

PROFESSIONAL MEASURING



**STEREO-  
MICROSCOPES**

# KERN Pictograms



**360° rotatable microscope head**



**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**  
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 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 device



**PC software**  
To transfer the measurements from the device to a PC.



**Automatic temperature compensation**  
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

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope
<b>FPS</b>	Frames per second
<b>H(S)WF</b>	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)
<b>LWD</b>	Long Working Distance
<b>N.A.</b>	Numerical Aperture

<b>SLR camera</b>	Single-Lens Reflex camera
<b>SWF</b>	Super Wide Field (Field number at least $\varnothing$ 23 mm for 10× eyepiece)
<b>W.D.</b>	Working Distance
<b>WF</b>	Wide Field (Field number up to $\varnothing$ 22 mm for 10× eyepiece)

# Why you should choose a KERN microscope now!

For 175 years, KERN & SOHN has been synonymous with high precision weighing and measuring technology. This claim is the driving force for the development of our microscope and refractometer ranges.

Thanks to consistent customer focus paired with smart ideas and the latest available technology we are proud to be suppliers of high-quality, durable top microscopes and refractometers, which help you to be as efficient as possible in your daily work.

When developing our microscopes we have concentrated on the very best optical quality and have used only high-quality glass and the latest technologies to achieve this. The high-quality Philips halogen and modern LED illumination produce razor-sharp images with high contrast and which will impress you with their brilliant true-colour display – you must have noticed this yourself.

## Your advantages:

- all mechanical parts have been designed for a long service life
- special attention has been given to the ergonomics of our microscopes, as this allows the user to work for several hours in a comfortable position which does not cause fatigue
- our microscopes are fully-equipped and can be used immediately
- Highlight for 2022: die KERN camera software – you will be amazed at how user-friendly and intuitive it is, a high-quality tablet camera as well as a comprehensive range of calibration services for refractometers
- and much more...

Use our practical “Check list for microscopes and refractometers”, which may help you to quickly determine specifications for the future instrument. Together with our KERN product specialist you can choose the right product for you.

If there is no suitable product in the standard range, for example, then we will of course configure an individual microscope for you.

Our aim is to develop a market-driven product solution, so with our microscope and refractometer range, the saying holds true: good quality at a competitive price! This is what we stand for and work towards, every day!

With our current 2022 product range you can benefit from improved quality and a clear reduction in price, which we have been able to achieve through more efficient production methods and increased global sales of our microscopes and refractometers and of course we pass this straight on to you

Do you have any questions about our range of microscopes and refractometers?

Your KERN customer consultants are available at any time to help you further.

I hope that you enjoy working efficiently with our KERN Optics products.



Albert Sauter, Managing Director

## Your advantages

### fast

- 24 hour dispatch service for products in stock – order today, on its way tomorrow
- Sales & service hotline from 8:00 am to 5:00 pm

### reliable

- Up to 3 years warranty
- Certified QM system  
DIN EN ISO 9001

### versatile

- One-stop shopping: from microscope through to refractometer – everything from one supplier
- Quick as a flash, find the product you want with the “Quick-Finder” at [www.kern-sohn.com](http://www.kern-sohn.com)



**Order hotline**  
+49 7433 9933-0



**E-mail order**  
[info@kern-sohn.com](mailto:info@kern-sohn.com)



**[www.kern-sohn.com](http://www.kern-sohn.com)**  
Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a microscopes and refractometers search engine.



**Service hotline**  
+49 7433 9933-199



**Our team of consultants will assist you**  
from Monday to Friday  
from 8:00 am to 5:00 pm



**Online shop**  
[www.kern-sohn.com](http://www.kern-sohn.com)



Side view

04

**EDUCATIONAL LINE**

Stereo microscope with robust, ergonomic design, ideal for workshops, schools and training

**Features**

- With its integrated handle as well as its stable arm curved stand, the KERN OSE OSE-42 has been specially developed for schools and workshops
- The incident and transmitted illumination unit included as standard can be optionally enabled for the very best illumination of your sample. Mobile use is also no problem due to the integrated battery compartment.
- Despite its low price it has very good optical characteristics, which enable you to have sharp images over a large field of view
- An turnable objective with predefined magnifications is available to make your working procedures quicker and more efficient
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- A special feature of this adaptable and yet robust microscope series is the stable mechanism of the microscope stand which can be adjusted precisely. It will also impress you with its functionality and ergonomic design
- A large selection of eyepieces as well as various additional external illumination units are available as accessories

**Scope of application**

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

**Applications/Samples**

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

**Technical data**

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 200×180×300 mm
- Net weight approx. 2 kg

STANDARD

Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
<b>KERN</b>							
<b>OSE 421</b>	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 1 W LED (transmitted)	<b>310,-</b>

# Stereomicroscope KERN OSE-42

Eyepiece	Specifications – Objectives		
	Magnification	2×	4×
WF 5×	Total magnification	10×	20×
	Field of view mm	∅ 10	∅ 5
WF 10×	Total magnification	20×	40×
	Field of view mm	∅ 10	∅ 5
WF 15×	Total magnification	30×	60×
	Field of view mm	∅ 7,5	∅ 3,7
WF 20×	Total magnification	40×	80×
	Field of view mm	∅ 6,5	∅ 3,2
<b>Working distance</b>		57 mm	57 mm

04

Model outfit		Model KERN	Order number	Price/piece excl. of VAT ex works €
		OSE 421		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101	40,-
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102	35,-
	WF 15×/∅ 15 mm	○ ○	OZB-A4103	35,-
	WF 20×/∅ 10 mm	○ ○	OZB-A4104	40,-
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	OZB-A4151	50,-
<b>Stand</b>	Arm curved, with 1 W LED illumination (transmitted + incident)	✓		
<b>Stage plate</b>	Frosted glass/∅ 59,5 mm	✓	OZB-A4815	25,-
	Black-white/∅ 59,5 mm	✓	OZB-A4816	25,-
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>			

✓ = Included with delivery

○ = Option



Stage plate black



Stage plate white

### EDUCATIONAL LINE

The practical and robust product for schools, training centres, the workshop and laboratory

#### Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSF-4G has been specially developed for schools and workshops
- The LED reflected and transmitted illumination included as standard guarantees the very best, continuously dimmable illumination of your sample
- As well as very good optical characteristics, its ergonomic working surface means that it offers the highest level of convenience in this class
- A turnable objective with three predefined magnifications is available to make your working procedures quicker and more effective
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort
- A large selection of eyepieces as well as various additional external illumination units 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

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

#### Applications/Samples

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

#### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 230×180×275 mm
- Net weight approx. 2,5 kg

#### STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
<b>KERN OSF 438</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/3×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	<b>410,-</b>
<b>OSF 439</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/4×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	<b>410,-</b>

# Stereomicroscope KERN OSF-4G

Eyepiece	Specifications – Objectives				
	Magnification	1×	2×	3×	4×
WF 5×	Total magnification	5×	10×	15×	20×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 10×	Total magnification	10×	20×	30×	40×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 15×	Total magnification	15×	30×	45×	60×
	Field of view mm	∅ 15	∅ 7,5	∅ 5	∅ 3,7
WF 20×	Total magnification	20×	40×	60×	80×
	Field of view mm	∅ 10	∅ 6,5	∅ 4,3	∅ 3,2
<b>Working distance</b>		57 mm	57 mm	57 mm	57 mm

04

Model outfit	Model KERN		Order number	Price/piece excl. of VAT ex works €	
	OSF 438	OSF 439			
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	○ ○	OZB-A4101	40,-
	WF 10×/∅ 20 mm	✓ ✓	✓ ✓	OZB-A4102	35,-
	WF 15×/∅ 15 mm	○ ○	○ ○	OZB-A4103	35,-
	WF 20×/∅ 10 mm	○ ○	○ ○	OZB-A4104	40,-
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	○	OZB-A4151	50,-
<b>Stand</b>	Arm curved, incl. handle, with LED illumination (0,35 W transmitted + 1 W incident)	✓	✓		
<b>Stage plate</b>	Frosted glass/∅ 59,5 mm	✓	✓	OZB-A4815	25,-
	Black-white/∅ 59,5 mm	✓	✓	OZB-A4816	25,-
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option



### LAB LINE

The affordable and flexible stereo zoom microscope for laboratories, inspection authorities and quality controls

#### Features

- The products in the KERN OZL-44 series are stereo zoom microscopes, which will impress you with their 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
- 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 gives you continuous magnification of 7,5× – 36×
- The OZL-44 series is available as a binocular version. The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- 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
- 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
- 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: 4,8:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×235×380 mm
- Net weight approx. 5 kg

#### STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZL 445</b>	Binocular	WF 10×/ø 20 mm	ø 26,7 – 5,6	0,75× – 3,6×	Pillar style	1 W LED (incident); 0,35 W LED (transmitted)	<b>550,-</b>



OZL 445		Specifications – Objectives				
Eyepiece	Magnification	Standard		Auxiliary objectives		
		1,0×	0,5×	0,75×	1,5×	2,0×
WF 5×	Total magnification	3,75× – 18×	1,875× – 9×	2,81× – 13,5×	5,625× – 27×	7,5× – 36×
	Field of view mm	∅ 26 – 6	∅ 60 – 13	∅ 32 – 7	∅ 16 – 4	∅ 12,5 – 3
WF 10×	Total magnification	7,5× – 36×	3,75× – 18×	5,625× – 27×	11,25× – 54×	15× – 72×
	Field of view mm	∅ 26,7 – 5,6	∅ 53,3 – 11,1	∅ 35,5 – 7,4	∅ 17,8 – 3,7	∅ 13,3 – 2,8
WF 15×	Total magnification	11,25× – 54×	5,625× – 27×	8,44× – 40,5×	16,875× – 81×	22,5× – 108×
	Field of view mm	∅ 19 – 4,5	∅ 43 – 9,5	∅ 24 – 5,5	∅ 12 – 3	∅ 9,5 – 2
WF 20×	Total magnification	15× – 72×	7,5× – 36×	56,25× – 54×	22,5× – 108×	30× – 144×
	Field of view mm	∅ 12,5 – 3	∅ 28 – 6	∅ 16 – 3,5	∅ 8 – 2	∅ 6 – 1,5
<b>Working distance</b>		86 mm	178 mm	96 mm	42,5 mm	25,5 mm
<b>Maximum sample height</b>		100 mm	10 mm	60 mm	120 mm	135 mm

Model outfit		Model KERN	Order number	Price/piece excl. of VAT ex works €
		OZL 445		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101	40,-
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102	35,-
	WF 15×/∅ 15 mm	○ ○	OZB-A4103	35,-
	WF 20×/∅ 10 mm	○ ○	OZB-A4104	40,-
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	OZB-A4151	50,-
Auxiliary objectives	0,5×	○	OZB-A4201	85,-
	0,75×	○	OZB-A4202	85,-
	1,5×	○	OZB-A4204	85,-
	2,0×	○	OZB-A4205	90,-
	Soldering protection lens	○	OZB-A4251	25,-
Stand	Pillar style, with LED illumination (0,35 W transmitted + 1 W incident)	✓		
Stage plate	Frosted glass/∅ 95 mm	✓	OZB-A4805	25,-
	Black-white/∅ 95 mm	✓	OZB-A4806	25,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>			

✓ = Included with delivery

○ = Option

04



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

**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 OZL 464/466/468: 100:0
- 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						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>OZL 463</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>600,-</b>
<b>OZL 464</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>670,-</b>
<b>OZL 465</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>640,-</b>
<b>OZL 466</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>690,-</b>
<b>OZL 467</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>600,-</b>
<b>OZL 468</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>660,-</b>

Eyepiece	Specifications - Objectives					
	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2,0×
HSWF 10×	Total magnification	7× - 45×	3,5× - 22,5×	5,3× - 33,8×	10,5× - 67,5×	14× - 90×
	Field of view mm	∅ 28,6 - 4,4	∅ 57,1 - 8,9	∅ 38,1 - 5,9	∅ 19 - 3	∅ 14,3 - 2,2
HWF 15×	Total magnification	10,5× - 67,5×	5,3× - 33,8×	7,9× - 50,6×	15,5× - 101,3×	21× - 135×
	Field of view mm	∅ 21,4 - 3,3	∅ 42,9 - 6,7	∅ 28,5 - 4,4	∅ 14,3 - 2,2	∅ 10,7 - 1,7
HSWF 20×	Total magnification	14× - 90×	7× - 45×	10,5× - 67,5×	21× - 135×	28× - 180×
	Field of view mm	∅ 14,3 - 2,2	∅ 28,6 - 4,4	∅ 19,1 - 2,9	∅ 9,5 - 1,5	∅ 7,1 - 1,1
HWF 25×	Total magnification	17,5× - 112,5×	8,8× - 56,3×	13,1× - 91,9×	26,3× - 168,8×	35× - 225×
	Field of view mm	∅ 12,9 - 2,0	∅ 25,7 - 4,0	∅ 17,2 - 2,7	∅ 8,6 - 1,3	∅ 6,4 - 1,0
<b>Working distance</b>		105 mm	177 mm	120 mm	47 mm	26 mm
<b>Maximum sample height</b>		140 mm	35 mm	80 mm	165 mm	185 mm

Model outfit	Model KERN						Order number	Price/piece excl. of VAT ex works €	
	OZL 463	OZL 464	OZL 465	OZL 466	OZL 467	OZL 468			
Eyepieces (30,0 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OZB-A4631	45,-
	HSWF 15×/∅ 15 mm	○	○	○	○	○	○	OZB-A4632	55,-
	HWF 20×/∅ 10 mm	○	○	○	○	○	○	OZB-A4633	55,-
	HSWF 25×/∅ 9 mm	○	○	○	○	○	○	OZB-A4634	60,-
Auxiliary objectives	0,5×	○	○			○	○	OZB-A4641	90,-
	0,75×	○	○			○	○	OZB-A4644	90,-
	1,5×	○	○			○	○	OZB-A4642	90,-
	2,0×	○	○			○	○	OZB-A4643	90,-
	Soldering protection lens	○	○			○	○	OZB-A4645	40,-
C-Mount	1× (focus adjustable)		✓		✓		✓	OZB-A4809	55,-
	0,3× (focus adjustable)		○		○		○	OZB-A4810	95,-
	0,5× (focus adjustable)		○		○		○	OZB-A4811	105,-
Eyepiece camera adapter	1,0×; for fitting an eyepiece camera to the trinocular connection of the microscope		○		○		○	OZB-A4863	40,-
Stand	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)					✓	✓		
Ring illumination	Integrated into the microscope head as incident illumination			✓	✓				
Stage plate	Frosted glass/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4670	25,-
	Black-white/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4806	25,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>								

✓ = Included with delivery

○ = Option

NEW



OZL 473

## LAB LINE

The flexible, affordable all-rounder with flexible incident light for training companies, inspection authorities and laboratories

## Features

- The KERN OZL-47 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and high level of ergonomic working comfort
- A highlight is the powerful and continuously dimmable integrated LED double gooseneck illumination (incident light), which ensures an individually and quickly adjustable illumination.
- 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 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
- 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
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution OZL 474: 100:0
- 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						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZL 473</b>	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident)	<b>840,-</b>
<b>OZL 474</b>	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident)	<b>930,-</b>

# Stereo zoom microscope KERN OZL-47

Eyepiece	Magnification	Specifications – Objectives				
		Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	5,3× – 33,8×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 28,6 – 4,4	∅ 57,1 – 8,9	∅ 38,1 – 5,9	∅ 19 – 3	∅ 14,3 – 2,2
HWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,9× – 50,6×	15,5× – 101,3×	21× – 135×
	Field of view mm	∅ 21,4 – 3,3	∅ 42,9 – 6,7	∅ 28,5 – 4,4	∅ 14,3 – 2,2	∅ 10,7 – 1,7
HSWF 20×	Total magnification	14× – 90×	7× – 45×	10,5× – 67,5×	21× – 135×	28× – 180×
	Field of view mm	∅ 14,3 – 2,2	∅ 28,6 – 4,4	∅ 19,1 – 2,9	∅ 9,5 – 1,5	∅ 7,1 – 1,1
HWF 25×	Total magnification	17,5× – 122,5×	8,8× – 56,3×	13,1× – 91,9×	26,3× – 168,8×	35× – 225×
	Field of view mm	∅ 12,9 – 2	∅ 25,7 – 4	∅ 17,2 – 2,7	∅ 8,6 – 1,3	∅ 6,4 – 1
<b>Working distance</b>		105 mm	177 mm	120 mm	47 mm	26 mm
<b>Maximum sample height</b>		140 mm	35 mm	80 mm	165 mm	185 mm

04

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OZL 473	OZL 474		
Eyepieces (30,0 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	OZB-A4631	45,-
	HSWF 15×/∅ 15 mm	○ ○	○ ○	OZB-A4632	55,-
	HWF 20×/∅ 10 mm	○ ○	○ ○	OZB-A4633	55,-
	HSWF 25×/∅ 9 mm	○ ○	○ ○	OZB-A4634	60,-
Auxiliary objectives	0,5×	○	○	OZB-A4641	90,-
	0,75×	○	○	OZB-A4644	90,-
	1,5×	○	○	OZB-A4642	90,-
	2,0×	○	○	OZB-A4643	90,-
	Soldering protection lens	○	○	OZB-A4645	40,-
C-Mount	1× (focus adjustable)		○	OZB-A4809	55,-
	0,3× (focus adjustable)		○	OZB-A4810	95,-
	0,5× (focus adjustable)		○	OZB-A4811	105,-
Eyepiece camera adapter	1,0×; for fitting an eyepiece camera to the trinocular connection of the microscope	○	○	OZB-A4863	40,-
Stand	Pillar style, with 3 W-LED illumination (incident)	✓	✓		
Stage plate	Black-white/∅ 95 mm	✓	✓	OZB-A4806	25,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option

**LAB LINE**

Stereo zoom microscope with or without halogen illumination, for the laboratory, training centres, quality control or agriculture

**Features**

- The KERN OZL-45 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and high level of ergonomic working comfort
- The Halogen incident and transmitted illumination included as standard guarantees the very best illumination of your sample
- The high-quality optics, together with a large working surface offers the highest level of comfort for your applications
- The zoom objective offers you continuous magnification from 7,5×–50×
- The KERN OZL-45 series is available as a binocular 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
- 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
- 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

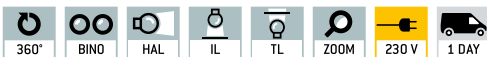
**Applications/Samples**

- 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
- Tube 45° inclined
- Magnification ratio: 6,7:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×270×460 mm
- Net weight approx. 5 kg

## STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZL 45 1</b>	Binocular	HSWF 10×/ø 23 mm	ø 33 – 5	0,75× – 5,0×	Pillar style	10 W Halogen (incident) 10 W Halogen (transmitted)	<b>760,-</b>

# Stereo zoom microscope KERN OZL-45

Eyepiece	Specifications – Objectives				
	Magnification	Standard		Auxiliary objectives	
		1,0×	0,5×	0,75×	2,0×
HWF 5×	Total magnification	3,75× – 25×	1,875× – 12,5×	2,813× – 18,75×	7,5× – 50×
	Field of view mm	∅ 31 – 4,6	∅ 61,3 – 9,2	∅ 41,3 – 6,1	∅ 16 – 2,5
HSWF 10×	Total magnification	7,5× – 50×	3,75× – 25×	5,625× – 37,5×	15× – 100×
	Field of view mm	∅ 33 – 5	∅ 65 – 10	∅ 44 – 6,7	∅ 16 – 2,5
HWF 15×	Total magnification	11,25× – 75×	5,625× – 37,5×	8,438× – 56,25×	22,5× – 150×
	Field of view mm	∅ 24 – 4,2	∅ 48 – 8,5	∅ 32 – 5,6	∅ 12 – 2
HSWF 20×	Total magnification	15× – 100×	7,5× – 50×	11,25× – 75×	30× – 200×
	Field of view mm	∅ 20 – 3,5	∅ 40 – 7	∅ 26,7 – 4,7	∅ 10 – 1,8
HWF 25×	Total magnification	18,75× – 125×	9,375× – 62,5×	14,063× – 93,75×	37,5× – 255×
	Field of view mm	∅ 15,8 – 2,4	∅ 31,5 – 4,8	∅ 24,1 – 3,2	∅ 7,9 – 1,2
<b>Working distance</b>		113 mm	177 mm	117 mm	35 mm
<b>Maximum sample height</b>		120 mm	60 mm	90 mm	165 mm

04

Model outfit	Model KERN		Order number	Price/piece excl. of VAT ex works €
	OZL 451			
Eyepieces (30,0 mm)	HWF 5×/∅ 23,2 mm	○ ○	OZB-A4112	45,-
	HSWF 10×/∅ 23 mm	✓ ✓	OZB-A4118	45,-
	HWF 15×/∅ 15 mm	○ ○	OZB-A4119	45,-
	HSWF 20×/∅ 14,5 mm	○ ○	OZB-A4120	70,-
	HWF 25×/∅ 11,7 mm	○ ○	OZB-A4121	70,-
Auxiliary objectives	0,5×	○	OZB-A4209	135,-
	0,75×	○	OZB-A4210	135,-
	2,0×	○	OZB-A4206	130,-
Stand	Pillar style, with 12 V/ 10 W Halogen Illumination (transmitted + incident)	✓		
Stage plate	Frosted glass/∅ 95 mm	✓	OZB-A4805	25,-
	Black-white/∅ 95 mm	✓	OZB-A4806	25,-
Illumination	10 W spare bulb (transmitted + incident)	✓	OZB-A4804	25,-
Mechanical stage (Pre-assembling on request)	Stage size W×D 180×155 mm, Travel 75×55 mm, for transmitted and incident illumination	○	OZB-A4605	260,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>			

✓ = Included with delivery

○ = Option





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, continuously 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×
- 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-dimensional 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						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZL 456</b>	Binocular	HSWF 10×/ø 23 mm	ø 33 – 5	0,75× – 5,0×	Arm curved	1 W LED (incident); 0,21 W LED (transmitted)	<b>870,-</b>



# Stereo zoom microscope KERN OZL-45R

Eyepiece	Specifications – Objectives	
	Magnification	Standard 1,0×
HWF 5×	Total magnification	3,75× – 25×
	Field of view mm	∅ 31 – 4,6
HSWF 10×	Total magnification	7,5× – 50×
	Field of view mm	∅ 33 – 5
HWF 15×	Total magnification	11,25× – 75×
	Field of view mm	∅ 24 – 4,2
HSWF 20×	Total magnification	15× – 100×
	Field of view mm	∅ 20 – 3,5
HWF 25×	Total magnification	18,75× – 125×
	Field of view mm	∅ 15,8 – 2,4
<b>Working distance</b>		113 mm
<b>Maximum sample height</b>		45 mm

04

Model outfit	Model KERN	Order number	Price/piece excl. of VAT ex works €
	OZL 456		
<b>Eyepieces</b> (30,0 mm)	HWF 5×/∅ 23,2 mm	○ ○	OZB-A4112 45,-
	HSWF 10×/∅ 23 mm	✓ ✓	OZB-A4118 45,-
	HWF 15×/∅ 15 mm	○ ○	OZB-A4119 45,-
	HSWF 20×/∅ 14,5 mm	○ ○	OZB-A4120 70,-
	HWF 25×/∅ 11,7 mm	○ ○	OZB-A4121 70,-
<b>Stand</b>	Arm curved, with LED illumination (0,21 W transmitted + 1 W incident)	✓	
<b>Stage plate</b>	Frosted glass/∅ 95 mm	✓	OZB-A4805 25,-
	Black-white/∅ 95 mm	✓	OZB-A4806 25,-
<b>Mechanical stage</b> (Pre-assembling on request)	Stage size W×D 180×155 mm, Travel 75×55 mm, for transmitted and incident illumination	○	OZB-A4605 260,-
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>		

✓ = Included with delivery

○ = Option



## LAB LINE

First-class optics and strong illumination combined with a high level of flexibility

### Features

- The KERN OZM series is a range of excellent stereo zoom microscopes with above-average optical features
- The ergonomic shape allows a simple, effortless working over a period of several hours
- The extraordinarily strong and continuously dimmable 3 W LED reflected and transmitted illumination ensures a flexible and particularly good level of illumination for your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM provides sharp, high-contrast, colour-true images
- The zoom objective gives you continuous magnification from 7,5×–45×
- 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

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

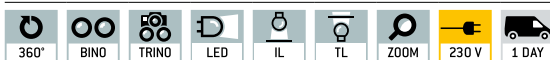
### Applications/Samples

- 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 OZM 543/544: 100:0
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H  
330×285×440 mm
- Net weight approx. 4,5 kg

#### STANDARD



#### OPTION



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZM 542</b>	Binocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>1390,-</b>
<b>OZM 544</b>	Trinocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>1730,-</b>

# Stereo zoom microscope KERN OZM-5

Eyepiece	Specifications - Objectives					
	Magnification	Auxiliary objectives				
		Standard 1,0×	0,5×	0,7×	1,5×	2×
HSWF 10×	Total magnification	7× - 45×	3,5× - 22,5×	4,9× - 31,5×	10,5× - 67,5×	14× - 90×
	Field of view mm	∅ 32,8 - 5,1	∅ 65,7 - 10,2	∅ 46,9 - 7,3	∅ 21,9 - 3,4	∅ 16,4 - 2,6
SWF 15×	Total magnification	10,5× - 67,5×	5,3× - 33,8×	7,4× - 47,2×	15,8× - 101,3×	21× - 135×
	Field of view mm	∅ 24,3 - 3,8	∅ 48,6 - 7,6	∅ 34,7 - 5,4	∅ 16,2 - 2,5	∅ 12,1 - 1,9
SWF 20×	Total magnification	14× - 90×	7× - 45×	9,8× - 63×	21× - 135×	28× - 180×
	Field of view mm	∅ 20 - 3,1	∅ 40 - 6,2	∅ 28,6 - 4,4	∅ 13,3 - 2,1	∅ 10 - 1,6
SWF 30×	Total magnification	21× - 135×	10,5× - 67,5×	14,7× - 94,5×	31,5× - 202,5×	42× - 270×
	Field of view mm	∅ 12,9 - 2	∅ 25,7 - 4	∅ 18,4 - 2,9	∅ 8,6 - 1,6	∅ 6,4 - 1
<b>Working distance</b>		110 mm	195 mm	145 mm	50 mm	35 mm
<b>Maximum sample height</b>		130 mm	30 mm	65 mm	160 mm	175 mm

Model outfit	Model KERN		Order number	Price/piece excl. of VAT ex works €	
	OZM 542	OZM 544			
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	OZB-A5503	70,-
	SWF 15×/∅ 17 mm	○○	○○	OZB-A5504	75,-
	SWF 20×/∅ 14 mm	○○	○○	OZB-A5505	85,-
	SWF 30×/∅ 9 mm	○○	○○	OZB-A5506	120,-
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	OZB-A5512	125,-
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	OZB-A5513	140,-
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	OZB-A5514	140,-
Achromatic auxiliary objectives	0,5×	○	○	OZB-A5612	160,-
	0,7×	○	○	OZB-A5613	160,-
	1,5×	○	○	OZB-A5615	155,-
	2,0×	○	○	OZB-A5616	160,-
	Soldering protection lens	○	○	OZB-A5614	50,-
C-Mount	0,3× (focus adjustable)		○	OZB-A5701	140,-
	0,5× (focus adjustable)		○	OZB-A5702	140,-
	1,0× (focus adjustable)		○	OZB-A5703	105,-
	1,0× (with micrometer) only in combination with OZB-A5703		○	OZB-A5704	295,-
	for SLR cameras (Nikon)		○	OZB-A5706	295,-
	for SLR cameras (Olympus)		○	OZB-A5707	295,-
	for SLR cameras (Canon)		○	OZB-A5708	295,-
Darkfield unit	Darkfield unit	○	○	OZB-A4601	80,-
Object clamp	Object clamp	○	○	OBB-A6205	75,-
Stand	Pillar style, without illumination				
	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓		
	Please find more stands in the catalogue on page 80 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				
Stage plate	Frosted glass/∅ 94,5 mm	✓	✓	OZB-A5192	25,-
	Black-white/∅ 94,5 mm	✓	✓	OZB-A5191	25,-
	Clear glass/∅ 94,5 mm	○	○	OZB-A5190	25,-
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for transmitted and incident illumination	○	○	OZB-A5781	240,-
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	OZB-A5782	270,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option



## 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 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-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: 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

#### STANDARD



#### OPTION



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZP 556</b>	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)	<b>1530,-</b>
<b>OZP 558</b>	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)	<b>1880,-</b>

Stereo zoom microscope KERN OZP-5

Eyepiece	Specifications – Objectives					
	Magnification	Standard 1,0×	Auxiliary objectives			
			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	∅ 38,3 – 4,2	∅ 76,7 – 8,4	∅ 54,8 – 6	∅ 25,6 – 2,8	∅ 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	∅ 28,3 – 3,1	∅ 56,7 – 6,2	∅ 40,5 – 4,4	∅ 18,9 – 2,1	∅ 14,2 – 1,5
SWF 20×	Total magnification	12× – 110×	6× – 55×	8,4× – 77×	18× – 165×	24× – 220×
	Field of view mm	∅ 23,3 – 2,5	∅ 46,7 – 5,1	∅ 33,3 – 3,6	∅ 15,6 – 1,7	∅ 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	∅ 15 – 1,6	∅ 30 – 3,3	∅ 21,4 – 2,3	∅ 10 – 1,1	∅ 7,5 – 0,8
<b>Working distance</b>		108 mm	195 mm	145 mm	50 mm	35 mm
<b>Maximum sample height</b>		110 mm	10 mm	45 mm	140 mm	150 mm

Model outfit	Model KERN		Order number	Price/piece excl. of VAT ex works €	
	OZP 556	OZP 558			
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	OZB-A5503	70,-
	SWF 15×/∅ 17 mm	○○	○○	OZB-A5504	75,-
	SWF 20×/∅ 14 mm	○○	○○	OZB-A5505	85,-
	SWF 30×/∅ 9 mm	○○	○○	OZB-A5506	120,-
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	OZB-A5512	125,-
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	OZB-A5513	140,-
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	OZB-A5514	140,-
Achromatic auxiliary objectives	0,5×	○	○	OZB-A5612	160,-
	0,7×	○	○	OZB-A5613	160,-
	1,5×	○	○	OZB-A5615	160,-
	2,0×	○	○	OZB-A5616	165,-
	Soldering protection lens	○	○	OZB-A5614	50,-
C-Mount	0,3× (focus adjustable)		○	OZB-A5701	140,-
	0,5× (focus adjustable)		○	OZB-A5702	140,-
	1,0× (focus adjustable)		○	OZB-A5703	165,-
	1,0× (with micrometer) only in combination with OZB-A5703		○	OZB-A5704	295,-
	for SLR cameras (Nikon)		○	OZB-A5706	295,-
	for SLR cameras (Olympus)		○	OZB-A5707	295,-
	for SLR cameras (Canon)		○	OZB-A5708	295,-
Darkfield unit	Darkfield unit	○	○	OZB-A4601	80,-
Object clamp	Object clamp	○	○	OBB-A6205	75,-
Stand	Pillar style, without illumination				
	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓		
	Please find more stands in the catalogue on page 80 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				
Stage plate	Frosted glass/∅ 94,5 mm		✓	OZB-A5192	25,-
	Black-white/∅ 94,5 mm	✓	✓	OZB-A5191	25,-
	Clear glass/∅ 94,5 mm		○	OZB-A5190	25,-
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	○	○	OZB-A5781	240,-
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	OZB-A5782	270,-
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option



## PROFESSIONAL LINE

Professional stereo zoom microscope with parallel optics for excellent images, depth of field, contrast and fatigue-free working

### Features

- The KERN OZS series is a special, high-quality stereo zoom microscope with parallel optics for demanding analyses
- The KERN OZS 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
- The parallel optical system is a high-quality optical system and provides excellent images with the best contrast, colour and depth of field with fatigue-free working. Refocusing is also only necessary in very few cases when magnifying the zoom
- The continuously adjustable magnification range from 8 to 50 times magnification means that you can work quickly and effectively
- As standard, the models of the KERN OZS series are trinocular and are therefore equipped 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

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

### 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: Parallel optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 10:1
- Light distribution 100:0
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 305×300×540 mm
- Net weight approx. 5,5 kg

STANDARD



OPTION



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZS 574</b>	Trinocular	HWF 10×/∅ 22 mm	∅ 27,5–2,75	0,8×–8×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>3640,-</b>

# Stereo zoom microscope KERN OZS-5

Eyepiece	Specifications - Objectives				
	Magnification	Standard Plan 1,0×	Achr. objective 0,5×	Achr. objective 0,7×	Achr. objective 1,5× (Auxiliary)
HWF 10×	Total magnification	8× - 80×	4× - 40×	5,6× - 56×	12× - 120×
	Field of view mm	∅ 27,5 - 2,75	∅ 55 - 5,5	∅ 39,3 - 3,93	∅ 18,33 - 1,83
SWF 15×	Total magnification	12× - 120×	6× - 60×	8,4× - 84×	18× - 180×
	Field of view mm	∅ 21,25 - 2,13	∅ 42,5 - 4,25	∅ 30,36 - 3,04	∅ 14,17 - 1,42
SWF 20×	Total magnification	16× - 160×	8× - 80×	11,2× - 112×	24× - 240×
	Field of view mm	∅ 17,5 - 1,75	∅ 35 - 3,5	∅ 25 - 2,5	∅ 11,67 - 1,17
SWF 30×	Total magnification	24× - 240×	12× - 120×	16,8× - 168×	36× - 360×
	Field of view mm	∅ 11,25 - 1,13	∅ 22,5 - 2,25	∅ 16,1 - 1,61	∅ 7,5 - 0,75
<b>Working distance</b>	91 mm	186 mm	135 mm	40 mm	
<b>Maximum sample height</b>	100 mm	30 mm	80 mm	125 mm	

Model outfit	Model KERN		Order number	Price/piece excl. of VAT ex works €
	OZS	574		
Eyepieces (30,0 mm)	HWF 10×/∅ 22 mm	✓✓	OZB-A5502	75,-
	SWF 15×/∅ 17 mm	○ ○	OZB-A5504	75,-
	SWF 20×/∅ 14 mm	○ ○	OZB-A5505	85,-
	SWF 30×/∅ 9 mm	○ ○	OZB-A5506	120,-
	HWF 10×/∅ 22 mm (reticule 0,1 mm)	○	OZB-A5511	130,-
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	OZB-A5513	140,-
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	OZB-A5514	140,-
<b>Plan achromatic objective</b>	1,0×	✓	OZB-A5603	640,-
<b>Achromatic objectives</b>	0,5×	○	OZB-A5601	230,-
	0,7×	○	OZB-A5602	230,-
	1,5× Only in combination with OZB-A5603	○	OZB-A5604	300,-
<b>Trinocular beamsplitter</b>	Division 100:0	✓	OZB-A5401	660,-
	Division 50:50	○	OZB-A5402	660,-
<b>C-Mount</b>	0,3× (focus adjustable)	○	OZB-A5701	140,-
	0,5× (focus adjustable)	○	OZB-A5702	140,-
	1,0× (focus adjustable)	○	OZB-A5703	105,-
	1,0× (with micrometer) only in combination with OZB-A5703	○	OZB-A5704	295,-
	for SLR cameras (Nikon)	○	OZB-A5706	295,-
	for SLR cameras (Olympus)	○	OZB-A5707	295,-
	for SLR cameras (Canon)	○	OZB-A5708	295,-
<b>Darkfield unit</b>	Darkfield unit	○	OZB-A4601	80,-
<b>Object clamp</b>	Object clamp	○	OBB-A6205	75,-
<b>Stand</b>	Pillar style, with 3 W LED illumination (transmitted + incident)	✓		
<b>Stage plate</b>	Frosted glass/∅ 94,5 mm	✓	OZB-A5192	25,-
	Black-white/∅ 94,5 mm	✓	OZB-A5191	25,-
	Clear glass/∅ 94,5 mm	○	OZB-A5190	25,-
<b>Mechanical stage</b> (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	○	OZB-A5781	240,-
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	OZB-A5782	270,-
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>			

✓ = Included with delivery

○ = Option





Plug in for power supply

04

**PROFESSIONAL LINE**

The coaxial with parallel optics for excellent contrast and depth of field

**Features**

- The KERN OZC has been developed specially to meet requirements for high contrast and depth of field. These devices are absolutely essential for the LCD/LED electronics industry
- The coaxial 2 W LED reflected illumination which is integrated into the objective guarantees selective depth of focus, so that even low-lying sections can be recorded (e.g. the bottom of a drilled hole)
- The parallel optics is a high-quality optical system and provides excellent images with the best contrast, colour and depth of field with fatigue-free working. Refocusing is also only necessary in very few cases when magnifying the zoom
- The large, adjustable magnification range from 18 to 65 times gives you continuous zoom when you are working
- As standard, the KERN OZC is trinocular and is therefore equipped for connecting a camera for documentation purposes and for quality reports
- The arm curved stand ensures precise adjustment and focusing of your sample. The stand base is particularly heavy and therefore offers a high level of stability and an extremely secure footing
- A large selection of eyepieces and a mechanical stage extension 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. You can select this adapter from the following model outfit list
- Please find detailed information in the following model outfit list

**Scope of application**

- LCD/LED electronics, semiconductor technology

**Applications/Samples**

- Samples with focus on three-dimensional impression (depth, thickness), zoom for variable magnification, e.g. LCD/LED electronics, circuit boards, ICs

**Technical data**

- Optical system: Parallel optics
- Brightness adjustable
- Tube 45° inclined
- Magnification ratio: 3,6:1
- Light distribution 100:0
- Interpupillary distance 52 - 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 305×180×405 mm
- Net weight approx. 6,6 kg.

STANDARD



OPTION



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZC 583</b>	Trinocular	HSWF 10×/ø 23 mm	ø 12,78 - 3,5	1,8× - 6,5×	Arm curved	2 W LED (coaxial incident)	<b>900,-</b>

ONLY WHILE STOCKS LAST



# Coaxial microscope KERN OZC-5

Eyepiece	Specifications - Objectives	
	Magnification	Standard 1,0×
HWF 10×	Total magnification	18× - 65×
	Field of view mm	∅ 12,78 - 3,5
SWF 15×	Total magnification	27× - 97,5×
	Field of view mm	∅ 9,5 - 2,6
SWF 20×	Total magnification	36× - 130×
	Field of view mm	∅ 7,78 - 2,2
SWF 30×	Total magnification	54× - 195×
	Field of view mm	∅ 5 - 1,4
<b>Working distance</b>		92 mm
<b>Maximum sample height</b>		35 mm

04

Model outfit	Model KERN	Order number	Price/piece excl. of VAT ex works €	
	OZC 583			
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	OZB-A5503	70,-
	SWF 15×/∅ 17 mm	○○	OZB-A5504	75,-
	SWF 20×/∅ 14 mm	○○	OZB-A5505	85,-
	SWF 30×/∅ 9 mm	○○	OZB-A5506	120,-
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	OZB-A5512	125,-
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	OZB-A5513	140,-
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	OZB-A5514	140,-
C-Mount	0,3× (focus adjustable)	○	OZB-A5701	140,-
	0,5× (focus adjustable)	○	OZB-A5702	140,-
	1,0× (focus adjustable)	○	OZB-A5703	105,-
	1,0× (with micrometer) only in combination with OZB-A5703	○	OZB-A5704	295,-
	for SLR cameras (Nikon)	○	OZB-A5706	295,-
	for SLR cameras (Olympus)	○	OZB-A5707	295,-
	for SLR cameras (Canon)	○	OZB-A5708	295,-
Stand	Arm curved, without illumination	✓		
External illumination	Please find the information about external illumination units in the catalogue on page 83 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>			

✓ = Included with delivery

○ = Option



Side view

04

**LAB LINE**

The specialist for jewellers and the gem industry

**Features**

- The KERN OZG series has been specially developed for jewellers and mineral observations in the gem industry. Precious stones and gems can be checked and handled with this stereo zoom microscope
- You have a choice of a strong halogen transmitted illumination unit as well as halogen reflected and transmitted illumination variants, each with an additional frontal illumination
- As well as very good optical characteristics, this model forms an ideal package with its dark field unit with object clamp which is included in the scope of delivery
- The KERN OZG 493 is fitted with a pole stand which has both integrated bright halogen light units with incident and transmitted illumination, as well as additional front lighting
- 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**

- Jewellers and gem industry

**Applications/Samples**

- Samples with focus on three-dimensional impression (depth, thickness), zoom for variable magnification, special stand for processing workpieces e.g. gems, components, precious stones

**Technical data**

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Magnification ratio: 5,1:1
- Overall dimensions W×D×H 310×170×350 mm
- Net weight approx. 5 kg

STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZG 493</b>	Binocular	WF 10×/ø 20 mm	ø 26,7 – 5,6	0,7× – 3,6×	Pillar style	10 W Halogen (incident) 10 W Halogen (transmitted) 10 W Fluorescence (front illumination)	<b>610,-</b>

# Gem microscope KERN OZG-4

OZG 493 Specifications – Objectives		
Eyepiece	Magnification	Standard 1,0×
WF 5×	Total magnification	3,75× – 18×
	Field of view mm	∅ 26 – 6
WF 10×	Total magnification	7,5× – 36×
	Field of view mm	∅ 26,7 – 5,6
WF 15×	Total magnification	11,25× – 54×
	Field of view mm	∅ 19 – 4,5
WF 20×	Total magnification	15× – 72×
	Field of view mm	∅ 12,5 – 3
<b>Working distance</b>		86 mm

04

Model outfit	Model KERN OZG 493	Order number	Price/piece excl. of VAT ex works €
<b>Eyepieces</b> (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101 40,-
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102 35,-
	WF 15×/∅ 15 mm	○ ○	OZB-A4103 35,-
	WF 20×/∅ 10 mm	○ ○	OZB-A4104 40,-
<b>Darkfield unit</b>	Darkfield unit	✓	OZB-A4601 80,-
<b>Object clamp</b>	Object clamp (steel wire)	✓	OZB-A4604 35,-
<b>Stand</b>	Pillar style, with 12 V/ 10 W Halogen (transmitted + incident) and 10 W Fluorescent illumination (front)	✓	
<b>Stage plate</b>	Frosted glass/∅ 95 mm	✓	OZB-A4805 25,-
	Black-white/∅ 95 mm	✓	OZB-A4806 25,-
<b>Illumination</b>	10 W spare bulb (transmitted + incident)	✓	OZB-A4804 25,-

✓ = Included with delivery      ○ = Option

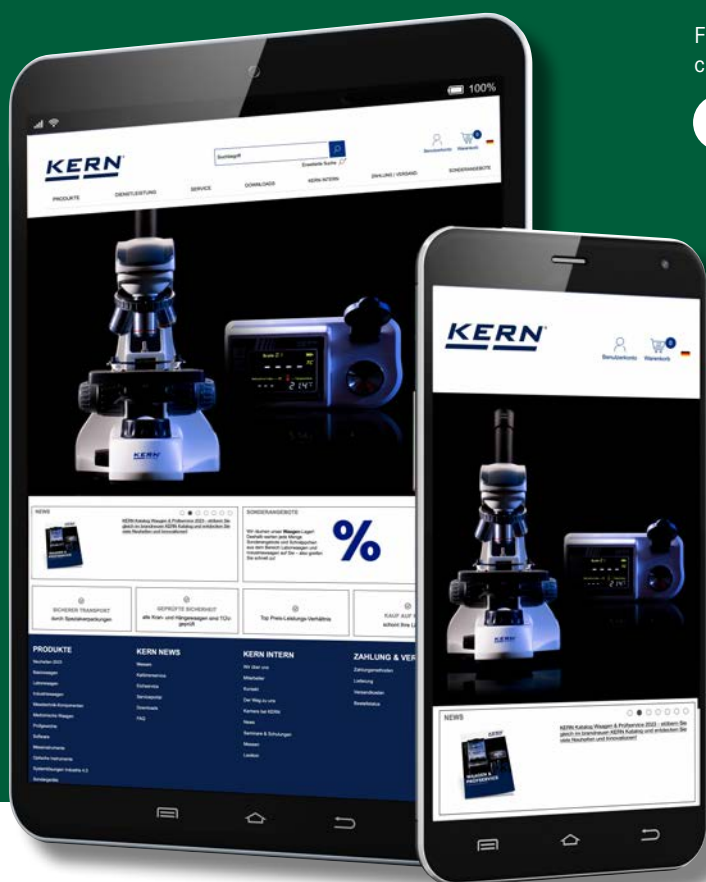
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KERN & SOHN GmbH  
Balances, Test weights, Microscopes,  
DAkKS calibration laboratory  
Ziegelei 1  
72336 Balingen  
Germany  
Tel. +49 7433 9933-0  
info@kern-sohn.com



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