





PROFESSIONAL LINE

High-quality parallel optics for the best images, depth of field and contrast - with extra large zoom range

Features

- · The devices in the KERN OZS series are special, high-quality stereo zoom microscopes with parallel optics and an above-average zoom range for demanding analyses.
- The KERN OZS series is available as a strong, continuously adjustable 3 W LED reflected and transmitted light variant for the very best illumination of your sample or as a variant without illumination.
- The parallel optics is a high-quality optical system and provides excellent images with the best contrast, colour and depth of field with fatigue-free working.
- · The exceptionally large, adjustable magnification range from 8 to 80 times magnification gives you continuous zoom for the views you need.

- · As standard, the models of the KERN OZS series are trinocular and therefore equipped for connecting a camera for documentation purposes and for quality reports.
- These models are particularly flexible due to the modular construction, the pillar stand as well as the powerful, longlife LED reflected and transmitted illumination which can be integrated as an option.
- 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. 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-dimesnional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- · Optical system: Parallel optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 10:1
- Interpupillary distance: 52 76 mm
- · Diopter adjustment: Both-sided
- Overall dimensions W×D×H 305×300×540 mm
- Net weight approx. 5,5 kg

STANDARD

























Model Standard configuration Tube Eyepiece Field of view Objective Stand Illumination **KERN** Zoom HWF 10×/Ø 22 mm **OZS 573** \emptyset 27,5 – 2,75 0,8×-8× Trinocular Pillar style **OZS 574** Trinocular HWF 10×/Ø 22 mm Ø 27,5 – 2,75 0,8×-8× Pillar style 3 W LED (incident); 3 W LED (transmitted)



Eyepiece	Specifications - Objectives						
	Magnification	Standard Plan 1,0×	Achromatische Objektive				
			0,5×	0,7×	1,5× (Auxiliary)		
HWF 10×	Total magnification	8×-80×	4× - 40×	5,6×-56×	12× - 120×		
	Field of view mm	Ø 27,5 - 2,75	Ø 55 – 5,5	ø 39,3 - 3,93	Ø 18,33 – 1,83		
SWF 15×	Total magnification	12× - 120×	6×-60×	8,4× - 84×	18× – 180×		
	Field of view mm	Ø 21,25 - 2,13	Ø 42,5 – 4,25	Ø 30,36 – 3,04	ø 14,17 – 1,42		
SWF 20×	Total magnification	16× - 160×	8×-80×	11,2× - 112×	24× - 240×		
	Field of view mm	ø 17,5 – 1,75	Ø 35 – 3,5	Ø 25 - 2,5	Ø 11,67 – 1,17		
SWF 30×	Total magnification	24× - 240×	12× - 120×	16,8× - 168×	36× - 360×		
	Field of view mm	Ø 11,25 – 1,13	Ø 22,5 – 2,25	Ø 16,1 – 1,61	Ø 7,5 – 0,75		
Working distance		91 mm	186 mm	135 mm	40 mm		

Model outfit		Model KERN		Order number	
		OZS 573	OZS 574		
Eyepieces (30,0 mm)	HWF 10×/ø 22 mm	√√	44	OZB-A5502	
	SWF 15×/Ø 17 mm	00	00	OZB-A5504	
	SWF 20×/Ø 14 mm	00	00	OZB-A5505	
	SWF 30×/Ø 9 mm	00	00	OZB-A5506	
	HWF 10×/Ø 22 mm (reticule 0,1 mm)	0	0	OZB-A5511	
	SWF 15×/Ø 17 mm (reticule 0,05 mm)	0	0	OZB-A5513	
	SWF 20×/Ø 14 mm (reticule 0,05 mm)	0	0	OZB-A5514	
Plan achromatic objective	1,0×	✓	✓	OZB-A5603	
Achromatic objectives	0,5×	0	0	OZB-A5601	
	0,7×	0	0	OZB-A5602	
	1,5× Only in combination with OZB-A5603	0	0	OZB-A5604	
Trinocular	Division 100:0	✓	✓	OZB-A5401	
beamsplitter	Division 50:50	0	0	OZB-A5402	
C-Mount	0,3× (focus adjustable)	0	0	OZB-A5701	
	0,5× (focus adjustable)	0	0	OZB-A5702	
	1,0× (focus adjustable)	0	0	OZB-A5703	
	1,0× (with micrometer) only in combination with OZB-A5703	0	0	OZB-A5704	
	for SLR cameras (Nikon)	0	0	OZB-A5706	
	for SLR cameras (Olympus)	0	0	OZB-A5707	
	for SLR cameras (Canon)	0	0	OZB-A5708	
Darkfield unit	Darkfield unit	0	0	OZB-A4601	
Object clamp	Object clamp	0	0	OBB-A6205	
Stand	Pillar style, without illumination	✓			
	Pillar style, with 3 W LED illumination (transmitted + incident)		✓		
Stage plate	Frosted glass/ Ø 94,5 mm		✓	OZB-A5192	
	Black-white/Ø 94,5 mm	✓	✓	OZB-A5191	
	Glass/Ø 94,5 mm		0	OZB-A5190	
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	0	0	OZB-A5781	
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	0	0	OZB-A5782	
External illumination	Please find the information about external illumination units in	the catalogue fron	n page 81 and on o	ur website www.kern-sohr	.com

KERN Optics Catalogue 2016

KERN Pictograms:





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



SD card For data storage



Monocular Microscope

For the inspection with one eye



Phase contrast unit For a higher contrast



PC software

To transfer the measurements from the device to a PC.



Binocular Microscope

For the inspection with both eyes



Darkfield condenser/unit

For a higher contrast due to indirect illumination



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Trinocular Microscope

For the inspection with both eyes and the additional option for the connection of a camera



Polarising unit

To polarise the light



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Abbe Condenser

With high numerical aperture for the concentration and the focusing of light



Infinity system

Infinity corrected optical system



Battery operation

Ready for battery operation. The battery type is specified for each device.



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Battery operation rechargable

Prepared for a rechargable battery operation



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Mains adapter

230V/50Hz in standard version for EU. On request GB, AUS or USA version.



Incident illumination

For non-transparent objects



❖

USB 2.0

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USB 3.0

Integrated scale In the eyepiece

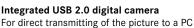
-230 V Power supply

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB. AUS or USA on request.



Transmitting illumination

For transparent objects





Package shipment The time required to manufacture the



Fluorescence illumination

For stereomicroscopes





WF

product internally is shown in days in the pictogram.



FL-HB0

Fluorescence illumination

for compound microscopes With 100W mercury lamp and filter



HDMI digital camera

For direct transmitting of the picture to a display device

For direct transmitting of the picture to a PC

3 YEARS WARRANTY Warranty The warranty period is shown in the

Abbreviations

C-Mount Adapter for the connection of a

camera to a trinocular microscope

FPS Frames per second H(S)WF High (Super) Wide Field

(Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

SLR Kamera Single-Lens Reflex camera

N.A. **Numerical Aperture** **SWF** Super Wide Field

pictogram.

(Field number at least Ø 23 mm

for 10x eyepiece)

Working Distance W.D.

Wide Field (Field number up to Ø22 mm for 10x eyepiece)

Your KERN specialist dealer: