

Стереомикроскопы CARL ROTH SMZ-161, SMZ-168, OSE-417, OZL-445, OSF-439, OZL-463, OZL-464, OZL-456

Технические характеристики

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Казахстан (772)734-952-31

Киргизия (996)312-96-26-47



Stereo microscopes



Stereo microscope

Eschenbach.

Optional accessories (please order separately):

- Widefield eyepieces and attachment lenses for modulating the total magnification

Technical specifications:

Art. No.	X822.1	X823.1
Type	Model 33213	Model 33263
Tube	Binocular	
Total magnification	10x/20x – can be expanded up to 40x as an option	
Magnification type	Revolving turret	
Ocular magnification	Widefield 10x	
Lens arrangement	coaxial	
Lens magnification	1x/2x	
Field of view	19 mm	
Dioptre compensation	±5 dpt on the left ocular tube	
Angular observation	45 °	
Head	Can be rotated 360°	
Distance between eyepieces	54–74 mm	
Working distance	83 mm	
Light source	LED	
Type of lighting	Incident light	
Image focusing	Coarse focus	
Power supply	Mains-powered	
Mains connection	100–240 V, 50/60 Hz	

Delivery incl. eyepiece cups and dust cover.

Model 33213

With robust metal stand. Ø 20 mm stand rod. 200 x 150 mm bottle stand with plastic plate (black/white) for reflected illumination.

Type	Art. No.	Pack Qty.	
Model 33213	X822.1	1 unit(s)	

Model 33263

Stable and long metal hinged arm with three locking screws in the spring joints, fully adjustable. With stable table clamp suitable for tabletop thicknesses up to 70 mm.

Type	Art. No.	Pack Qty.	
Model 33263	X823.1	1 unit(s)	



Stereo zoom microscope SMZ-161

Motic.

Compact design, high-quality optics and robust mechanism. With LED lighting.

- Continuously variable zoom with lock positions for reproducible magnification
- Increased working distance allows sufficient space for sample handling
- Reflected light and transmitted light can be controlled separately

Technical specifications:

Art. No.	ATP9.1	ATT0.1
Type	SMZ-161-BLED (R2LED)	SMZ-161-TLED (R2LED)
Tube	Binocular	Trinocular
Total magnification	7.5x to 45x	
Magnification type	Zoom	
Ocular magnification	Widefield 10x	
Lens magnification	0.75x–4.5x, zoom ratio 1:6	
Field of view	20 mm	
Dioptre compensation	±5 dpt on both ocular tubes	
Angular observation	45 °	
Head	Can be rotated 360°	
Distance between eyepieces	50–75 mm	
Working distance	110 mm	
Light source	LED	
Type of lighting	Incident light and transmitted light	
Image focusing	Coarse focus	
Power supply	Mains-powered	
Mains connection	100–240 V, 50 Hz	

Delivery incl. stage inserts (black/white and matte glass) and dust cover.

Binocular

Pic.	Type	Art. No.	Pack Qty.	
(1)	SMZ-161-BLED (R2LED)	ATP9.1	1 unit(s)	

Trinocular

With trinocular head for mounting a microscope camera on the photo-tube using C-mount adapter. Please order C-mount adapter separately.

Pic.	Type	Art. No.	Pack Qty.	
(2)	SMZ-161-TLED (R2LED)	ATT0.1	1 unit(s)	

Stereo microscopes



Stereo microscope SMZ-168

Motic.

High-quality stereo microscopes for science, research and quality control.

- Larger field of view and working distance
- Sturdy transmitted light stand with wide base plate
- Continuously variable zoom with lock positions for reproducible magnification
- Reflected light and transmitted light can be controlled separately

Optional accessories (please order separately):

- Widefield eyepieces and auxiliary objective lenses for modulating the total magnification.

Technical specifications:

Art. No.	KA17.1	KA18.1
Type	SMZ-168 BL	SMZ-168 TL
Tube	Binocular	Trinocular
Total magnification	7.5x/50x – can be expanded up to 200x as an option	
Magnification type	Zoom	
Ocular magnification	Widefield 10x	
Lens magnification	0.75x–5x, zoom ratio 1:6.7	
Field of view	23 mm	
Dioptre compensation	±5 dpt on both ocular tubes	
Angular observation	35 °	
Head	Can be rotated 360°	
Distance between eyepieces	52,5–75 mm	
Working distance	113 mm	
Light source	Halogen	
Type of lighting	Incident light and transmitted light	
Image focusing	Coarse focus	
Power supply	Mains-powered	
Mains connection	100–240 V, 50 Hz	

Delivery incl. stage inserts (black/white and matte glass), blue filter and dust cover.

Binocular

Pic.	Type	Art. No.	Pack Qty.	
(1)	SMZ-168 BL	KA17.1	1 unit(s)	

Trinocular

With trinocular head for mounting a microscope camera on the photo-tube using C-mount adapter. Please order C-mount adapter separately.

Pic.	Type	Art. No.	Pack Qty.	
(2)	SMZ-168 TL	KA18.1	1 unit(s)	



Stereo microscope OSE-417

Kern.

Robust, rigid and easy to operate stereo microscope for schools, workshops and training organisations. For preparations with focus on spatial impression, e.g. insects and seeds.

- Good optical characteristics for sharp images over a wide field of vision
- Interchangeable lens with two pre-defined magnifications
- Eyepiece fixed securely in the tube
- Stable and precisely adjustable mechanics of the microscope stand

Optional accessories (please order separately):

- Widefield eyepieces and attachment lenses for modulating the total magnification

Technical specifications:

Art. No.	HNA2.1
Type	OSE-417
Tube	Binocular
Total magnification	20x, 40x
Magnification type	Turret
Ocular magnification	Widefield 10x
Lens magnification	2x/4x
Field of view	20 mm
Dioptre compensation	left
Angular observation	45 °
Distance between eyepieces	55–75 mm
Working distance	57 mm
Light source	LED
Type of lighting	Incident light and transmitted light
Image focusing	Coarse focus
Power supply	Mains-powered
Mains connection	100–240 V, 50/60 Hz

Total magnification when combining different eyepieces/lenses:

Eyepiece	Magnification	Lens	
		2x ¹	4x ¹
WF 5x	Total magnification (x-times)	10	20
	Visual field Ø (mm)	10	5
WF 10x ¹	Total magnification (x-times)	20	40
	Visual field Ø (mm)	10	5
WF 20x	Total magnification (x-times)	40	80
	Visual field Ø (mm)	6.5	3.2

¹ Included with delivery

Delivery incl. stage inserts (black/white and matte glass), eyecups and dust cover.

Type	Art. No.	Pack Qty.	
OSE-417	HNA2.1	1 unit(s)	



Stereo microscopes



Stereo zoom microscope OZL-445

Kern.

Easy-to-operate, stable stereo-zoom microscope for laboratories, test institutes and quality checks.

- Zoom lens allows magnification of the specimen to be continuously adjusted
- Large working area for improved comfort, column stands allow greater flexibility
- Eyepiece fixed securely in the tube
- Reflected light and transmitted light can be controlled separately

Optional accessories (please order separately):

- Protective lens element
- Widefield eyepieces and attachment lenses for modulating the total magnification

Technical specifications:

Art. No.	HHE1.1
Type	OZL-445
Tube	Binocular
Total magnification	7.5x to 36x – can be expanded up to 144x as an option
Magnification type	Zoom
Ocular magnification	Widefield 10x
Lens magnification	0.75–3.6x
Field of view	20 mm
Dioptr compensation	±5 dpt on both ocular tubes
Angular observation	45 °
Head	Can be rotated 360°
Distance between eyepieces	55–75 mm
Working distance	86 mm
Light source	LED
Type of lighting	Incident light and transmitted light
Image focusing	Coarse focus
Power supply	Mains-powered
Mains connection	100–240 V, 50/60 Hz

Total magnification when combining different eyepieces/lenses:

Eyepiece	Magnification	Lens		
		Standard 1x ¹	0.5x ancillary	2.0x ancillary
WF 5x	Total magnification (x-times)	3.5–18	1.875–9	7.5–36
	Visual field Ø (mm)	26–6	60–13	12.5–3
WF 10x ¹	Total magnification (x-times)	7.5–36	3.75–18	15–72
	Visual field Ø (mm)	26.7–5.6	53.3–11.1	13.3–2.8
WF 20x	Total magnification (x-times)	15–72	7.5–36	30–144
	Visual field Ø (mm)	12.5–3	28–6	6–1.5

¹ Included with delivery

Delivery incl. stage inserts (black/white and matte glass), eyecups and dust cover.

Type	Art. No.	Pack Qty.	
OZL-445	HHE1.1	1 unit(s)	



Stereo microscope OSF-439

Kern.

Practical and sterile stereo microscope for training and laboratory. With integrated handle and stable stand.

- Ergonomically designed working surface for high level of comfort
- Interchangeable lens with three pre-defined magnifications for fast and effective work
- Eyepiece fixed securely in the tube
- Reflected light and transmitted light can be controlled separately

Technical specifications:

Art. No.	HHC9.1
Type	OSF-439
Tube	Binocular
Total magnification	10x, 20x, 40x
Magnification type	Turret
Ocular magnification	Widefield 10x
Lens magnification	1x, 2x, 4x
Field of view	20 mm
Dioptr compensation	±5 dpt on the left eyepiece
Angular observation	45 °
Head	fixed
Distance between eyepieces	55 – 75 mm
Working distance	57 mm
Light source	LED
Type of lighting	Incident light and transmitted light
Image focusing	Coarse focus
Power supply	Mains-powered
Mains connection	100–240 V, 50/60 Hz

Delivery incl. stage inserts (black/white and matte glass), eyecups and dust cover.

Type	Art. No.	Pack Qty.	
OSF-439	HHC9.1	1 unit(s)	

Stereo microscopes



Stereo zoom microscope OZL-46 series

Kern.

All-round stereo microscope with zoom function for schools, training workshops and laboratories.

- With extra-wide field eyepieces for greater vision angle, thereby ideal for people who wear glasses
- Reflected light and transmitted light can be controlled separately

Optional accessories (please order separately):

- Widefield eyepieces and attachment lenses for modulating the total magnification

Technical specifications:

Art. No.	HHE7.1	HHE8.1
Type	OZL 463	OZL 464
Tube	Binocular	Trinocular
Total magnification	7x to 45x – can be expanded up to 180x as an option	
Magnification type	Zoom	
Ocular magnification	Super wide angle (HWF) 10x	
Lens magnification	0.7–4.5x	
Field of view	20 mm	
Dioptr compensation	±5 dpt on both ocular tubes	
Angular observation	45 °	
Head	Can be rotated 360°	
Distance between eyepieces	55–75 mm	
Working distance	105 mm	
Light source	LED	
Type of lighting	Incident light and transmitted light	
Image focusing	Coarse focus	
Power supply	Mains-powered	
Mains connection	100–240 V, 50/60 Hz	

Total magnification when combining different eyepieces/lenses:

Eyepiece	Magnification	Lens		
		Standard 1x ¹	0.5x ancillary	2.0x ancillary
WF 10x ¹	Total magnification (x-fold)	7–45	3.5–22.5	14–90
	Visual field Ø (mm)	28.6–4.4	57.1–8.9	14.3–2.2
WF 20x	Total magnification (x-fold)	14–90	7–45	28–180
	Visual field Ø (mm)	14.3–2.2	28.6–4.4	7.1–1.1

¹ Included with delivery

Delivery incl. stage inserts (black/white and matte glass), eyecups and dust cover.

OZL 463 binocular

Type	Art. No.	Pack Qty.
OZL 463	HHE7.1	1 unit(s)

OZL 464 trinocular

With trinocular head for mounting a microscope camera on the photo-tube using C-mount adapter. Please order C-mount adapter separately.

Type	Art. No.	Pack Qty.
OZL 464	HHE8.1	1 unit(s)



Stereo zoom microscope OZL-456

Kern.

Stereo microscope with large zoom range.

- Integrated LED ring light in the lens housing for uniform illumination of the specimen without shadows
- Visual field and working distance magnified through high super-widefield lenses
- The greater viewing angle of the HSWF eyepieces is particularly suitable for people who wear glasses
- Reflected light and transmitted light can be controlled separately

Optional accessories (please order separately):

- Widefield eyepieces and attachment lenses for modulating the total magnification

Technical specifications:

Art. No.	HHH3.1
Type	OZL-456
Tube	Binocular
Total magnification	7.5x to 50x - can be expanded up to 100x as an option
Magnification type	Zoom
Ocular magnification	High super-widefield 10x
Lens magnification	0.75–5x
Field of view	23 mm
Dioptr compensation	±5 dpt on both eyepiece tubes
Angular observation	45 °
Head	Can be rotated 360°
Distance between eyepieces	55–75 mm
Working distance	113 mm
Light source	LED
Type of lighting	Incident light and transmitted light
Image focusing	Coarse focus
Power supply	Mains-powered
Mains connection	100–240 V, 50/60 Hz

Total magnification when combining different eyepieces/lenses:

Eyepiece	Lens	
	Magnification	Standard 1x ¹
HWF 5x	Total magnification (x-times)	3.75–25
	Visual field Ø (mm)	31–4.6
HSWF 10x ¹	Total magnification (x-times)	7.5–50
	Visual field Ø (mm)	33–5
HSWF 20x	Total magnification (x-times)	15–100
	Visual field Ø (mm)	20–3.5

¹ Included with delivery

Delivery incl. Stage inserts (black/white and matte glass), eyecups and dust cover.

Type	Art. No.	Pack Qty.
OZL-456	HHH3.1	1 unit(s)

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