

6



DIGITAL MICROSCOPE SETS



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)					Price excl. of VAT ex works €
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	
OBE 124C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	www.kern-sohn.com, KERN Optics catalogue Page 14, 85	1250,—
OBE 134C825						1310,—
OBE 124C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"		1410,—
OBE 134C832						1470,—
OBE 124T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 – 30 FPS)	CMOS 1/2,5"	www.kern-sohn.com, KERN Optics catalogue Page 14, 89	1950,—
OBE 134T241						2020,—



OBL-1 with camera



OBL-1 with tablet



OBN-1 with camera



OBN-1 with tablet

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 ex works €
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	
OBL 137C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 85	1770,-
OBL 137C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 85	1930,-
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	2480,-
OBN 132C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 85	2230,-
OBN 135C825						2160,-
OBN 132C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 85	2390,-
OBN 135C832						2320,-
OBN 132T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 – 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 89	2940,-
OBN 135T241						2870,-



OZL 464 with camera



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 ex works €
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	
OZL 464C825						1160,-
OZL 466C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 44, 85	1180,-
OZL 468C825						1160,-
OZL 464C832						1320,-
OZL 466C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"		1340,-
OZL 468C832						1320,-
OZL 464T241						1870,-
OZL 466T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 – 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 44, 89	1890,-
OZL 468T241						1860,-



OZM-5 with camera



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)

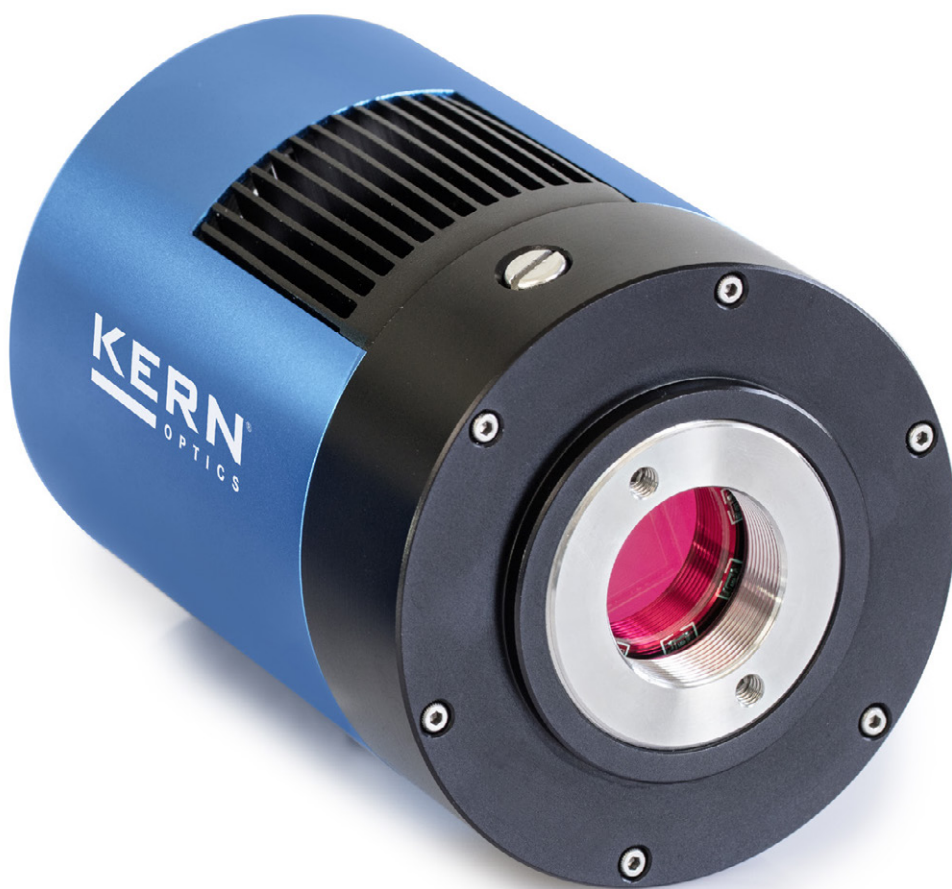
OZM-5

- 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: ø 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 ex works €
KERN	Included camera	Resolution camera	Interface	Sensor	Details microscope, camera	
OZM 544C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 52, 85	2250,-
OZM 544C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 52, 85	2410,-
OZP 558C825	ODC 825	5 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 54, 85	2400,-
OZP 558C832	ODC 832	5 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 54, 85	2560,-
OZP 558T241	ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 – 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 54, 89	3110,-



10

MICROSCOPE CAMERAS & SOFTWARE

Specialists in microscopy for measurement, counting, documentation, archiving and image processing

Features

- A large selection of microscope cameras is available for your individual applications
- The universal microscope cameras can be used anywhere and can be connected to the microscope as well as to a laptop or PC using the USB cable (USB 2.0 or USB 3.0, see table)
- The power supply is through the USB cable, which means that no additional power supply is required
- Your daily work is made significantly easier with the very best synchronisation, a high frame rate as well as stable image performance together with our camera software microscope VIS KERN OXM 901 which we deliver with the product
- For details about our software please refer to the "Camera software microscope VIS KERN OXM 901" product group in the catalogue (page 95) or see www.kern-sohn.com

- These universal cameras can also be connected to all microscopes available on the market offering the appropriate C-mount adapter for the particular microscope

Accessories

- Object micrometer, for calibrating the software measuring function, division 0,1 mm + 0,01 mm, KERN ODC-A2404, € 40,-

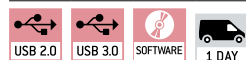
C-Mount Cameras – USB 2.0/3.0 KERN ODC-82 · ODC-83



Features

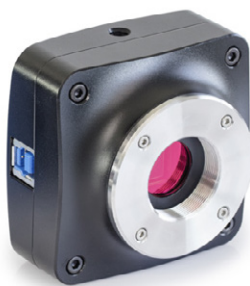
- Through the proven CMOS technology, in connection with the USB 2.0 or USB 3.0 the images are shown quickly and clearly
- These cameras are also ideal for more demanding applications, such as, for example, darkfield, phase contrast and for fluorescence applications
- As well as the camera, the delivery includes our multi-lingual camera software, an USB cable (length: 2 m), various eyepiece adapters and an object micrometre to calibrate the software
- Please order the appropriate C-mount adapter to fit your KERN microscope now

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
KERN								
ODC 825	5,1 MP	USB 2.0	6,8 – 55	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	430,-
ODC 831	3,1 MP	USB 3.0	27,3 – 53,3	CMOS	1/3"	colour	Win XP, Vista, 7, 8, 10	570,-
ODC 832	5,1 MP	USB 3.0	14,2 – 101,2	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	590,-

C-Mount Camera – High Resolution KERN ODC-84



Features

- The high-resolution, professional ODC-84 range offers you an impressive 20 megapixel resolution which will give you bright detailed views of your sample. By using the integrated USB 3.0 interface, live images are transferred to the KERN OXM 902 for processing and documentation
- Power supply is through the USB interface so that there is no requirement for an external power source.
- As well as the camera, the delivery includes our multi-lingual camera software, an USB cable (length: 2 m), various eyepiece adapters and an object micrometre to calibrate the software
- Please order the appropriate C-mount adapter (only 1,0x possible) to fit your KERN microscope now

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
KERN								
ODC 841	20 MP	USB 3.0	15 – 60	CMOS	1"	colour	Win XP, Vista, 7, 8, 10	1270,-

! Can only be used in combination with compound microscopes



Features

- The ODC 851 HDMI microscope camera has been specially developed for direct HDMI connection to your HDMI compatible display device. The images can be stored straight onto the SD card which is delivered with the product or can be transferred to your PC or laptop for further processing using the USB 2.0 cable in combination with the OXM 902 software
- The HDMI autofocus camera ODC 852 offers you a perfect, effective solution for modern microscopy. The autofocus function automatically detects and adjusts the focus level so that you always have a razor-sharp image. Ideal for all applications in connection with a KERN stereo microscope
- Realtime images can be transferred to an HDMI-compatible display device using the HDMI connection and they can also be stored on the SD card which was delivered with the product. As an alternative, data can also be transferred using the

- WiFi module (ODC 852) to a PC or laptop in combination with the KERN OXM 902 software which is included with the delivery
- Power supply is from an external 12 V power unit
- Scope of delivery ODC 851: Camera, USB mouse, USB 2.0 cable (length: 2 m), HDMI cable (length: 2 m), SD card (16 GB) and camera software Microscope VIS Basic KERN OXM 902
- Scope of delivery ODC 852: Camera, USB mouse, HDMI cable (length: 2 m), SD card (16 GB), WiFi adapter and camera software Microscope VIS Pro KERN OXM 902
- Please order the appropriate C-mount adapter to fit your KERN microscope now

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
KERN								
ODC 851	2 MP	HDMI, USB 2.0, SD	60	CMOS	1/2"	colour	Win XP, Vista, 7, 8, 10	1150,-
ODC 852*	5 MP	HDMI, SD, WLAN	25 – 60	CMOS	1/1,8"	colour	Win XP, Vista, 7, 8, 10	1170,-

*can only be used in combination with stereo microscopes

C-Mount Camera – High Resolution KERN ODC-86



The cooled camera for professional fluorescence examinations

Features

- The ODC 861 camera with Peltier cooling technology has been specially designed for fluorescent applications. It is able to significantly compensate for image noise associated with weak lighting. Due to its high resolution and light-sensitive Sony CMOS colour sensor it proves first-class images. The practical, sturdy storage box serves as protection and for transportation of this premium camera

- Realtime images can be transferred straight to a PC or laptop using the integrated USB 3.0 interface. As an alternative, 2 USB 2.0 interfaces are available, to operate the camera with the KERN OXM 902 software which is included with the delivery
- Power supply is from an external 12 V power unit
- Please order the appropriate C-mount adapter (only 1,0x possible) to fit your KERN microscope now
- Black balance possible

Can only be used in combination with compound microscopes

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
KERN								
ODC 861	20 MP	USB 3.0	5 – 30	CMOS	1"	colour	Win XP, Vista, 7, 8, 10	2400,-



ODC-87, ODC-88



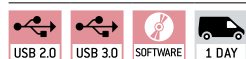
Eyepiece camera fixed into the tube

Features

- With the KERN eyepiece cameras you can convert your standard microscope to a digital microscope, by replacing one eyepiece of your non-digital microscope with an eyepiece camera and connect this to your computer via USB
- The universal eyepiece can be connected to the microscope as well as to a laptop or PC using the USB cable (2.0 or 3.0, see table)
- The power supply is through the USB cable, which means that no additional power supply is required
- Your daily work is made significantly easier with the very best synchronisation, a high frame rate as well as stable image performance together with our software

- As well as the camera, the delivery includes our multi-lingual camera software Microscope VIS 2.0 Pro, a USB cable (length: 1,5m), two eyepiece adapters and an object micrometer to calibrate the software
- Possible tube diameters:
23,2 mm (Standard)
30,0 mm (Eyepiece adapter)
30,5 mm (Eyepiece adapter)

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
KERN								
ODC 874	3 MP	USB 2.0	3 – 7,5	CMOS	1/2,7"	colour	Win XP, Vista, 7, 8, 10	240,-
ODC 881	5 MP	USB 3.0	15 – 30	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	320,-

USB Microscope – USB 2.0 KERN ODC-89

10

The digital USB microscope for rapid testing or for hobby use



ODC 895

Features

- The USB hand-held microscope is designed for rapid and simple observations. Ideally suited for coins, plants, insects and skin samples for all hobby scientists, children and students
- With the USB microscope you can easily adjust the magnification to suit all conventional samples. The zoom range can be adjusted to a magnification of 10× as well as 200×
- The eight LEDs fitted in the ring shape ensure strong and effective illumination of your sample. Use the adjustment wheel on the cable to control the illumination setting
- As well as the camera, you will also find our multi-lingual camera software Microscope VIS 2.0 Pro included with delivery
- Cable length: 1,4 m

Stand with focus wheel:

- Work area: 150×80mm
- Focus range: 60 mm
- Overall dimensions: 150×80×135 mm

STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Supported operating system	Magnification levels	Focusing stand	Illumination	Price excl. of VAT ex works €
KERN										
ODC 895	2 MP	USB 2.0	15 – 30	CMOS	1/3,2"	Win XP, Vista, 7, 8, 10	10×, 200×	Focus wheel	8× LED	220,-



ODC 241



Integrated software with measuring function

Digital microscopy brought up to date – tablet with integrated camera for optimal observation and digital documentation of the sample

Features

- A 2-in-1 solution in digital microscopy as a universal system for trinocular microscopes with C-mount adapter. The ODC 241 microscope-tablet-camera consists of a large Android tablet in combination with a 5-MP camera
- The KERN ODC 241 tablet-camera has been specially developed for simple and direct observation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- As well as a live transfer of the image to the Android table, the integrated 5-MP camera also means that images and videos can be created for the documentation
- Simple measuring functions such as, for example, functions for measuring distance, surfaces and angles as well as a manual counting function are also available

- Automatic white balance and automatic contrast adjustment can be performed quickly and easily, which enables efficient working procedures
- A range of additional functions are provided through the integrated interfaces, such as, for example
 - Data storage on a USB stick or SD card
 - Connection to a USB mouse
 - Transfer of the live image to an external screen using HDMI
 - Transfer of stored data to external receivers using WiFi
- The delivery includes the tablet camera with pre-installed software as well as the mains adapter

Technical data

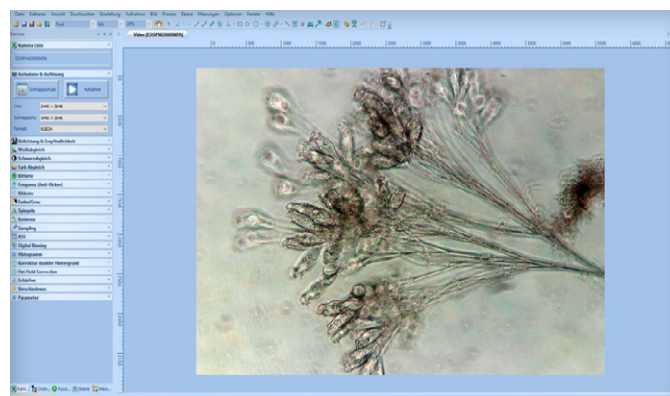
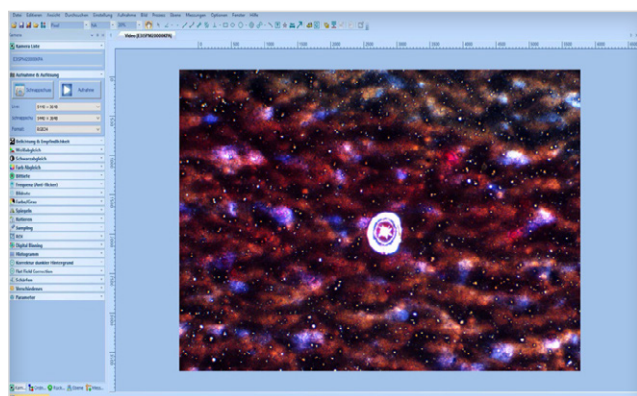
- 9.7" LCD-Touchscreen
- Screen resolution: 2048×1536 pixels
- CPU: Quad Core Cortex-A17; 1,8 GHz
- Overall dimensions W×D×H 238×51×206 mm
- Net weight approx. 0,65 kg

! Cannot be combined with the following microscopes:
series OZM-5, OLM 170

STANDARD



Model	Resolution Camera	Interface	FPS	Sensor	Sensor size	Supported operating system	Price excl. of VAT ex works €
KERN							
ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD	15 – 30	CMOS	1/2,5"	Android 5.1	1110,-



The digital specialist for measurement, counting and archiving – free of charge with all KERN microscope cameras

Features

- As well as the streaming function for the object to be viewed, the software OXM 902 also offers you an image snapshot function, as well as a video function
- Various measuring functions such as, for example, functions for measuring distance, surfaces and angles and a manual counting function are available. In addition there are extensive image processing and documentation functions available, and of course an exporting function to Microsoft Office applications Word® and Excel®
- With the display settings you can display different measurements, grid sizes, scales and rulers for the very best measuring procedure

- Automatic white balance and automatic contrast adjustment can be performed quickly and easily, which enables efficient working procedures
- The following highlights are included:
 - Image Stitching
 - Image Stacking
 - DShow and TWAIN support
 - Software development kit
- With this software it is possible operate all available KERN microscope cameras

Technical data

- Can be used for Microsoft Windows 7, 8, 10 and 11
- Depending on the language setting of your Windows operating system the software KERN microscope VIS Basic & Pro will be identified and installed in the current language. This can be changed manually at any time
- The software is available in the following languages: German, English, Spanish, Italian, French, Portuguese, Polish, Russian, Turkish, Chinese, Japanese, Korean
- As well as the software CD, a USB cable and an object micrometer are included with all KERN cameras as well as all digital microscopes. Please refer to the documentation for the software in the download area of our website www.kern-sohn.com for further details