +2 D with the neutral lenses 0 D (supplied with the instrument).

### HEINE OMEGA® 500 LED indirect binocular ophthalmoscope The predecessor of the OMEGA 600



With its LED $^{\rm HQ}$  and perfect colour rendering, the OMEGA 500 has set the standard for reliability and performance.

**Set includes: OMEGA 500, HC 50L headband rheostat,** connecting cord cinch, pad with 50 fundus charts, teaching mirror, in hard case

	6V LED
plug-in transformer for HC 50L headband rheostat	C-283.41.320
mPack with plug-in transformer (incl. 90° angled adaptor)	C-283.41.670



**Set includes: OMEGA 500 UNPLUGGED,** HC 50L headband rheostat, pad with 50 fundus charts, teaching mirror, in hard case

	6V LED
mPack UNPLUGGED and plug-in transformer UNPLUGGED	C-284.41.670



 $\textbf{Kit includes: OMEGA 500 UNPLUGGED,} \ \ \text{HC 50L headband rheostat.} \ \ \text{Without case}$ 

	6V LED
kit 5: Plug-in transformer UNPLUGGED, 1x mPack UNPLUGGED	C-008.33.535
kit 6: Wall unit EN 50 UNPLUGGED charger, 2 x mPack UNPLUGGED	C-008.33.536
kit 7: Wall unit EN 50 UNPLUGGED charger, 1 x mPack UNPLUGGED [01]	C-008.33.537



<sup>►</sup> Carrying cases and storage cases may deviate in shape and colour.

<sup>►</sup> For information on HEINE EN 50 UNPLUGGED and mPack UNPLUGGED see page 164-165.

### HEINE OMEGA® 500 with DV1 digital video camera High-resolution digital imaging of the fundus

#### HIGH-RESOLUTION DIGITAL IMAGING OF THE FUNDUS



- ▶ 5 MP resolution. Capable of capturing high-resolution videos or still shots of examinations. No disturbing picture noise due to increased light sensitivity of the camera - also suitable for the examination of premature babies. Perfect for sharing the examiner's view with a wider audience, educating patients on the diagnosis, recording techniques for presentations, and patient records
- Interface and software. Will plug into any laptop or computer via USB 2.0 interface. Supplied with software program for video recording and image capture
- ▶ Integrated camera design. The integrated camera system ensures precise alignment with the optical system of the Indirect ophthalmoscope. Robust, dustproof design. No further adjustment of mirrors necessary for digital imaging



For more information, please refer to www.heine.com/omega500dv1

### **OMEGA 500** with DV1 sets | kits



#### Set includes: OMEGA 500 with DV1 digital video camera,

HC 50L headband rheostat, USB 2.0 cord, pad with 50 fundus charts, in hard case

	6V LED
mPack UNPLUGGED and plug-in transformer	C-176.41.670



#### Kit includes: OMEGA 500 with DV1 digital video camera,

HC 50L headband rheostat, USB 2.0 cord. Without case

	6V LED
mPack UNPLUGGED with plug-in transformer	C-008.33.561
2 x mPack UNPLUGGED with EN 50 UNPLUGGED	C-008.33.562

### HEINE SIGMA® 250 indirect ophthalmoscope Spectacle-mounted ophthalmoscope – with LED<sup>HQ</sup> illumination



SIGMA 250 apertures



Large spot, small spot, red-free filter

#### SIGMA 250 M2 apertures



Large spot, pinhole, red-free filter

Simplified diagram of various beam configurations Large pupil – Small pupil – Peripheral view



Large pupil



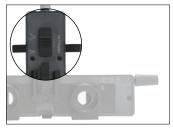
Small pupil



Peripheral view

The spectacle-mounted indirect ophthalmoscope to suit any pupil size. Two separate controls for selecting the ideal setting of parallax and convergence guarantee completely illuminated stereo views in pupils up to 2 mm, as well as viewing in the periphery.

- ▶ Power source mPack mini compact and light power source with USB charging option. With a weight of just 95 g and dimensions of 44x23x101 mm, this mobile power source is now approx. 70 % smaller and lighter than its predecessor. Typ. 11 hours in continuous operation at maximum power Please note: The SIGMA 250 is compatible only with mPack mini
- ▶ Extremely light, 110 g without frame. Light and comfortable
- ► There's LED. And there's LEDHO. 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 LEDHO
- ► Lightweight frame. High tensile carbon fiber construction is lightweight and has excellent stability
- ▶ Illumination beam adjustable ±3°. Eliminates reflexes
- ▶ Integrated red-free filter. Improves contrast
- ► Optional blue and yellow filter
- ► Large and small apertures
- ► Dust proof. Maintenance-free
- ▶ PD selection from 47 to 72 mm. Suits any user
- ▶ Optics on swivel mount. Unrestricted view
- ▶ Optional clip-in correction frame for prescription lenses







Convergence adjustment



For further information on the mPack mini, please see page 168.

### HEINE SIGMA® 250 Sets | kits



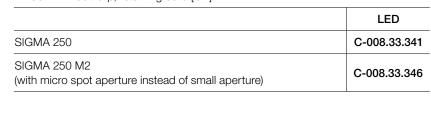
#### Set includes: SIGMA 250 with S-FRAME spectacle frame,

mPack mini with E4-USB plug-in transformer and USB cord, mPack mini belt clip, teaching mirror, blue and yellow filters, diffusor, retaining cord, case [01]

	LED
SIGMA 250	C-281.41.671
SIGMA 250 M2 (with micro spot aperture instead of small aperture)	C-279.41.671

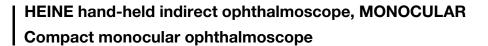
#### Kit includes: SIGMA 250 with S-FRAME spectacle frame,

mPack mini with E4-USB plug-in transformer and USB cord, mPack mini belt clip, retaining cord [02]





<sup>▶</sup> Carrying cases and storage cases may deviate in shape and colour.





An unusually compact instrument, which is recommended for visits and mobile use.

- ▶ Durable metal construction. Long working life
- ▶ Built-in interference red-free filter. Improves contrast
- ► All optical components made of coated optical glass. Precise images and high light intensity
- ▶ Adjustable light beam. Useful for small pupils
- ► One hand operation. All control elements can be easily reached with the thumb
- ▶ +3D lens attachment. An aid to accomodation, magnifies the image

# HEINE hand-held indirect ophthalmoscope MONOCULAR kits

#### Hand-held indirect ophthalmoscope, MONOCULAR with

	3.5V XHL
BETA4 USB rechargeable handle with USB cord and plug-in power supply	C-020.27.388
BETA4 NT rechargeable handle with NT4 table charger [01]	C-020.23.420





<sup>►</sup> For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.

#### Model eyes

### **HEINE** skia-| retinoscope trainer

This model eye is ideal for teaching and practice. The pupil diameter and refractive error can be set exactly and are therefore reproducible. The front lens compartment holder accepts up to two trial lenses. The cylinder can be read from the graduated scale.



- ► Scale: 0°- 180° for cylinder determination
- ▶ Diameter of pupil. Variable 2, 3, 4, 5, 6, 8 mm
- ▶ Optics: Optical glass, achromatic lens, focal length F = 32 mm
- ► Trainer body. Made of metal extremely stable and durable
- ▶ Angle of examination variable

#### Model eye

skia- retinoscope trainer	C-000.33.011
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# Model eyes HEINE ophthalmoscope trainer

This model eye was developed for the teaching environment. It is the first adjustable model from HEINE to mimic the human eye. Precise, durable and with a multitude of uses, it simplifies the learning process and encourages the student to practice with the ophthalmoscope.



- ▶ Diameter of pupil. Variable 2, 3, 4, 5, 6, 8 mm
- ► Aspheric optical glass lens. Focal length F = 18 mm. Lens curvature matches that of the retina
- ► Trainer body. Made of metal extremely stable and durable
- ▶ Angle of examination variable

#### Model eye

ophthalmoscope trainer	C-000.33.010

# HEINE A.R. aspheric ophthalmoscopy lenses With anti-reflex A.R. coating



- ▶ Advanced triple multicoating. Reduced reflection, excellent light transmission
- ▶ Lens curvature matches that of the retina. Perfect, distortion-free retinal image
- ▶ Large diameter. Significant increase in field of view without magnification loss
- ► Aspheric surfaces. Reduced distortion of the periphery

#### Ophthalmoscopy lens with case

A.R. 30D Ø 46mm	C-000.17.231
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# Combi case | hard case



Combi case respectively hard case for indirect binocular ophthalmoscopes. Features a deep, dense foam insert to protect instruments.

#### Combi case | hard case\*



[03]



OMEGA 600 traveller bag [01] (Can be worn over the shoulder or as a backpack.)	C-080.00.000
combi case [02] for OMEGA 500	C-079.03.000
hard case [03] for OMEGA 500	C-079.00.000
case for SIGMA 250 (270 mm x 270 mm x 150 mm) [04]	C-000.32.553
*Carrying cases and storage cases may deviate in shape and colour	'

<sup>\*</sup>Carrying cases and storage cases may deviate in shape and colour.

# Accessories for HEINE indirect ophthalmoscopes



#### Fundus charts

pad with 50 pcs. [05]	C-000.33.208



## Further articles | accessories HEINE indirect ophthalmoscopes

#### OMEGA 600 ophthalmoscope













CC1 charging case [02]	X-000.99.091
CB1 charging battery [01]	X-007.99.687
E4-USBC power supply with cable [03]	X-000.99.300
CW1 wall charger (without OMEGA 600) [04]	X-095.17.320
	·
TM2 teaching mirror [05]	C-000.33.212
OMEGA 600 traveller bag [06]	C-080.00.000
	1

<sup>►</sup> For information on HEINE power sources see <u>pages 162-163</u>.

# Further articles | accessories HEINE indirect ophthalmoscopes



OMEGA 500 ophthalmoscope	6V LED
on headband with HC 50L headband rheostat and connecting cord cinch	C-008.33.502













#### Accessories OMEGA 500 ophthalmoscope

upgrade-kit OMEGA 500 with LED module [01] and HC 50L [02]	X-008.16.325
LED module for OMEGA 500 [01]	X-008.87.200
HC 50L headband rheostat (without plug-in transformer)	X-095.16.325
plug-in transformer for HC 50L headband rheostat	X-095.16.330
teaching mirror [03]	C-000.33.209
extension cord cinch-cinch, 2m [04]	C-000.33.510
connecting cord cinch to EN 50 charger mPack plug-in transformer for HC 50L, 1.6 m [05]	X-000.99.667
extension cord from plug-in transformer UNPLUGGED to mPack UNPLUGGED, 2 m [06]	X-000.99.668
USB 2.0 cord for OMEGA 500 with DV1	X-000.99.206



<sup>►</sup> For information on HEINE power sources see <u>pages 162-168</u>.

# Further articles | accessories **HEINE** indirect ophthalmoscopes



SIGMA 250 ophthalmoscope	LED
SIGMA 250 with S-FRAME, retaining cord	C-008.33.340
SIGMA 250 M2 (with micro spot aperture instead of small aperture) with S-FRAME, retaining cord	C-008.33.345















#### Accessories SIGMA 250 ophthalmoscope

C-000.33.302
C-000.33.313
C-000.33.314
C-000.33.315
C-000.33.316
C-000.32.309





Hand-held indirect ophthalmoscope, MONOCULAR	3.5V XHL
with + 3 D lens attachment and orbit rest extension, without handle	C-002.33.001

#### Accessories hand-held indirect ophthalmoscope, MONOCULAR

+ 3 D lens attachment only [07]	C-000.33.101
orbit rest extension, for spectacle wearers only	C-000.33.104
XHL xenon halogen spare bulb	X-002.88.050

<sup>▶</sup> For information on HEINE battery and rechargeable handles and the EN 200 wall transformer, see pages 150-160.