## MICROSCOPES & REFRACTOMETERS 2023

MICROSCOPES

Video microscope KERN OIV-3



NEW



Zoom wheel with click-stop

# The beginner's video microscope with the simplest handling for applications of all kinds

#### Features

- The Kern OIV-2 is a video microscope which has been constructed to optimise digital stereo microscopy. Our well-conceived, comprehensive solution with axial optical unit enables immediate, simple display of your samples on the screen.
- The LED incident illumination unit (ring) included as standard guarantees the very best illumination of your sample.
- Combined with the large working surface, recording objects on the screen is ideally suited for monitoring, analysis and documentation in industrial environments.
- The excellent optical unit enables continuous sharp image tracking across the entire zoom range from 0,7×-4,5×
- The powerful 5.0 megapixel camera of the microscope without eyepieces offers, thanks to the HDMI output, smooth live monitoring of your samples from the HD monitor. In addition, the software which is easy to use, the USB stick as well as the USB mouse which are integral components of the delivery, mean you can process and store your results digitally.

- An additional HDMI interface makes it possible to connect an external monitor and thus enable live observation on two devices operated in parallel
- A special feature of this microscope series are the zoom wheels with integrated click-stop. This offers precise selection of the magnification level and supports the user in calibrating the documentation functions in the software
- A protective dust cover, as well as multi-lingual user instructions are included in the scope of the delivery

#### Technical data

- · Optical system: Axial
- Brightness adjustable
- Screen: 12", 1920×1080 HD, -5°- 90° inclination
- Magnification ratio: 6,4:1
- Stand: arm curved
- Illumination: 3 W LED ring (incident)
- Data storage: External using USB (Max 128 GB)
- Working distance: 100 mm
- Maximum sample height: 110 mm
- Overall dimensions W×D×H 260×320×450 mm
- Net weight approx. 4,4 kg

#### Accessories

· Auxiliary objectives on request

STANDARD								
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LED	IL	ZOOM	USB 2.0	HDMI	230 V	1 DAY		

Model	Standard configuration					
	Resolution	Interface	Sensor	Field of view	Objective	Software functions
KERN	camera			mm	Zoom	
OIV 345	5 MP	HDMI (60 FPS)	CMOS 1/2,8"	Ø 29,82-4,18	0,7×-4,5×	Images and videos, documentation

### **MICROSCOPES & REFRACTOMETERS 2023**

**KERN PICTOGRAMS** 



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



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LED

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 3W LED illumination and filter



Phase contrast unit For a higher contrast



Darkfield condenser/unit For a higher contrast due to indirect illumination



To polarise the light











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INFINITY

Zoom magnification For stereomicroscopes

Infinity corrected optical system

Infinity system

Auto-focus





Parallel optical system For stereomicroscopes, enables fatigue-proof working

For automatic control of the focus level



SD card For data storage



USB 2.0 digital camera For direct transmitting of the picture to a PC USB 2.0



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 compesation For measurements between 10  $^\circ\text{C}$  and 30  $^\circ\text{C}$ 



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



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 Ø22 mm for 10× eyepiece)		
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operation

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



Battery operation rechargeable Prepared for a rechargeable battery

230 V

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.