

10

MICROSCOPE CAMERAS & SOFTWARE

Microscope Cameras KERN ODC – Specialists in microscopy for measurement, counting, documentation, archiving and image processing

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 accompanying Camera Software Microscope VIS KERN OXM 901. For details about our software please refer to the *Camera Software Microscope* product group in the catalogue

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, KERN ODC-A2404

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 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

STANDARE)		
•	$\stackrel{\bullet \overset{\bullet}{\longleftarrow}}{\longrightarrow}$.
USB 2.0	USB 3.0	SOFTWARE	1 DAY

Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system
KERN							
ODC 825	5,1 MP	USB 2.0	6,8 - 55	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10
ODC 831*	3,1 MP	USB 3.0	27,3 - 53,3	CMOS	1/3"	colour	Win XP, Vista, 7, 8, 10
ODC 832	5,1 MP	USB 3.0	14,2 - 101,2	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10

■ * ONLY WHILE STOCKS LAST

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 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 1,0× possible) to fit your KERN microscope now

Note: Can only be used in combination with compound microscopes



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system
KERN							
ODC 841	20 MP	USB 3.0	15 – 60	CMOS	1"	colour	Win XP, Vista, 7, 8, 10



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 HD-MI-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)
- 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

S	I F	4P	۱L	А	K	υ
_						_

















1	
1	1 DAY

Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system
KERN							
ODC 851*	2 MP	HDMI, USB 2.0, SD	60	CMOS	1/2"	colour	Win XP, Vista, 7, 8, 10
ODC 852	5 MP	HDMI, SD, WLAN	25 - 60	CMOS	1/1,8"	colour	Win XP, Vista, 7, 8, 10

■ * ONLY WHILE STOCKS LAST

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 OXM 902 software
- · Power supply is from an external 12 V power unit
- Please order the appropriate C-mount adapter (only 1,0× possible) to fit your KERN microscope now
- · Black balance possible

Note: Can only be used in combination with compound microscopes









Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system
KERN							
ODC 861	20 MP	USB 3.0	5 – 30	CMOS	1"	colour	Win XP, Vista, 7, 8, 10



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 a USB cable (length: 1,5 m), two eyepiece adapters and an object micrometer to calibrate the software
- · Possible tube diamaters: 23,2 mm (Standard) 30,0 mm (Eyepiece adapter) 30,5 mm (Eyepiece adapter)









Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system
KERN							
ODC 874	3 MP	USB 2.0	3 – 7,5	CMOS	1/2,7"	colour	Win XP, Vista, 7, 8, 10
ODC 881	5 MP	LISB 3 D	15 _ 30	CMOS	1/2 5"	colour	Win XP Vieta 7 8 10

USB Microscope - USB 2.0 KERN ODC-89

The digital USB microscope for rapid testing or for hobby use



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
- Cable length: 1,4 m

Stand with focus wheel:

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

Model	Resolution	Interface	FPS	Sensor	Sensor size	Supported operating system	Magnifica- tion levels	Focusing stand	Illumination
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







Integrated software with measuring function

Tablet with integrated camera for 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 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,
- · 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

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

















Resolution

Interface

FPS

Sensor

Sensor size

Supported operating system

KERN

Model

ODC 241 5 MP WiFi, USB 2.0, HDMI, SD 15 – 30 CMOS 1/2,5" Android 5.1







Integrated software with touch user interface

HD tablet with integrated 4K camera for convenient monitoring and professional digital documentation of the sample

Features

- The KERN ODC 251 microscope tablet camera consists of an Android tablet with a 10.5" HD display in combination with an 8 MP camera. It is intuitive to use and is suitable for all trinocular microscopes with a C-mount adapter
- The KERN tablet cameras have been specially developed for simple, direct monitoring of samples on the screen, whether used in the laboratory, in quality testing or in training and studying
- The integrated high-performance camera has an 8 MP image sensor with a sensor size of 1/1.8" and is able to record videos with a resolution of 4K. In this way, as well a live transfer of the image to the Android table, high-resolution images and videos can also be created for the documentation. Measuring functions, such as, for example, functions for measuring distance, surfaces and angles 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,
- Data storage on a USB stick
- 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 or LAN
- · The delivery includes the tablet camera with pre-installed measuring software, the power supply, a calibration slide as well as user instructions

Scope of application

- · Goods inwards inspection
- · Quality control
- · Repair and Service
- Laboratories
- · Training and study

Technical data

- 10,5" LCD-Touchscreen
- · Screen resolution: pixels 1920×1280
- · CPU: Quad Core Cortex-A17; 1,8 GHz
- Overall dimensions W×D×H 237×169×57 mm
- · Net weight approx. 0,80 kg

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



Model

Resolution camera

Interfaces

FPS

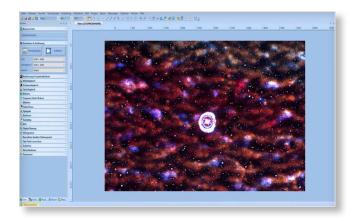
Sensor

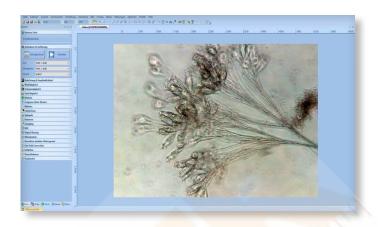
Sensor size

Supported operating system

KERN

ODC 251 8 MP 4 K Ethernet, Bluetooth, WLAN, USB 2.0, USB 3.0, HDMI 30 FPS CMOS 1/1,8" Android





The digital specialist for measurement, counting and archiving – free of charge with all KERN microsope 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
- Please refer to the documentation for the software in the download area of our website on the internet.