



#### LAB LINE

# The high-quality model for flexible and professional users

## Features

- The KERN OZO-5 models are very robust and easy to use stereo microscopes with a zoom function operable from both sides for an above-average enlargement range.
- Their qualities, the flexible pillar stand and the optional integral, powerful and long-life LED incident and transmitted illumination make these models especially flexible.
- On all models it is possible to adjust the diopter on both tubes.
- · A trinocular model version, allowing a camera to be fitted, is also available.
- · These models are optimally suited to quality control, assembly and repair workstations in the electronics and semi-conductor industries as well as in biological laboratories and research establishments.
- · These models are also ideal for use at workstations in rough working environments, such as training establishments, workshops and in production.

- The design of these special optical system allows a large depth of field, where only very little refocussing at the zoom enlargement is necessary.
- In addition, thanks to its precise resolution, it provides high-contrast images, an extra large field of view and is absolutely true-to-
- · These models offer the best possible ease of use thanks to their extra large working distance providing a large working surface.
- · The multitude of auxiliary objectives, eyepieces, universal stands and additional accessory parts facilitates use in all common stereo microscopy applications.
- · One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

## Technical data

- · Optical system: Greenough
- · Brightness adjustable
- · Magnification ratio: 8,8:1
- Tube: 35° inclined
- Interpupillary distance: 52 76 mm
- Diopter adjustment (both-sided)
- · Packing dimensions WxDxH 370x330x385 mm

#### OZO 551 / OZM 553

• Net weight approx. 5,1 kg

## OZM 552 / OZM 554

· Net weight approx. 6,1 kg

Please find detailed information in the following charts.

#### STANDARD







									OPTIC
ONI	TRINO	ED LED	<u>8</u> IL	Q TL	ZOOM	<b>—■</b> 230 V	1 DAY	3 YEARS WARRANTY	SCA
	Standard configuration								

	1						1
Model				Standard c	onfiguration		
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZO 551	Binocular	HSWF 10x Ø 23 mm	Ø 28,75 - 3,3	0,8x - 7x	Pillar style	-	
OZO 552	Binocular	HSWF 10x Ø 23 mm	Ø 28,75 - 3,3	0,8x - 7x	Pillar style	3W LED (incident); 3W LED (transmitting)	
OZO 553	Trinocular	HSWF 10x Ø 23 mm	Ø 28,75 – 3,3	0,8x - 7x	Pillar style	-	
OZO 554	Trinocular	HSWF 10x Ø 23 mm	Ø 28,75 - 3,3	0,8x - 7x	Pillar style	3W LED (incident); 3W LED (transmitting)	



Eyepiece			Eigensch	aften – Objektive				
	Magnification	Standard	Auxiliary objectives					
		1,0x	0,37x	0,5x	0,7x	1,5x	2x	
HSWF 10x	Total magnification	8x - 70x	2,96x - 25,9x	4x - 35x	5,6x - 49x	12x - 105x	16x - 140x	
	Field of view mm	Ø 28,75 - 3,3	Ø 74,3 - 8,5	Ø 57,5 - 6,6	Ø 41,1-4,7	Ø 19,2 - 2,2	Ø 14,4 - 1,6	
	Total magnification	12x - 105x	4,44x - 38,9x	6x - 52,5x	8,4x - 73,5x	18x - 157,5x	24x - 210x	
SWF 15x	Field of view mm	Ø 21,25 - 2,4	Ø 57,4 – 6,6	Ø 42,5 - 4,9	Ø 30,4 - 3,5	Ø 14,2 - 1,6	Ø 10,6 - 1,2	
SWF 20x	Total magnification	16x - 140x	5,92x - 51,8x	8x-70x	11,2x - 98x	24x - 210x	32x - 280x	
	Field of view mm	Ø 17,5 - 2	Ø 47,3 - 5,4	Ø 35 - 4	Ø 25 – 2,9	Ø 11,7 - 1,3	Ø 8,75 – 1	
SWF 30x	Total magnification	24x - 210x	8,88x - 77,7x	12x - 105x	16,8x - 147x	36x - 315x	48x - 420x	
	Field of view mm	Ø 11,25 - 1,3	Ø 30,4 - 3,5	Ø 22,5 - 2,6	Ø 16,1 – 1,8	Ø 7,5 - 0,9	Ø 5,625 – 0,6	
Working distance		108 mm	275 mm	195 mm	145 mm	50 mm	35 mm	

Model outfit			Mode	KERN	Order number				
			OZO 552	OZO 553	OZO 554				
	HSWF 10x / Ø 23 mm	••	••	••	••	OZB-A5503			
	SWF 15x/Ø 17 mm	00	00	00	00	OZB-A5504			
	SWF 20x/Ø 14 mm	00	00	00	00	OZB-A5505			
Eyepieces	SWF 30x/Ø 9 mm	00	00	00	00	OZB-A5506			
	HSWF 10x / Ø 23 mm (reticule 0,1 mm)	0	0	0	0	OZB-A5512			
	SWF 15x/Ø 17 mm (reticule 0,05 mm)	0	0	0	0	OZB-A5513			
	SWF 20x/Ø 14 mm (reticule 0,05 mm)	0	0	0	0	OZB-A5514			
	0,37x	0	0	0	0	OZB-A5611			
	0,5x	0	0	0	0	OZB-A5612			
Achromatic auxiliary objectives	0,7x	0	0	0	0	OZB-A5613			
auxiliary objectives	1,5x	0	0	0	0	OZB-A5615			
	2,0x	0	0	0	0	OZB-A5616			
	0,3x			0	0	OZB-A5701			
	0,5x			0	0	OZB-A5702			
	1,0x			0	0	OZB-A5703			
C-Mount	1,0x (with micrometer)			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 attachment	Darkfield attachment	0	0	0	0	OBB-A6201			
Object clamp	Object clamp	0	0	0	0	OBB-A6205			
	Pillar style, without illumination	•		•					
Stands	Pillar style, with 3W LED illumination (transmitting + incident)		•		•				
	Please find more stands in the catalogue on page 64 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			
	Stage size: WxD 188x160 mm, Travel: 76x65 mm, for transmitting and incident illumination	0	o	0	0	OZB-A5781			
Mechanical stage	Stage size: WxD 180x175 mm, Travel: 100x86 mm, for incident illumination only	0	0	0	0	OZB-A5782			
External illumination	Please find the information about external illumination units in	the catal	ogue from	page 68 a	and on ou	website www.kern-sohn.com			
		• = Standard configuration o = O							

= Standard configuration

# **KERN Pictograms:**





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Monocular Microscope

For the inspection with one eye



Fluorescence illumination for compound microscopes With 3 W LED illumination and filter



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Binocular Microscope

For the inspection with both eyes



Phase contrast unit

For a higher contrast



**Battery operation** 

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



Trinocular Microscope

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



Polarising unit

To polarise the light



Rechargeable battery pack

Rechargeable set.



**Abbe Condenser** 

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



Infinity system

Infinity corrected optical system



Mains adapter

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



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



230 V

Power supply

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



**LED** illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Package shipment

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



Incident illumination

For non-transparent objects



Integrated scale

In the eyepiece



Warranty

The warranty period is shown in the pictogram.



Transmitting illumination

For transparent objects



Integrated USB 2.0 digital camera

For direct transmitting of the picture to a PC



Fluorescence illumination

For stereomicroscopes



Integrated USB 3.0 digital camera

For direct transmitting of the picture to a PC

## **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)

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 10x eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to

Ø 22 mm for 10x eyepiece)

# Your KERN specialist dealer: