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

BINO | LED | IL | TL | BATT | 230 V | 1 DAY

Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination
KERN						
OSE 421	Binocular	WF 10×/⌀ 20 mm	⌀ 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
Working distance		57 mm	57 mm

Model outfit		**Model KERN**	**Order number**
		OSE 421	
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
	WF 10×/⌀ 20 mm (reticule 0,1 mm)	○	OZB-A4151
Stand	Arm curved, with 1 W LED illumination (transmitted + incident)	✓	
Stage plate	Frosted glass/⌀ 59,5 mm	✓	OZB-A4815
	Black-white/⌀ 59,5 mm	✓	OZB-A4816
External illumination	Please find the information about external illumination units in the catalogue on page 87 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 interface
For data transmission

USB 3.0 interface
For data transmission

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 measure-mentsfrom the device to a PC.

Automatic temperature compesation
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.

Pallet 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 Ø 23 mm for 10× eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to Ø 22 mm for 10× eyepiece)