

# DIGITAL MICROSCOPE SETS

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	
OBL-12 · OBL-13	
OBL-14 · OBL-15	
OBL-S · OBN-S	
OBN-13 · OBN-15	
OBN-14 <b>EW</b>	
OBS-1	
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ORA	
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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-BORMOSE-4 · OZL-9 · OZM-9OSF-43OXM-9	105 _ 99-104 71 36 38
ORL-B	105 _ 99-104 71 36 38 90
ORL-B	105 _ 99-104 71 36 38 90 81 83
ORL-B	105 99-104 71 36 38 90 81 83 74
ORL-B	105 99-104 71 36 38 90 81 83 74 80
ORL-B	105 99-104 71 36 38 90 81 83 74 80 79
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ORL-B	105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 50
ORL-B	105 99-104 71 36 38 90 81 83 74 56 40 46 48 42 44 67 50 70

New model

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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





OBE-1 with camera

OBE-1 with tablet

# Our all-round compound microscope as a comprehensive digital solution for schools, training and laboratories

#### **Features**

- Laboratory microscopes from the OBE range are now also available to you as a comprehensive digital solution for your live investigations.
   Optionally available with an mounted tablet or C-mount camera. Naturally, the appropriate
   C-mount adapter is included with the delivery
- The mounted KERN ODC 241 tablet-camera has been specially developed for simple, convenient and direct investigation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- The mounted C-mount camera is available in different versions and can be used anywhere
- For detailed information on the individual components, see the relevant product description of the individual item
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery

#### **Technical data**

- Finite optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Eyepiece: HWF 10×/Ø 18 mm
- Objective quality: Achromatic
- Objectives OBE 124: 4×/10×/40×
- Objectives OBE 134: 4×/10×/40×/100×
- Illumination: 3 W LED (transmitted)
- Overall dimensions W×D×H 320×180×365 mm
- Net weight approx. 5,5 kg

Model			Standard configuration (camera)			
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	ex works €
OBE 124C825	ODC 825	325 5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"	www.kern-sohn.com,	1230,-
OBE 134C825	ODC 625	3 IVIP	USB 2.0 (0,6 - 35 FFS)	CIVIOS 1/2,5		1290,-
OBE 124C832	ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOC 1 /2 E"	<ul> <li>KERN Optics catalogue</li> <li>Page 12, 85</li> </ul>	1380,-
OBE 134C832	ODC 032	5 IVIP	036 3.0 (14,2 - 101,2 FP3)	CMOS 1/2,5"		1440,-
OBE 124T241	- ODC 241 5 MP	W:E: LICE 2 0 LIDML CD (15, 20 EDC)	CMOS 1/2,5"	www.kern-sohn.com,	1820,-	
OBE 134T241	ODC 241	3 IVIP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CIVIOS 1/2,5	KERN Optics catalogue Page 12, 89	1890,-



# The digital laboratory assistant with infinity optical unit and fixed, Köhler illumination

#### **Features**

- Laboratory microscopes from the OBL and OBN range are now also available to you as a comprehensive digital solution for your live investigations. Optionally available with an mounted tablet or C-mount camera. Naturally, the appropriate C-mount adapter is included with the delivery
- The mounted KERN ODC 241 tablet-camera has been specially developed for simple, convenient and direct investigation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- The mounted C-mount camera is available in different versions and can be used anywhere
- For detailed information on the individual components, see the relevant product description of the individual item

 A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery

#### Technical data

- Infinity optical system
- Siedentopf 30° inclined/360° rotatable
- Eyepiece: HWF 10×/Ø 20 mm

#### OBL-1

- Quadplex nosepiece
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 7,7 kg
- Objective quality: Infinity E-Plan
- Objectives: 4×/10×/40×/100×
- Illumination OBL 137: 3 W LED (transmitted)

#### OBN-1

- · Quintuple nosepiece
- · Diopter adjustment: Both-sided
- Overall dimensions W×D×H 390×200×400 mm
- Net weight approx. 10 kg
- Objective quality: Infinity Plan
- Objectives: 4×/10×/20×/40×/100×
- Illumination OBN 132:
   20 W Halogen (transmitted)
- Illumination OBN 135: 3 W LED (transmitted)

Model	Standard configuration (camera)				Price excl. of VAT	
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	ex works €
OBL 137C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 85	1750,-
OBL 137C832	ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 85	1900,-
OBL 137T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 89	2350,-
OBN 132C825 OBN 135C825	- ODC 825	5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 18, 85	2210,- 2140,-
OBN 132C832 OBN 135C832	ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 18, 85	2360,- 2290,-
OBN 132T241 OBN 135T241	- ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 18, 89	2810,- 2740,-







OZL 466 with camera



OZL 468 with camera



OZL 464 with tablet



OZL 466 with tablet



OZL 468 with tablet

# The flexible, affordable all-rounder with zoom function as a digital solution for schools, training companies, inspection authorities and laboratories

#### **Features**

- The flexible, cost-effective OZL-46 range is now also available to you as a comprehensive digital solution for your live investigations. Optionally available with an mounted tablet or C-mount camera. Naturally, the appropriate C-mount adapter is included with the delivery
- The mounted KERN ODC 241 tablet-camera has been specially developed for simple, convenient and direct investigation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- The mounted C-mount camera is available in different versions and can be used anywhere
- For detailed information on the individual components, see the relevant product description of the individual item
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery

#### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution 100:0
- Interpupillary distance 55 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 300×240×420 mm
- · Net weight approx. 5 kg
- Eyepiece: HWF 10×/Ø 20 mm
- Field of view: Ø 28,6 4,4 mm
- Objective: 0,7×-4,5×
- Stand OZL 464/466: Pillar style
- Stand OZL 468: Arm curved
- Illumination: 3 W LED (incident + transmitted)

Model	Standard configuration (camera)					Price excl. of VAT
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	ex works €
OZL 464C825						1140,-
OZL 466C825	ODC 825	5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"		1160,-
OZL 468C825	_				KERN Optics catalogue	1140,-
OZL 464C832	ODC 832 5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	Page 42, 85	1290,-	
OZL 466C832					1310,-	
OZL 468C832	-					1290,-
OZL 464T241					KERNI Ontina antala ma	1740,-
OZL 466T241	ODC 241 5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 42, 89	1760,-	
OZL 468T241					Page 42, 69	1740,-







OZP-5 with camera



OZP-5 with tablet

# First-class optics as well as strong illumination combined with a high level of flexibility and digital tools

#### **Features**

- Stereomicroscopes from the OZM and OZP range are now also available to you as a comprehensive digital solution for your live investigations. Optionally available with an mounted tablet or C-mount camera. Naturally, the appropriate C-mount adapter is included with the delivery
- The mounted KERN ODC 241 tablet-camera has been specially developed for simple, convenient and direct investigation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- The mounted C-mount camera is available in different versions and can be used anywhere
- For detailed information on the individual components, see the relevant product description of the individual item
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery

#### Technical data

- Optical system: Greenough optics
- · Brightness adjustable (separate)
- Light distribution: 100:0
- Diopter adjustment: Both-sided
- Net weight approx. 5,5 kg
- Eyepiece: HSWF 10×/Ø 23 mm
- Stand: Pillar style
- Illumination: 3 W LED (incident + transmitted)

#### OZM-5

- Tube 45° inclined
- Magnification ratio: 6,4:1
- Interpupillary distance 52 76 mm
- Overall dimensions W×D×H 330×285×440 mm
- Field of view:  $\emptyset$  32,8 5,1 mm
- Objective: 0,7×-4,5×

#### OZP-5

- Tube: 35° inclined
- · Magnification ratio: 9,2:1
- Interpupillary distance 52 76 mm
- Overall dimensions W×D×H
   330×285×470 mm
- Field of view: Ø 38,3 4,2 mm
- Objective: 0,6×-5,5×

Model	Standard configuration (camera)			Price excl. of VAT		
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	ex works €
OZM 544C825	ODC 825	5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 50, 85	2250,-
OZM 544C832	ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 50, 85	2410,-
OZP 558C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 52, 85	2380,-
OZP 558C832	ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 52, 85	2530,-
OZP 558T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 52, 89	2980,-

### The oldest Precision Balance Factory in Germany

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