



## KERN OZL-46 Stereo Zoom Microscope Instruction Manual

[Home](#) » [KERN](#) » KERN OZL-46 Stereo Zoom Microscope Instruction Manual 



Stereo zoom microscope KERN OZL-46  
KERN OPTICS CATALOGUE 2022



OZL 464  
With standard stand



OZL 465  
With ring illumination



OZL 467  
With handle

### LAB LINE

The flexible, affordable all-rounder with zoom function for schools, training companies, inspection authorities and laboratories

## Contents

- [1 Features](#)
- [2 Scope of application](#)
- [3 Technical data](#)
- [4 STANDARD](#)
- [5 Pictograms](#)
- [6 Abbreviations](#)
- [7 Documents / Resources](#)
- [8 Related Posts](#)

## Features

- The products in the KERN OZL-46 series are stereo zoom microscopes, which will impress you with their quality, easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- The highlight of the OZL 465/OZL 466 is the strong, continuously dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- The zoom objective offers you continuous magnification from 7×–45×
- The KERN OZL-46 series is available as a binocular or trinocular version
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- With its integrated handle as well as its stable arm curved stand, the KERN OZL 467/ OZL 468 has been specially developed for schools and workshops
- A large selection of eyepieces, external illumination units 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
- 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

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

## Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

## Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution 50:50
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 300×240×420 mm
- Net weight approx. 4 kg

## STANDARD







Model	Standard configuration						
KERN	Tube	Eyepiece	Field of view m m	Objective Zoom	Stand	Illumination	
<b>OZL 46 3</b>	Binocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
<b>OZL 46 4</b>	Trinocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
<b>OZL 46 5</b>	Binocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
<b>OZL 46 6</b>	Trinocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
<b>OZL 46 7</b>	Binocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)	
<b>OZL 46 8</b>	Trinocular	HWF 10×/Ø 20 mm	Ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)	






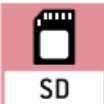








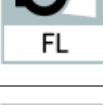


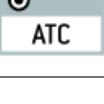











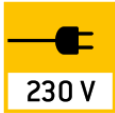
<b>Auxiliary objectives</b>	1,5×	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	OZB-A464 2	
	2,0×	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	OZB-A464 3	
	Soldering protection lens	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	OZB-A464 5	
<b>C-Mount</b>	1× (focus adjustable)		✓		✓		✓	OZB-A480 9	
	0,3× (focus adjustable)		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	OZB-A481 0	
	0,5× (focus adjustable)		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	OZB-A481 1	
<b>Eyepiece camera adapter</b>	1,0×; for fitting an eyepiece camera to the trinocular connection of the microscope		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	OZB-A486 3	
<b>Stand</b>	Pillar style, with 3 W-LED illumination (transmitted + incident)	✓	✓						
	Pillar style, with 3 W-LED illumination (transmitted)			✓	✓				
	Arm curved, incl. handle, with 3 W-LED illumination (transmitted + incident)					✓	✓		
<b>Ring illumination</b>	Integrated into the microscope head as incident illumination			✓	✓				
<b>Stage plate</b>	Frosted glass/Ø 95 mm	✓	✓	✓	✓	✓	✓	OZB-A467 0	
	Black-white/Ø 95 mm	✓	✓	✓	✓	✓	✓	OZB-A480 6	
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on the internet								

✓ = Included with delivery  
○ = Option

## Pictograms

	360° rotatable microscope head		Zoom magnification For stereomicroscopes
	Monocular Microscope For the inspection with one eye		Auto-focus For automatic control of the focus level

 BINO	Binocular Microscope For the inspection with both eyes	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 SCALE	Integrated scale In the eyepiece
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 SD	SD card For data storage
 HAL	Halogen illumination For pictures bright and rich in contrast	 USB 2.0	USB 2.0 digital camera For direct transmitting of the picture to a PC
 LED	LED illumination Cold, energy-saving and especially long-life illumination	 USB 3.0	USB 3.0 digital camera For direct transmitting of the picture to a PC
 IL	Incident illumination For non-transparent objects	 WIFI	WLAN data interface For transmitting of the picture to a mobile display device
 TL	Transmitting illumination For transparent objects	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device
 FL	Fluorescence illumination For stereomicroscopes	 SOFTWARE	PC software To transfer the measurements from the device to a PC
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 IP	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
 PH	Phase contrast unit For a higher contrast	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 POLAR	Polarising unit To polarise the light	 230 V	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.

	Infinity system Infinity corrected optical system		Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AU S or USA on request.
---	--	---	--



### Package 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)

## Your KERN specialist dealer:

### KERN & SOHN GmbH · Ziegelei 1

- 72336 Balingen · Germany
- Tel. +49 7433 9933 - 0
- [www.kern-sohn.com](http://www.kern-sohn.com)
- [info@kern-sohn.com](mailto:info@kern-sohn.com)

## Documents / Resources

	<p><b><a href="#">KERN OZL-46 Stereo Zoom Microscope</a></b> [pdf] Instruction Manual</p> <p>OZL-46 Stereo Zoom Microscope, OZL-46, Stereo Zoom Microscope, Zoom Microscope, Microscope</p>
---	---