

User instructions

Microscope camera

KERN

ODC-86

ODC 861

Version 1.4
02/2025





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Before use

You should ensure that the device is not exposed to direct sunlight, temperatures which are too high or too low, vibrations, dust or a high level of humidity.

The ideal temperature range is between 0 and 40°C and a relative humidity of 85% should not be exceeded.

Always make sure that you use an approved power cable. Thus, possible damages by reason of the development of overheating (fire hazard) or an electric shock can be prevented.

Do not open the housing and touch the internal component. There is the risk of damaging them and affecting the functionality of the camera.

In order to carry out cleanings always disconnect the power cable from the camera.

Always keep the sensor clear from dust and do not touch it. Otherwise, there is the risk of affecting the microscopic image. In case of non-use always attach the protective covers.

Technical data

Camera model	ODC 861
Resolution	20 MP / 2.4 x 2.4 µm
Sensor	1" CMOS
Frames per second (FPS)	5 - 30
Colour / monochrome	Colour
Interfaces	USB 3.0
Supported operating systems	Microsoft® Windows® 11 / 10 / 8 / 7
PC requirements	CPU ≥ 2.8 GHz / USB 3.0 / Memory > 2 GB

Nomenclature



Number	Description
1	12 V DC connection
2	USB 3.0 Interface
3	USB 2.0 Interfaces
4	LED-Status

LED	Description
PWR	Camera On/Off
SYS	System Connection
TEC	Peltier Cooling On/Off
FAN	Fan On/Off

Scope of delivery

- Microscope camera
- USB 3.0 connection cable
- Object micrometer for calibration
- Software CD

Free download:

www.kern-sohn.com > DOWNLOADS > SOFTWARE > Microscope VIS Pro

- Eyepiece adapter (Ø 23,2 mm)
- Adjustment rings (Ø 30,0 mm + Ø 30,5 mm) for eyepiece adapter
- Power supply

Mounting

1. Remove the black cover at the bottom of the camera.
2. The thread, where the cover was attached, is a standardised C mount thread. Thus, there are special C mount adapters needed for the connection to a microscope.
3. For the mounting to the microscope the C mount adapter is attached to the connection point of the microscope. After that the camera must be screwed onto the C mount adapter.

Important:

The choosing of the right C mount adapter depends on the used microscope model. It must be an adapter, which is adjusted to the construction of the microscope and recommended by the manufacturer as appropriate for the relevant microscope.

4. If necessary, adjust the microscope according to the trinocular usage (with help of the trino toggle rod / trino toggle wheel).

PC connection

1. Establish USB 3.0 connection via USB 3.0 connection cable.
2. Installing the software with help of the CD / download.
3. The software-internal "User Guide" includes all information and instructions about the operation of the software or of digital microscopy.