



OZM 544



OZM 541

**LAB LINE**

The high-quality model for experienced users

**Features**

- The KERN OZM-5 models are very robust and easy to use stereo microscopes with a zoom function operable from both sides.
- Their qualities, the flexible pillar stand and the optional integral, powerful and long-life LED incident and transmitted illumination make these models especially flexible.
- On all models it is possible to adjust the diopter on both tubes.
- A trinocular model version, allowing a camera to be fitted, is also available.
- These models are optimally suited to workstations in very rough working environments, training establishments, workshops, as well as assembly and repair workstations in the electronics and semi-conductor industries.
- These models are also ideal for use in production, in quality control and in biological laboratory and research areas.

- The design of the optical system allows a large depth of field, where only very little refocussing at the zoom enlargement is necessary.
- In addition, it provides precise resolution, an extra large field of view and is absolutely true-to-colour.
- These models offer the best possible ease of use thanks to their extra large working distance providing a large working surface.
- The multitude of auxiliary objectives, eyepieces, universal stands and additional accessory parts facilitates use in all common stereo microscopy applications.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

**Technical data**

- Optical system: Greenough
- Brightness adjustable
- Magnification ratio: 6,4:1
- Tube: 45° inclined
- Interpupillary distance: 52 – 76 mm
- Diopter adjustment (both-sided)
- Packing dimensions WxDxH 370x330x385 mm

**OZM 541 / OZM 543**  
• Net weight approx. 5,2 kg

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Please find detailed information in the following charts.

STANDARD



OPTION



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

Eyepiece	Specifications - Objectives						
	Magnification	Standard 1,0x	Auxiliary objectives				
			0,37x	0,5x	0,7x	1,5x	2x
HSWF 10x	Total magnification	7x - 45x	2,59x - 16,65x	3,5x - 22,5x	4,9x - 31,5x	10,5x - 67,5x	14x - 90x
	Field of view mm	Ø 32,8 - 5,1	Ø 88,8 - 13,8	Ø 65,7 - 10,2	Ø 46,9 - 7,3	Ø 21,9 - 3,4	Ø 16,4 - 2,6
SWF 15x	Total magnification	10,5x - 67,5x	3,89x - 25x	5,3x - 33,8x	7,4x - 47,2x	15,8x - 101,3x	21x - 135x
	Field of view mm	Ø 24,3 - 3,8	Ø 65,6 - 10,2	Ø 48,6 - 7,6	Ø 34,7 - 5,4	Ø 16,2 - 2,5	Ø 12,1 - 1,9
SWF 20x	Total magnification	14x - 90x	5,18x - 33,3x	7x - 45x	9,8x - 63x	21x - 135x	28x - 180x
	Field of view mm	Ø 20 - 3,1	Ø 54,1 - 8,4	Ø 40 - 6,2	Ø 28,6 - 4,4	Ø 13,3 - 2,1	Ø 10 - 1,6
SWF 30x	Total magnification	21x - 135x	7,77x - 50x	10,5x - 67,5x	14,7x - 94,5x	31,5x - 202,5x	42x - 270x
	Field of view mm	Ø 12,9 - 2	Ø 34,7 - 5,4	Ø 25,7 - 4	Ø 18,4 - 2,9	Ø 8,6 - 1,6	Ø 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	HSWF 10x / Ø 23 mm	●●	●●	●●	●●	OZB-A5503	
	SWF 15x / Ø 17 mm	○○	○○	○○	○○	OZB-A5504	
	SWF 20x / Ø 14 mm	○○	○○	○○	○○	OZB-A5505	
	SWF 30x / Ø 9 mm	○○	○○	○○	○○	OZB-A5506	
	HSWF 10x / Ø 23 mm (reticule 0,1 mm)	○	○	○	○	OZB-A5512	
	SWF 15x / Ø 17 mm (reticule 0,05 mm)	○	○	○	○	OZB-A5513	
	SWF 20x / Ø 14 mm (reticule 0,05 mm)	○	○	○	○	OZB-A5514	
Achromatic auxiliary objectives	0,37x	○	○	○	○	OZB-A5611	
	0,5x	○	○	○	○	OZB-A5612	
	0,7x	○	○	○	○	OZB-A5613	
	1,5x	○	○	○	○	OZB-A5615	
	2,0x	○	○	○	○	OZB-A5616	
C-Mount	0,3x			○	○	OZB-A5701	
	0,5x			○	○	OZB-A5702	
	1,0x			○	○	OZB-A5703	
	1,0x (with micrometer)			○	○	OZB-A5704	
	for SLR cameras (Nikon)			○	○	OZB-A5706	
	for SLR cameras (Olympus)			○	○	OZB-A5707	
	for SLR cameras (Canon)			○	○	OZB-A5708	
Darkfield attachment	Darkfield attachment	○	○	○	○	OBB-A6201	
Object clamp	Object clamp	○	○	○	○	OBB-A6205	
Stands	Pillar style, without illumination	●		●			
	Pillar style, with 3W LED illumination (transmitting + incident)		●		●		
	Please find more stands in the catalogue on page 64 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>						
Stage plate	Frosted glass / Ø 94,5 mm		●		●	OZB-A5192	
	Black-white / Ø 94,5 mm	●	●	●	●	OZB-A5191	
	Glass / Ø 94,5 mm		○		○	OZB-A5190	
Mechanical stage	Stage size: WxD 188x160 mm, Travel: 76x65 mm, for transmitting and incident illumination	○	○	○	○	OZB-A5781	
	Stage size: WxD 180x175 mm, Travel: 100x86 mm, for incident illumination only	○	○	○	○	OZB-A5782	
External illumination	Please find the information about external illumination units in the catalogue from page 68 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>						

● = Standard configuration

○ = Option

 360°	<b>360° rotatable microscope head</b>	 FL-HB0	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 AUTO ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 PH	<b>Phase contrast unit</b> For a higher contrast	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 TRINO	<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	<b>Polarising unit</b> To polarise the light	 ACCU	<b>Rechargeable battery pack</b> Rechargeable set.
 ABBE	<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 INFINITY	<b>Infinity system</b> Infinity corrected optical system	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 LED	<b>LED illumination</b> Cold, energy saving and especially long-life illumination	 PARALLEL	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 DAYS	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 3 YEARS WARRANTY	<b>Warranty</b> The warranty period is shown in the pictogram.
 TL	<b>Transmitting illumination</b> For transparent objects	 USB 2.0	<b>Integrated USB 2.0 digital camera</b> For direct transmitting of the picture to a PC		
 FL	<b>Fluorescence illumination</b> For stereomicroscopes	 USB 3.0	<b>Integrated USB 3.0 digital camera</b> For direct transmitting of the picture to a PC		

## Abbreviations

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

## Your KERN specialist dealer: