



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 charts.

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

OZG 493

- Magnification ratio: 5,1:1
- Overall dimensions WxDxH 310x170x350 mm
- Net weight approx. 5 kg

OZG 497

- Magnification ratio: 6,7:1
- Overall dimensions WxDxH 340x235x480 mm
- Net weight approx. 11,5 kg

STANDARD



Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZG 493	Binocular	HWF 10x/φ 21,5 mm	φ 28 – 5,6	0,7x – 3,6x	Pillar style	12 V/10 W Halogen (incident) 12 V/10 W Halogen (transmitted) 10 W Fluorescence (front illumination)
OZG 497 *	Trinocular	HSWF 10x/φ 23 mm	φ 33 – 5,1	0,75x – 5,0x	Arm curved	12 V/10 W Halogen (transmitted) 10 W Fluorescence (front illumination including single fiber)

* ONLY WHILE STOCKS LAST

































OZG 493		
Specifications - Objectives		
Eyepiece	Magnification	Standard 1,0×
WF 5×	Total magnification	3,75× - 18×
	Field of view mm	∅ 26 - 6
HWF 10×	Total magnification	7,5× - 36×
	Field of view mm	∅ 28 - 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	
	HWF 10×/∅ 21,5 mm	✓ ✓		OZB-A4106	
	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°	360° rotatable microscope head	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 SD	SD card For data storage
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated USB 2.0 digital camera For direct transmitting of the picture to a PC	 1 DAY	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 FL	Fluorescence illumination For stereomicroscopes	 USB 3.0	Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 FL-HBD	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device		

Abbreviations

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

Your KERN specialist dealer: