

Stereo zoom microscope KERN OZL-45R





Dimmable, integrated LED ring illumination

LAB LINE

The practical and flexible stereo zoom microscope with integrated LED ring illumination and large zoom range

Features

- The KERN OZL-456 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and its integrated LED ring illumination unit
- The highlight of the KERN OZL-456 is the strong, continuoulsy dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- With its built-in, top-quality optics and powerful, integrated LED illumination unit, this model is a special all-rounder for all areas of application
- The zoom objective offers you continuous magnification from 7,5× $50\times$

- As standard, the KERN OZL-45R series is provided as a binocular version with 10× eyepieces with a field of view with a diameter of 23 mm
- The arm curved stand gives you a large working area as well as a precise adjustment mechanism
- A large selection of eyepieces as well as auxiliary objectives are available as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- Please find detailed information in the following model outfit list

Scope of application

 In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

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
- Incident illumination dimmable
- Tube 45° inclined
- Magnification ratio: 6,7:1
- Interpupillary distance $55-75\ mm$
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 320×275×420 mm
- Net weight approx. 4,5 kg

STANDARD



Model		Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination		
KERN			mm	Zoom				
OZL 456	Binocular	HSWF 10×/Ø 23 mm	Ø 33 – 5	0,75× - 5,0×	Arm curved	1 W LED (incident); 0,21 W LED (transmitted)		

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Eyepiece	Specifications - Objectives				
	Magnification	Standard			
		1,0×			
HWF 5×	Total magnification	3,75×-25×			
11001 3^	Field of view mm	Ø 31 – 4,6			
11014/5 40	Total magnification	7,5×-50×			
HSWF 10×	Field of view mm	Ø 33 - 5			
LIME 45 v	Total magnification	11,25×-75×			
HWF 15×	Field of view mm	Ø 24 – 4,2			
HSWF 20×	Total magnification	15× – 100×			
HSWF ZUX	Field of view mm	Ø 20 - 3,5			
104/5 05	Total magnification	18,75× - 125×			
HWF 25×	Field of view mm	Ø 15,8 - 2,4			
Working distance		113 mm			
Maximum sample height		45 mm			

Model outfit		Model KERN	Order number			
		OZL 456				
	HWF 5×/ø 23,2 mm	00	OZB-A4112			
	HSWF 10×/Ø 23 mm	√ √	OZB-A4118			
Eyepieces (30,0 mm)	HWF 15×/ø 15 mm	00	OZB-A4119			
(,,	HSWF 20×/Ø 14,5 mm	00	OZB-A4120			
	HWF 25×/Ø 11,7 mm	00	OZB-A4121			
Stand	Arm curved, with LED illumination (0,21 W transmitted + 1 W incident)	✓				
0	Frosted glass/Ø 95 mm	✓	OZB-A4805			
Stage plate	Black-white/ø 95 mm	✓	OZB-A4806			
Mechanical stage (Pre-assembling on request)	Stage size W×D 180×155 mm, Travel 75×55 mm, for transmitted and incident illumination	0	OZB-A4605			
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on the internet					

✓ = Included with delivery

O = Option



Pictograms



360° rotatable





Monocular Microscope

For the inspection with one eye



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



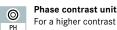
Fluorescence illumination

for compound microscopes USB 2.0 With 100W mercury lamp and filter



Fluorescence illumination for compound microscopes

With 3 W LED illumination and filter



Phase contrast unit



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 digital camera

For direct transmitting of the picture to a PC



USB 3.0 digital camera

For direct transmitting of the picture to a PC



WLAN data interface

For transmitting of the picture to a mobile display device



HDMI digital camera

For direct transmitting of the picture to a display



PC software

To transfer the measurements from 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 cf. 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.

Abbreviations

Adapter for the connection of a C-Mount

camera to a trinocular microscope

LWD Long Working Distance SWF Super Wide Field (Field number at

least Ø 23 mm for 10× eyepiece)

FPS Frames per second N.A. Numerical Aperture

Working Distance W.D.

H(S)WF High (Super) Wide Field (Eyepiece with SLR Single-Lens Reflex camera high eye point for wearers of glasses) camera

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

Your KERN specialist dealer:



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.