

# VIDEO MICROSCOPES

Laboratory | Industry | Food Industry



2025

# **KERN Pictograms**



360° rotatable microscope head



Monocular Microscope
For the inspection with
one eve



**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 100W 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 measurements from the device to



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.



Rechargeable battery pack Rechargeable set



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)

# KERN Models A-Z

OAB-L	108
OBE-12 · OBE-13	12
OBE-S	65
OBL-12 · OBL-13	
OBL-14 · OBL-15	
OBL-S · OBN-S	
OBN-13 · OBN-15	
OBN-14 <u>***</u>	
OBS-1	
OBT-1 · OBT-2 <u></u>	
OCM-1	
ODC-24	88
ODC-25 NEW	89
ODC-82 · ODC-83 · ODC-84	
ODC-85 · ODC-86	
ODC-87 · ODC-88 · ODC-89	
OIV-2	
OIV-3 · OIV-9 KEW	
OIV-6	63
OKM-1	
OKO-1	28
OLM-1	30
OPO-1	
ORA	92-98
ORA ORL-B ORM	105
ORL-B	105 99-104
ORL-B	105 99-104 71
ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSE-42	105 99-104 71 36
ORL-B	105 99-104 71 36 38
ORL-B	105 99-104 71 36 38
ORL-BORMOSE-4 · OZL-9 · OZM-9OSF-43OXM-9OZB-HOZB-H	105 99-104 71 36 38 90 81
ORL-B	105 99-104 71 36 90 81 83
ORL-B	105 99-104 71 36 38 90 81 83 74
ORL-B	10599-1047136389081837480
ORL-B	105 99-104 71 36 38 90 81 83 74 80 79
ORL-B	105 99-104 71 36 38 90 81 83 74 80 79 56
ORL-B	105 99-104 71 36 38 90 81 83 74 80 79 56
ORL-B	105 99-104 71 36 38 90 81 83 74 56 40 46
ORL-B	105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48
ORL-B	105 99-104 36 38 90 81 74 80 79 56 40 46 48 42
ORL-B	105 99-104 36 38 90 81 83 74 80 79 56 40 46 48 42 44
ORL-B	105 99-104 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67
ORL-B	105 99-104 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 50
ORL-B	105 99-104 36 38 90 81 83 74 56 40 46 48 42 44 67 50 70
ORL-B	105 99-104 36 38 90 81 83 74 56 40 46 48 42 44 67 50 70 68
ORL-B	105 99-104 36 38 90 81 83 74 56 40 46 48 42 44 67 50 70

New model

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With questions about our products and services, we will be happy to advise you:

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# **KERN Hotlines**



Technical questions about our products?
You will find assistance here quickly: +49 7433 9933-...

Service-Hotline	→ 199
for general technical questions about your KERN product	
Ontical Davisos	

for all technical questions concerning our microscopes, microscope cameras, refractometers, etc.

#### Laboratory and Analytical Balances

**→444** 

for all technical questions concerning our high quality precision balances, analytical balances (especially with electromagnetic force-compensated measuring systems, tuning fork and high application density)

# SAUTER Measuring Instruments → 555

for all technical questions concerning our SAUTER measuring instruments, test benches, force measuring accessories (clamps etc.), SAUTER software

#### System Solutions Industry 4.0 → 200

for all technical questions concerning the interlocking of the latest information and communication technology with our scales, load cells and measuring devices as well as questions about KERN software

#### Calibration and Verification Service → 196

for any questions concerning our calibration and verification service





# The entry level video microscope with bright image reproduction and intuitive operation



Zoom wheel with click stop



NEW: KERN OIV 901: Universal stands with hinged arm for clamping onto the edge of the bench



NEW: KERN OIV 902: Universal stands with hinged arm for screw onto a bench surface

#### **Features**

- The KERN OIV-3 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 eyepiece has a high level of colour reproduction and offers smooth live monitoring of your samples using the HD monitor
- The high-quality display made from toughened glass is easy to clean due to the absence of edges
- The intuitive software and wireless USB mouse, both included with delivery, make it possible for you to easily process your results digitally and store them
- Using a HDMI interface it is possible to connect an additional monitor and in this way you can observe two devices operated in parallel in real time

- The image can be viewed on the PC using a USB connection. The software required for this also offers the option of carrying out measurements. It is available for download
- A special feature of this microscope range are the zoom wheels with integrated click stop.
   These offer precise selection of magnification levels and support the user when calibrating the documentation functions in the software
- The video microscope has one HDMI and two USB 2.0 interfaces as well as a micro SD card slot
- A protective dust cover, a USB stick (32 GB), a wireless USB mouse as well as multi-lingual user instructions are included in the delivery
- · Menu languages: DE, EN, FR, IT, RU, JA, ZH

#### **NEW: KERN OIV-9**

- The integrated universal stands with hinged arm enable flexible working with the most varied samples, even with greater working distances. In addition, the microscope can be pushed to the side if necessary, to create space
- KERN OIV 901: Universal stands with hinged arm for clamping: The user simply attaches the microscope to the edge of a bench using the clamping device delivered with the product
- KERN OIV 902: Universal stands with hinged arm for screw onto a bench surface. Hole required

#### Technical data

- · Optical system: Axial
- Screen: 12", 1920×1080 HD, -5° 90° inclination
- Magnification ratio 6,4:1
- · Frame rate: 60 fps
- · Camera resolution: 5 MP
- · Stand: mechanical
- Illumination: 3 W-LED ring (Reflected light)
- · Brightness adjustable
- · Data storage: External using USB (Max 32 GB)
- · Working distance: 100 mm
- Maximum sample height: 110 mm
- Overall dimensions W×D×H KERN OIV-3: 320×260×450 mm KERN OIV-9: 320×260×450 mm
- · Length jointed arm KERN OIV-9: 533 mm
- Net weight approx. 4,4 kg

#### Accessories

- Conversion objective lens 0,5×, KERN OBB-A3225, € 195,-
- Conversion objective lens 2,0×,
   KERN OBB-A3226, € 195,-
- Solder protection lens, KERN OBB-A3227, € 33,-
- Object holder for micrometer (multi),
   KERN ODC-A2404, € 40,-
- Cleaning Sets for Microscopes, KERN OCS 901, € 35,-



Model KERN		Resolution camera	Interface	Sensor	Field of view mm	Objective Zoom	Software functions	Price excl. of VAT ex works €
OIV 345		5 MP	USB 2.0, HDMI, MicroSD (60 fps)	CMOS 1/2,8"	Ø 16 - 2,5	0,7 × - 4,5 ×	Images and videos, documentation	2520,-
OIV 901	NEW	5 MP	USB 2.0, HDMI, MicroSD (60 fps)	CMOS 1/2,8"	Ø 16 - 2,5	0,7 × - 4,5 ×	Images and videos, documentation	2960,-
OIV 902	NEW	5 MP	USB 2.0, HDMI, MicroSD (60 fps)	CMOS 1/2,8"	Ø 16 - 2,5	0,7 × - 4,5 ×	Images and videos, documentation	2990,-





OIV 254 Snapshot button

# The comprehensive digital solution for increased working comfort when carrying out continuous monitoring work in industry.

#### **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×-5×
- The powerful 2.0 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
- · With the OIV 254 model, there is the option of image capture at the push of a button, without having to detour via the software. Whereas the OIV 255 guarantees software-controlled taking of images and videos with additional, documentation functions
- · 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°-15° inclination
- Magnification ratio: 7,1:1
- · Stand: arm curved
- Illumination: 2 W LED ring (incident)
- · Data storage: External using USB (Max 128 GB)
- · Working distance: 105 mm
- · Maximum sample height: 100 mm
- Overall dimensions W×D×H 320×260×483 mm
- · Net weight approx. 6 kg

#### Accessories

 Auxiliary objective 0,5×, KERN OZB-A2101, € 310,-

#### STANDARD



Model		Standard configuration					
	Resolution Interface Sensor Field of view Objective Software functions				excl. of VAT ex works		
KERN	camera			mm	Zoom		€
OIV 254	2 MP	HDMI (60 FPS)	CMOS 1/2"	Ø 29,82-4,18	0,7×-5×	Image capture	2750,-
OIV 255	2 MP	HDMI (60 FPS)	CMOS 1/2"	Ø 29,82-4,18	0,7×-5×	Images and videos, documentation	2950,-





Side view with screen connected (not included with delivery)

# The professional video microscope with auto-focus

#### **Features**

- The KERN OIV-6 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 suitable in the industrial sector
- · The excellent optical unit enables continuous sharp image tracking across the entire zoom range from 0,7×-4,5×
- · Through the integrated auto-focus, the focus level can also be optimised within a defined image section

- The powerful 2.0 megapixel camera of the microscope without eyepieces offers, thanks to the HDMI output, smooth live monitoring of your samples using an external monitor (not included with delivery). 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
- The OIV 656 guarantees software-controlled taking of images and videos with additional, documentation functions
- Multi-lingual user instructions are included in the scope of the delivery

#### **Technical data**

- · Optical system: Axial
- · Brightness adjustable
- Magnification ratio: 6,5:1
- · Stand: arm curved
- Illumination: 3 W LED ring (incident)
- Data storage: External using USB (Max 128 GB)
- · Working distance: 91 mm
- · Maximum sample height: 85 mm
- Overall dimensions W×D×H 372×285×482 mm
- · Net weight approx. 7 kg

#### Accessories

- Auxiliary objective 0,5×, KERN OZB-A6101, € 310,-
- Auxiliary objective 2,0×, KERN OZB-A6102, € 310,-

STANDARD



Model	Standard configuration					Price	
	Resolution	Interface	Sensor	Field of view	Objective	Software functions	excl. of VAT ex works
KERN	camera			mm	Zoom		€
OIV 656	2 MP	HDMI (30 FPS)	CMOS 1/2,8"	Ø 12,64-2,65	0,7×-4,5×	Images and videos, documentation	4990,-

## The oldest Precision Balance Factory in Germany

#### **KERN & SOHN GmbH**

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