



#### LAB LINE

# Professional and powerful – thanks to its extremely large magnification range, strong illumination and first-class optics

#### **Features**

- The KERN OZP stereo zoom microscope stands out through its above-average magnification range and its robust shape which is also ergonomic, it enables effortless, simple working over a period of several hours.
- The KERN OZP 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 OZP provides sharp, high-contrast and colour-true images.
- The extremely large, continuously adjustable magnification range from 6 to 55 times magnification means that you can work quickly and effectively.
- 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 outfit list.
- 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: 9,2:1
- Light distribution OZP 557/558: 50:50
- 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
Ø	00		Ð	Ö	<u> </u>	Q	<b>-</b>		3 YEARS	Livin
360°	BINO	TRINO	LED	IL	TL	ZOOM	230 V	1 DAY	WARRANTY	SCALE

Model	Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZP 555 *	Binocular	HSWF 10×/Ø 23 mm	Ø 38,3 - 4,2	0,6×-5,5×	Pillar style	-	•
OZP 556	Binocular	HSWF 10×/Ø 23 mm	Ø 38,3 – 4,2	0,6× - 5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
OZP 557 *	Trinocular	HSWF 10×/Ø 23 mm	Ø 38,3 – 4,2	0,6×-5,5×	Pillar style	-	0
OZP 558	Trinocular	HSWF 10×/Ø 23 mm	Ø 38,3 – 4,2	0,6× - 5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	

**■** \*ONLY WHILE STOCKS LAST



Eyepiece		Specifications - Objectives									
	Magnification	Standard	Auxiliary objectives								
		1,0×	0,37×	0,5×	0,7×	1,5×	2×				
HSWF 10×	Total magnification	6×-55×	2,22× - 20,4×	3×-27,5×	4,2×-38,5×	9×-82,5×	12× - 110×				
HOWF IUA	Field of view mm	Ø 38,3 - 4,2	Ø 99,1 – 10,8	Ø 76,7 - 8,4	Ø 54,8 - 6	Ø 25,6 – 2,8	Ø 19,2 - 2,1				
0145 45	Total magnification	9×-82,5×	3,33× - 30,5×	4,5×-41,25×	6,3×-57,75×	13,5× - 123,75×	18× – 165×				
SWF 15×	Field of view mm	Ø 28,3 - 3,1	Ø 76,6 - 8,35	Ø 56,7 – 6,2	Ø 40,5 - 4,4	Ø 18,9 – 2,1	Ø 14,2 – 1,5				
SWF 20×	Total magnification	12× - 110×	4,44× - 40,7×	6×-55×	8,4×-77×	18× - 165×	24× - 220×				
SWF 20^	Field of view mm	Ø 23,3 - 2,5	Ø 63,1-6,9	Ø 46,7 – 5,1	Ø 33,3 - 3,6	ø 15,6 – 1,7	Ø 11,7 – 1,3				
0)4/5 00	Total magnification	18× - 165×	6,66×-61,1×	9×-82,5×	12,6× - 115,5×	27×-247,5×	36×-330×				
SWF 30×	Field of view mm	Ø 15 – 1,6	Ø 40,5 - 4,4	Ø 30 - 3,3	Ø 21,4 - 2,3	ø 10 – 1,1	Ø 7,5 - 0,8				
Working distance		108 mm	275 mm	195 mm	145 mm	50 mm	35 mm				

Model outfit			Model	KERN	Order number				
		OZP 555	OZP 556	OZP 557	OZP 558				
	HSWF 10×/Ø 23 mm	√√	√√	<b>√√</b>	√√	OZB-A5503			
	SWF 15×/Ø 17 mm	00	00	00	00	OZB-A5504			
	SWF 20×/Ø 14 mm	00	00	00	00	OZB-A5505			
Eyepieces (30,0 mm)	SWF 30×/Ø 9 mm	00	00	00	00	OZB-A5506			
(00,0 11111)	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			
	0,3× (focus adjustable)			0	0	OZB-A5701			
	0,5× (focus adjustable)			0	0	OZB-A5702			
	1,0× (focus adjustable)			0	0	OZB-A5703			
C-Mount	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 84 and on our website www.kern-sohn.com								
	Frosted glass/Ø 94,5 mm		✓		✓	OZB-A5192			
Stage plate	Black-white/Ø 94,5 mm	✓	✓	✓	✓	OZB-A5191			
	Glass/Ø 94,5 mm		0		0	OZB-A5190			
<b>Mechanical stage</b> (Pre-assembling on	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	0	0	0	0	OZB-A5781			
request)	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 87 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

Lucie SCALE Integrated scale

In the eyepiece



Power supply

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



Transmitting illumination

For non-transparent objects

For transparent objects



For direct transmitting of the picture to a PC



Package shipment The time required to manufacture the

product internally is shown in days in the pictogram.



Fluorescence illumination

For stereomicroscopes



❖

USB 2.0

USB 3.0 digital camera

For direct transmitting of the picture to a PC



WF

Warrantv

The warranty period is shown in the pictogram.



FPS

Fluorescence illumination for compound microscopes

With 100W 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

H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)

Frames per second

**LWD** Long Working Distance

N.A. **Numerical Aperture** 

SLR Kamera Single-Lens Reflex camera

**SWF** Super Wide Field

(Field number at least Ø 23 mm

for 10× eyepiece)

Working Distance W.D.

Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

# Your KERN specialist dealer:

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