



LAB LINE

The high-contrast and flexible stereo zoom microscope for professional applications which require high levels of magnification

Features

- The KERN OZO series will stand out through its large magnification range in higher magnifications as well as its sturdy construction and the fact that it is easy to use.
- · The ergonomic shape allows a simple, effortless working over a period of several hours.
- The KERN OZO 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.
- · With its large working distance, an extra large field of view and brilliant resolution, the KERN OZO provides sharp, high-contrast and colour-true images.
- · The large, continuously adjustable magnification radius from 8 to 70 times magnification means that you can work quickly and efficiently.
- · There is a choice of two binocular models as well as two trinocular models for connecting a camera for documentation purposes and for quality reports.

- 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
- · Please find detailed information in the following charts.

Scope of application

· Zoology and botany, 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: Greenough optics
- Brightness adjustable (separate)
- Tube: 35° inclined
- Magnification ratio: 8,8:1
- Interpupillary distance: 52 76 mm
- · Diopter adjustment: Both-sided
- · Overall dimensions W×D×H 330×285×470 mm
- Net weight approx. 4,5 kg

STANDARD































OPTION
min
CCVIE

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
OZO 551	Binocular	HSWF 10×/Ø 23 mm	Ø 28,75 – 3,3	0,8×-7×	Pillar style	-
OZO 552	Binocular	HSWF 10×/Ø 23 mm	Ø 28,75 – 3,3	0,8×-7×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZO 553	Trinocular	HSWF 10×/Ø 23 mm	Ø 28,75 – 3,3	0,8×-7×	Pillar style	-
OZO 554	Trinocular	HSWF 10×/Ø 23 mm	Ø 28.75 - 3.3	0.8× – 7×	Pillar style	3 W LED (incident): 3 W LED (transmitted)



Eyepiece	Specifications - Objectives									
	Magnification	Standard	Auxiliary objectives							
		1,0×	0,37×	0,5×	0,7×	1,5×	2×			
HSWF 10×	Total magnification	8×-70×	2,96× - 25,9×	4×-35×	5,6×-49×	12× - 105×	16× - 140×			
nswr IU^	Field of view mm	Ø 28,75 - 3,3	Ø 74,3 - 8,5	Ø 57,5 - 6,6	Ø 41,1 - 4,7	Ø 19,2 - 2,2	Ø 14,4 – 1,6			
0.4/5 4.5	Total magnification	12× - 105×	4,44× - 38,9×	6×-52,5×	8,4×-73,5×	18× - 157,5×	24× - 210×			
SWF 15×	Field of view mm	Ø 21,25 - 2,4	Ø 57,4 – 6,6	Ø 42,5 - 4,9	Ø 30,4 - 3,5	Ø 14,2 – 1,6	ø 10,6 – 1,2			
SWF 20×	Total magnification	16× - 140×	5,92×-51,8×	8×-70×	11,2×-98×	24×-210×	32× - 280×			
SWF 20*	Field of view mm	ø 17,5 – 2	Ø 47,3 - 5,4	Ø 35 - 4	Ø 25 - 2,9	ø 11,7 - 1,3	Ø 8,75 – 1			
SWF 30×	Total magnification	24× - 210×	8,88×-77,7×	12× - 105×	16,8× - 147×	36×-315×	48×-420×			
	Field of view mm	ø 11,25 - 1,3	Ø 30,4 - 3,5	Ø 22,5 - 2,6	ø 16,1 - 1,8	Ø 7,5 - 0,9	Ø 5,625 – 0,6			
Working distance		108 mm	275 mm	195 mm	145 mm	50 mm	35 mm			

Model outfit			Model	KERN	Order number				
			OZO 552	OZO 553	OZO 554				
	HSWF 10×/Ø 23 mm	551 √ √	44	44	11	OZB-A5503			
Eyepieces (30,0 mm)	SWF 15×/Ø 17 mm	00	00	00	00	OZB-A5504			
	SWF 20×/Ø 14 mm	00	00	00	00	OZB-A5505			
	SWF 30×/Ø 9 mm	00	00	00	00	OZB-A5506			
	HSWF 10×/Ø 23 mm (reticule 0,1 mm)	0	0	0	0	OZB-A5512			
	SWF 15×/Ø 17 mm (reticule 0,05 mm)	0	0	0	0	OZB-A5513			
	SWF 20×/Ø 14 mm (reticule 0,05 mm)	0	0	0	0	OZB-A5514			
	0,37× only in combination with a universal stand	0	0	0	0	OZB-A5611			
	0,5×	0	0	0	0	OZB-A5612			
Achromatic	0,7×	0	0	0	0	OZB-A5613			
auxiliary objectives	1,5×	0	0	0	0	OZB-A5615			
	2,0×	0	0	0	0	OZB-A5616			
	Soldering protection lens	0	0	0	0	OZB-A5614			
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	0	0	OZB-A4601			
Object clamp	Object clamp	0	0	0	0	OBB-A6205			
	Pillar style, without illumination	✓		✓					
Stand	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/Ø 94,5 mm		✓		✓	OZB-A5192			
	Black-white/Ø 94,5 mm	✓	✓	✓	✓	OZB-A5191			
	Glass/Ø 94,5 mm		0		0	OZB-A5190			
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for transmitted and incident illumination	0	0	0	0	OZB-A5781			
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	0	0	0	0	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								

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

•

USB 3.0

Integrated scale In the eyepiece

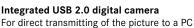
-230 V Power supply

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: