

Stereo Zoom Microscope KERN OZP-5





# 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
- 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
- As standard this microscope offers you continuous total magnification of 6× - 55×
- There is a choice of a binocular model as well as a trinocular model 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 model outfit list

#### 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: 100:0
- Interpupillary distance 52 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×285×470 mm
- Net weight approx. 4,5 kg

STANDARE	)							
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360°	BINO	TRINO	LED	IL	TL	ZOOM	230 V	1 DAY

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
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 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)



# **MICROSCOPES & REFRACTOMETERS 2024**





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Eyepiece	Specifications - Objectives								
	Magnification	Standard	Auxiliary objectives						
		1,0×	0,5×	0,7×	1,5×	2×			
HSWF 10×	Total magnification	6×-55×	3×-27,5×	4,2× - 38,5×	9×-82,5×	12× - 110×			
	Field of view mm	Ø 38,3 - 4,2	Ø 76,7 - 8,4	Ø 54,8 - 6	Ø 25,6 – 2,8	Ø 19,2 – 2,1			
SWF 15×	Total magnification	9×-82,5×	4,5×-41,25×	6,3× - 57,75×	13,5×- 123,75×	18× - 165×			
	Field of view mm	Ø 28,3 - 3,1	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×	6×-55×	8,4×-77×	18× - 165×	24× - 220×			
	Field of view mm	Ø 23,3 - 2,5	Ø 46,7 – 5,1	Ø 33,3 - 3,6	Ø 15,6 – 1,7	Ø 11,7 - 1,3			
SWF 30×	Total magnification	18× - 165×	9×-82,5×	12,6× - 115,5×	27×-247,5×	36×-330×			
	Field of view mm	Ø 15 – 1,6	Ø 30 – 3,3	Ø 21,4 - 2,3	Ø 10 - 1,1	Ø 7,5 - 0,8			
Working distance		108 mm	195 mm	145 mm	50 mm	35 mm			
Maximum sample height		110 mm	10 mm	45 mm	140 mm	150 mm			

Model outfit		Model KERN		Order number			
		OZP 556	OZP 558	_			
	HSWF 10×/Ø 23 mm	<b>4</b> 4	44	OZB-A5503			
Eyepieces (30,0 mm)	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			
30,0,	HSWF 10×/Ø 23 mm (reticule 0,1 mm)	0	0	OZB-A5512			
	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			
	0,5×	0	0	OZB-A5612			
		0	0	OZB-A5613			
Achromatic auxiliary objectives	1,5×	0	0	OZB-A5615			
Juxiliar y Objectives	2,0×	0	0	OZB-A5616			
	Soldering protection lens	0	0	OZB-A5614			
	0,3× (focus adjustable)		0	OZB-A5701			
	0,5× (focus adjustable)		0	OZB-A5702			
	1,0× (focus adjustable)		0	OZB-A5703			
C-Mount	1,0× (with micrometer) only in combination with OZB-A5703		0	OZB-A5704			
	For SLR cameras (Nikon)		0	OZB-A5706			
	For SLR cameras (Olympus)		0	OZB-A5707			
	For SLR cameras (Canon)		0	OZB-A5708			
Darkfield unit	Darkfield unit	0	0	OZB-A4601			
Object clamp	Object clamp	0	0	OBB-A6205			
	Pillar style, without illumination						
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	<b>√</b>				
	Please find more stands in the catalogue on page 84 and on the internet						
	Frosted glass/Ø 94,5 mm		✓	OZB-A5192			
Stage plate	Black-white/Ø 94,5 mm	✓	✓	OZB-A5191			
	Clear glass/Ø 94,5 mm		0	OZB-A5190			
Mechanical stage	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	0	0	OZB-A5781			
(Pre-assembling on request)	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	0	0	OZB-A5782			
External	Please find the information about external illumination units in the catalogue on page 87 and on the internet						



# **MICROSCOPES & REFRACTOMETERS 2024**

**KERN Pictograms** 





360° rotatable microscope head



**Monocular Microscope**For the inspection with one eve



**Binocular Microscope**For the inspection with both eyes



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



**Abbe Condenser** 

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



Halogen illumination For pictures bright and rich in contrast



**LED** illumination

Cold, energy-saving and especially long-life illumination



**Incident illumination**For non-transparent objects



**Transmitting illumination**For transparent objects



Fluorescence illumination For stereomicroscopes



Fluorescence illumination for compound microscopes

With 100 W mercury lamp and filter



Fluorescence illumination for compound microscopes

With 3 W LED illumination and filter



Phase contrast unit

For a higher contrast



Darkfield condenser/ unit

For a higher contrast due to indirect illumination



Polarising unit
To polarise the light



Infinity system Infinity corrected optical system



Zoom magnification



For stereomicroscopes



Auto-focus

For automatic control of the focus level



Parallel optical system For stereomicroscopes, enables fatigue-proof working



Integrated scale

In the eyepiece



**SD card** For data storage



**USB 2.0 interface** For data transmission



USB 3.0 interface For data transmission



WIFI data interface:

For transmitting of the picture to a mobile display device



**HDMI** digital camera

For direct transmitting of the picture to a display device



PC software

To transfer the measurementsfrom the device to a PC.



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram of. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999 +A2:2013



**Battery operation** 

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



Battery operation rechargeable

Prepared for a rechargeable battery operation



Plug-in power supply

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



Integrated power supply unit

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



Package shipment

The time required to manufacture the product internally is shown in days in the pictogram.



Pallet shipment

The time required to manufacture the product internally is shown in days in the pictogram.

### **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

N.A. Numerical Aperture

**SLR camera** Single-Lens Reflex camera

**SWF** Super Wide Field (Field number at least Ø 23 mm

for 10× eyepiece)

W.D. Working Distance

**WF** Wide Field (Field number up to Ø 22 mm

for 10× eyepiece)

