





Plug in for power supply

## **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-dimesnional 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 50:50
- Interpupillary distance 52 76 mm
- · Diopter adjustment: Both-sided
- · Overall dimensions W×D×H 305×180×405 mm
- · Net weight approx. 6,6 kg.

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Model				Standard co	onfiguration		
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZC 583	Trinocular	HSWF 10×/Ø 23 mm	Ø 12,78 – 3,5	1,8× - 6,5×	Arm curved	2 W LED (coaxial incident)	•



Eyepiece	Specifications - Objectives	
	Magnification	Standard
		1,0×
HWF 10×	Total magnification	18×-65×
1100	Field of view mm	Ø 12,78 – 3,5
SWF 15×	Total magnification	27×-97,5×
SWF 15*	Field of view mm	Ø 9,5 – 2,6
SWF 20×	Total magnification	36× - 130×
3WF 20^	Field of view mm	Ø 7,78- 2,2
SWF 30×	Total magnification	54× - 195×
SWF 3U^	Field of view mm	Ø 5 – 1,4
Working distance		92 mm
Maximum sample height		35 mm

Model outfit		Model KERN	Order number	
		OZC 583		
	HSWF 10×/ø 23 mm	<b>44</b>	OZB-A5503	
	SWF 15×/ø 17 mm	00	OZB-A5504	
	SWF 20×/ø 14 mm	00	OZB-A5505	
Eyepieces 30,0 mm)	SWF 30×/ø 9 mm	00	OZB-A5506	
	HSWF 10×/ø 23 mm (reticule 0,1 mm)	0	OZB-A5512	
	SWF 15×/ø 17 mm (reticule 0,05 mm)	0	OZB-A5513	
	SWF 20×/ø 14 mm (reticule 0,05 mm)	0	OZB-A5514	
	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	
Stand	Arm curved, without illumination	✓		
external Ilumination	Please find the information about external illumination units in the catalogue on page 83 and on our website www.kern-sohn.com			

✓ = Included with delivery

O = Option

# **KERN Pictograms:**





360° rotatable microscope head



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



WLAN data interface:

For transmitting of the picture to a mobile display device



Monocular Microscope

For the inspection with one eye



Phase contrast unit For a higher contrast



**HDMI** digital camera

For direct transmitting of the picture to a display device



Binocular Microscope

For the inspection with both eyes



Darkfield condenser/unit

For a higher contrast due to indirect illumination



PC software

To transfer the measurements from the device to a PC.



Trinocular Microscope

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



Polarising unit

To polarise the light



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Abbe Condenser

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



Infinity system

Infinity corrected optical system



Protection against dust and water

splashes IPxx The type of protection is shown by the



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



pictogram. **Battery operation** 

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



**LED** illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



**Battery operation rechargable** 

Prepared for a rechargable battery operation



Incident illumination

For non-transparent objects



Integrated scale In the eyepiece

230 V

Mains adapter

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



Transmitting illumination

For transparent objects



SD card



Power supply

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

Fluorescence illumination

For stereomicroscopes



USB 2.0 digital camera

For direct transmitting of the picture to a PC



WF

Package shipment

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

FL-HB0

Fluorescence illumination for compound microscopes

With 100W mercury lamp and filter

USB 3.0

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

FPS Frames per second

H(S)WF High (Super) Wide Field

(Eyepiece with high eye point for wearers of glasses)

**LWD** Long Working Distance

SLR Kamera Single-Lens Reflex camera

N.A. **Numerical Aperture**  **SWF** Super Wide Field

(Field number at least Ø 23 mm

for 10× eyepiece)

Working Distance W.D.

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

# Your KERN specialist dealer: