

Digital microscope sets KERN OBL-S · OBN-S



# 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 135: 20 W Halogen (transmitted)
- 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)

Included camera	Resolution camera	Interface	Sensor	Details microscope, camera
ODC 825	5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 86
ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 86
ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 16, 90
ODC 825	5 MP	USB 2.0 (6,8 - 55 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 86
ODC 832	5 MP	USB 3.0 (14,2 - 101,2 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 86
ODC 241	5 MP	WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)	CMOS 1/2,5"	KERN Optics catalogue Page 20, 90
	ODC 825 ODC 832 ODC 241 ODC 825 ODC 832	camera         camera           ODC 825         5 MP           ODC 832         5 MP           ODC 241         5 MP           ODC 825         5 MP           ODC 832         5 MP	camera         camera           ODC 825         5 MP         USB 2.0 (6,8 - 55 FPS)           ODC 832         5 MP         USB 3.0 (14,2 - 101,2 FPS)           ODC 241         5 MP         WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)           ODC 825         5 MP         USB 2.0 (6,8 - 55 FPS)           ODC 832         5 MP         USB 3.0 (14,2 - 101,2 FPS)	camera         camera           ODC 825         5 MP         USB 2.0 (6,8 - 55 FPS)         CMOS 1/2,5"           ODC 832         5 MP         USB 3.0 (14,2 - 101,2 FPS)         CMOS 1/2,5"           ODC 241         5 MP         WiFi, USB 2.0, HDMI, SD (15 - 30 FPS)         CMOS 1/2,5"           ODC 825         5 MP         USB 2.0 (6,8 - 55 FPS)         CMOS 1/2,5"           ODC 832         5 MP         USB 3.0 (14,2 - 101,2 FPS)         CMOS 1/2,5"

# **MICROSCOPES & REFRACTOMETERS 2023**

KERN PICTOGRAMS





360° rotatable microscope head



Monocular Microscope For the inspection with one eye



**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 100 W 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

00

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 digital camera

For direct transmitting of the picture to a PC



USB 3.0 digital camera

For direct transmitting of the picture to a PC



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 a PC.



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

## **ABBREVIATIONS**

C-Mount Adapter for the connection of a camera to a trinocular microscope

**FPS** Frames per second

High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses) H(S)WF

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) Battery operation rechargeable Prepared for a rechargeable battery



**■**→)

RECHARGE

BATT

operation

**Battery operation** 

**Plug-in power supply** 230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Ready for battery operation. The battery

type is specified for each device.



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.