



OZG 493



OZG 497 \*



Backside of OZG 497



Tilt positions



Tilt positions

**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, these models form an ideal package with their dark field unit with object clamp which is included in the scope of delivery
- The KERN OZG 493 is fitted with a pillar stand as well as an integrated bright halogen light unit with reflected and transmitted illumination
- The KERN OZG 497 has a arm curved stand, which is extremely flexible as it can be tilted and rotated Together with the powerful illumination units, which also includes a single fiber. This is an ideal solution for jewellers and the gem industry

- 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**

- Jewellers and gem industry

**Applications/Samples**

- Samples with focus on three-dimesnional 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

**OZG 493**

- Magnification ratio: 5,1:1
- Overall dimensions W×D×H 310×170×350 mm
- Net weight approx. 5 kg

**OZG 497**

- Magnification ratio: 6,7:1
- Light distribution 50:50
- Overall dimensions W×D×H 340×235×480 mm
- Net weight approx. 11,5 kg

STANDARD



Model	Standard configuration					
	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	12 V/10 W Halogen (incident) 12 V/10 W Halogen (transmitted) 10 W Fluorescence (front illumination)
<b>OZG 497 *</b>	Trinocular	HSWF 10×/ø 23 mm	ø 33 – 5,1	0,75× – 5,0×	Arm curved	12 V/10 W Halogen (transmitted) 10 W Fluorescence (front illumination including single fiber)

! \* ONLY WHILE STOCKS LAST

🔴 Price reduction




























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
Working distance		86 mm

OZG 497		
Specifications - Objectives		
Eyepiece	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
Working distance		113 mm

Model outfit		Model KERN		Order number	
		OZG 493	OZG 497		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○		OZB-A4101	
	WF 10×/∅ 20 mm	✓ ✓		OZB-A4102	
	WF 15×/∅ 15 mm	○ ○		OZB-A4103	
	WF 20×/∅ 10 mm	○ ○		OZB-A4104	
Eyepieces (30,0 mm)	HWF 5×/∅ 23,2 mm		○ ○	OZB-A4112	
	HSWF 10×/∅ 23 mm		✓ ✓	OZB-A4118	
	HWF 15×/∅ 15 mm		○ ○	OZB-A4119	
	HSWF 20×/∅ 14,5 mm		○ ○	OZB-A4120	
	HWF 25×/∅ 11,7 mm		○ ○	OZB-A4121	
C-Mount	1,0× (focus adjustable)		○	OZB-A4809	
	0,3× (focus adjustable)		○	OZB-A4810	
	0,5× (focus adjustable)		○	OZB-A4811	
Darkfield unit	Darkfield unit	✓	✓	OZB-A4601	
Object clamp	Object clamp (steel wire)	✓	✓	OZB-A4604	
Stand	Pillar style, with 12 V/10 W Halogen (transmitted + incident) and 10 W Fluorescent illumination (front)	✓			
	Arm curved, with 12 V/10 W Halogen (transmitted) and 10 W Fluorescent illumination (front) + Single fiber illumination		✓		
Stage plate	Frosted glass/∅ 95 mm	✓		OZB-A4805	
	Black-white/∅ 95 mm	✓		OZB-A4806	
Illumination	12 V/10 W spare bulb (transmitted + incident)	✓	✓	OZB-A4804	

✓ = Included with delivery

○ = Option

 360°	<b>360° rotatable microscope head</b>	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 WLAN	<b>WLAN data interface:</b> For transmitting of the picture to a mobile display device
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 PH	<b>Phase contrast unit</b> For a higher contrast	 HDMI	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 DF	<b>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	 SOFTWARE	<b>PC software</b> To transfer the measurements from the device to a PC.
 TRINO	<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	<b>Polarising unit</b> To polarise the light	 AUTO ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 ABBE	<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 INFINITY	<b>Infinity system</b> Infinity corrected optical system	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 LED	<b>LED illumination</b> Cold, energy saving and especially long-life illumination	 PARALLEL	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 RECHARGE	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 TL	<b>Transmitting illumination</b> For transparent objects	 SD	<b>SD card</b> For data storage	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 FL	<b>Fluorescence illumination</b> For stereomicroscopes	 USB 2.0	<b>USB 2.0 digital camera</b> For direct transmitting of the picture to a PC	 1 DAY	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 FL-HBO	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 USB 3.0	<b>USB 3.0 digital camera</b> For direct transmitting of the picture to a PC		

## Abbreviations

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope	<b>LWD</b>	Long Working Distance	<b>SWF</b>	Super Wide Field (Field number at least $\varnothing$ 23 mm for 10 $\times$ eyepiece)
<b>FPS</b>	Frames per second	<b>N.A.</b>	Numerical Aperture	<b>W.D.</b>	Working Distance
<b>H(S)WF</b>	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	<b>SLR Kamera</b>	Single-Lens Reflex camera	<b>WF</b>	Wide Field (Field number up to $\varnothing$ 22 mm for 10 $\times$ eyepiece)

## Your KERN specialist dealer: