

EDUCATIONAL LINE

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

Features

STANDARD

- 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





Stage plate black



Stage plate white

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						
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BINO	LED	IL	TL	BATT	230 V	1 DAY

Model	Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm				
OSF 438	Binocular	WF 10×/Ø 20 mm	Ø 20	1×/2×/3×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	
OSF 439	Binocular	WF 10×/Ø 20 mm	Ø 20	1×/2×/4×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	

Datasheet_OSF-4G_V1

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Stereomicroscope KERN OSF-4G



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

Model outfit		Mode	I KERN	Order number	
		OSF 438	OSF 439		
	WF 5×/Ø 16,2 mm	00	00	OZB-A4101	
Eyepieces (30,5 mm)	WF 10×/ø 20 mm	↓ ↓	44	OZB-A4102	
	WF 15×/Ø 15 mm	00	00	OZB-A4103	
	WF 20×/Ø 10 mm	00	00	OZB-A4104	
Stand	Arm curved, incl. handle, with LED illumination (0,35 W transmitted + 1 W incident)	✓	*		
Stage plate	Frosted glass/Ø 59,5 mm	✓	✓	OZB-A4815	
	Black-white / Ø 59,5 mm	✓	✓	OZB-A4816	
External illumination	Please find the information about external illumination up	nits in the catalogue on p	age 83 and on our	website www.kern-sohn.com	m

 \checkmark = Included with delivery

O = Option

KERN Pictograms:



360° rotatable microscope head



Monocular Microscope For the inspection with one eye



Binocular Microscope For the inspection with both eyes

Trinocular Microscope



the additional option for the connection of a camera Abbe Condenser With high numerical aperture for the

concentration and the focusing of light

For the inspection with both eyes and



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ABBE

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 100W mercury lamp and filter

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)

C



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



Phase contrast unit For a higher contrast

Darkfield condenser/unit

For a higher contrast due to indirect





Polarising unit To polarise the light

Infinity system

illumination







For stereomicroscopes Parallel optical system

For stereomicroscopes, enables

Zoom magnification

fatigue-proof working

Infinity corrected optical system



Integrated scale human In the eyepiece SCALE



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USB 2.0

⊶

USB 3.0

SD card For data storage



USB 2.0 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.



SOFTWARE

Automatic temperature compesation For measurements between 10 °C and 30 °C



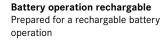
Protection against dust and water splashes IPxx The type of protection is shown by the

pictogram.



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





Mains adapter

230 V	



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

230V/50Hz in standard version for EU.

On request GB, AUS or USA version.



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

USB 3.0 digital camera For direct transmitting of the picture to a PC

Long Working Distance	SWF	Super Wig
Numerical Aperture		(Field nun for 10× ey
Single-Lens Reflex camera	W.D.	Working [
	6 6	Numerical Aperture

SWF	Super Wide Field (Field number at least \emptyset 23 mm for 10× eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer:

