

## Stereomicroscope KERN OSE-42



Side view

### EDUCATIONAL LINE

Stereo microscope with robust, ergonomic design, ideal for workshops, schools and training

#### Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSE OSE-42 has been specially developed for schools and workshops
- The incident and transmitted illumination unit included as standard can be optionally enabled for the very best illumination of your sample. Mobile use is also no problem due to the integrated battery compartment.
- Despite its low price it has very good optical characteristics, which enable you to have sharp images over a large field of view
- An turnable objective with predefined magnifications is available to make your working procedures quicker and more efficient
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- A special feature of this adaptable and yet robust microscope series is the stable mechanism of the microscope stand which can be adjusted precisely. It will also impress you with its functionality and ergonomic design
- A large selection of eyepieces as well as various additional external illumination units are available as accessories

#### 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
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 200×180×300 mm
- Net weight approx. 2 kg

#### STANDARD



#### Model

Standard configuration

	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination
<b>KERN</b>						
<b>OSE 421</b>	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 1 W LED (transmitted)

































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Eyepiece	Specifications - Objectives		
	Magnification	2×	4×
WF 5×	Total magnification	10×	20×
	Field of view mm	∅ 10	∅ 5
WF 10×	Total magnification	20×	40×
	Field of view mm	∅ 10	∅ 5
WF 15×	Total magnification	30×	60×
	Field of view mm	∅ 7,5	∅ 3,7
WF 20×	Total magnification	40×	80×
	Field of view mm	∅ 6,5	∅ 3,2
<b>Working distance</b>		57 mm	57 mm

Model outfit	Model KERN		Order number
	OSE 421		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4 101
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4 102
	WF 15×/∅ 15 mm	○ ○	OZB-A4 103
	WF 20×/∅ 10 mm	○ ○	OZB-A4 104
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	OZB-A4 151
<b>Stand</b>	Arm curved, with 1 W LED illumination (transmitted + incident)	✓	
<b>Stage plate</b>	Frosted glass/∅ 59,5 mm	✓	OZB-A48 15
	Black-white/∅ 59,5 mm	✓	OZB-A48 16
<b>External illumination</b>	Please find the information about external illumination units in the catalogue on page 83 and on the internet		

✓ = Included with delivery

○ = Option

- 
**360° rotatable microscope head**
- 
**Monocular Microscope**  
 For the inspection with one eye
- 
**Binocular Microscope**  
 For the inspection with both eyes
- 
**Trinocular Microscope**  
 For the inspection with both eyes and the additional option for the connection of a camera
- 
**Abbe Condenser**  
 With high numerical aperture for the concentration and the focusing of light
- 
**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 100 W mercury lamp and filter
- 
**Fluorescence illumination for compound microscopes**  
 With 3 W LED illumination and filter
- 
**Phase contrast unit**  
 For a higher contrast
- 
**Darkfield condenser/unit**  
 For a higher contrast due to indirect illumination
- 
**Polarising unit**  
 To polarise the light
- 
**Infinity system**  
 Infinity corrected optical system
- 
**Zoom magnification**  
 For stereomicroscopes
- 
**Auto-focus**  
 For automatic control of the focus level
- 
**Parallel optical system**  
 For stereomicroscopes, enables fatigue-proof working
- 
**Integrated scale**  
 In the eyepiece
- 
**SD card**  
 For data storage
- 
**USB 2.0 digital camera**  
 For direct transmitting of the picture to a PC
- 
**USB 3.0 digital camera**  
 For direct transmitting of the picture to a PC
- 
**WiFi 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.
- 
**Automatic temperature compensation**  
 For measurements between 10 °C and 30 °C
- 
**Protection against dust and water splashes IPxx:**  
 The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013
- 
**Battery operation**  
 Ready for battery operation. The battery type is specified for each device.
- 
**Battery operation rechargeable**  
 Prepared for a rechargeable battery operation
- 
**Plug-in power supply**  
 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
- 
**Integrated power supply unit**  
 Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
- 
**Package shipment**  
 The time required to manufacture the product internally is shown in days in the pictogram.

## 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
- N.A.** Numerical Aperture
- SLR camera** Single-Lens Reflex camera
- SWF** Super Wide Field (Field number at least  $\varnothing$  23 mm for 10 $\times$  eyepiece)
- W.D.** Working Distance
- WF** Wide Field (Field number up to  $\varnothing$  22 mm for 10 $\times$  eyepiece)