



OZM 544



OZM 541

LAB LINE

First-class optics and strong illumination combined with a high level of flexibility

Features

- The KERN OZM series is a range of excellent stereo zoom microscopes with above-average optical features.
- The ergonomic shape allows a simple, effortless working over a period of several hours.
- The extraordinarily strong and continuously dimmable 3 W LED reflected and transmitted illumination ensures a flexible and particularly good level of illumination for your sample.
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM provides sharp, high-contrast, colour-true images.
- The zoom objective gives you continuous magnification from 7,5×–45×.
- There is a choice of two binocular models as well as three trinocular models for connecting a camera for documentation purposes and for quality reports. For both variants you have the choice of models with or without illumination.

- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures.
- A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more are available as accessories.
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery.
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list.
- Please find detailed information in the following charts.

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Interpupillary distance: 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×285×440 mm
- Net weight approx. 4,5 kg

STANDARD



OPTION



































Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZM 541	Binocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	–
OZM 542	Binocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZM 543	Trinocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	–
OZM 544	Trinocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)

Eyepiece	Specifications - Objectives						
	Magnification	Standard 1,0×	Auxiliary objectives				
			0,37×	0,5×	0,7×	1,5×	2×
HSWF 10×	Total magnification	7× - 45×	2,59× - 16,65×	3,5× - 22,5×	4,9× - 31,5×	10,5× - 67,5×	14× - 90×
	Field of view mm	∅ 32,8 - 5,1	∅ 88,8 - 13,8	∅ 65,7 - 10,2	∅ 46,9 - 7,3	∅ 21,9 - 3,4	∅ 16,4 - 2,6
SWF 15×	Total magnification	10,5× - 67,5×	3,89× - 25×	5,3× - 33,8×	7,4× - 47,2×	15,8× - 101,3×	21× - 135×
	Field of view mm	∅ 24,3 - 3,8	∅ 65,6 - 10,2	∅ 48,6 - 7,6	∅ 34,7 - 5,4	∅ 16,2 - 2,5	∅ 12,1 - 1,9
SWF 20×	Total magnification	14× - 90×	5,18× - 33,3×	7× - 45×	9,8× - 63×	21× - 135×	28× - 180×
	Field of view mm	∅ 20 - 3,1	∅ 54,1 - 8,4	∅ 40 - 6,2	∅ 28,6 - 4,4	∅ 13,3 - 2,1	∅ 10 - 1,6
SWF 30×	Total magnification	21× - 135×	7,77× - 50×	10,5× - 67,5×	14,7× - 94,5×	31,5× - 202,5×	42× - 270×
	Field of view mm	∅ 12,9 - 2	∅ 34,7 - 5,4	∅ 25,7 - 4	∅ 18,4 - 2,9	∅ 8,6 - 1,6	∅ 6,4 - 1
Working distance		110 mm	275 mm	195 mm	145 mm	50 mm	35 mm

Model outfit	Model KERN				Order number		
	OZM 541	OZM 542	OZM 543	OZM 544			
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	✓✓	✓✓	OZB-A5503	
	SWF 15×/∅ 17 mm	○	○	○	○	OZB-A5504	
	SWF 20×/∅ 14 mm	○	○	○	○	OZB-A5505	
	SWF 30×/∅ 9 mm	○	○	○	○	OZB-A5506	
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	○	○	OZB-A5512	
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	○	○	OZB-A5513	
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	○	○	OZB-A5514	
Achromatic auxiliary objectives	0,37× only in combination with a universal stand	○	○	○	○	OZB-A5611	
	0,5×	○	○	○	○	OZB-A5612	
	0,7×	○	○	○	○	OZB-A5613	
	1,5×	○	○	○	○	OZB-A5615	
	2,0×	○	○	○	○	OZB-A5616	
	Soldering protection lens	○	○	○	○	OZB-A5614	
C-Mount	0,3× (focus adjustable)			○	○	OZB-A5701	
	0,5× (focus adjustable)			○	○	OZB-A5702	
	1,0× (focus adjustable)			○	○	OZB-A5703	
	1,0× (with micrometer) only in combination with OZB-A5703			○	○	OZB-A5704	
	for SLR cameras (Nikon)			○	○	OZB-A5706	
	for SLR cameras (Olympus)			○	○	OZB-A5707	
	for SLR cameras (Canon)			○	○	OZB-A5708	
Darkfield unit	Darkfield unit	○	○	○	○	OZB-A4601	
Object clamp	Object clamp	○	○	○	○	OBB-A6205	
Stand	Pillar style, without illumination	✓		✓			
	Pillar style, with 3 W LED illumination (transmitted + incident)		✓		✓		
	Please find more stands in the catalogue on page 78 and on our website www.kern-sohn.com						
Stage plate	Frosted glass/∅ 94,5 mm		✓		✓	OZB-A5192	
	Black-white/∅ 94,5 mm	✓	✓	✓	✓	OZB-A5191	
	Glass/∅ 94,5 mm		○		○	OZB-A5190	
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for transmitted and incident illumination	○	○	○	○	OZB-A5781	
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	○	○	OZB-A5782	
External illumination	Please find the information about external illumination units in the catalogue from page 81 and on our website www.kern-sohn.com						

✓ = Included with delivery

○ = Option

 360°	360° rotatable microscope head	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 SD	SD card For data storage
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated USB 2.0 digital camera For direct transmitting of the picture to a PC	 1 DAY	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 FL	Fluorescence illumination For stereomicroscopes	 USB 3.0	Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device		

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope	LWD Long Working Distance	SWF Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)
FPS Frames per second	N.A. Numerical Aperture	W.D. Working Distance
H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	SLR Kamera Single-Lens Reflex camera	WF Wide Field (Field number up to Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: