# KERN OBT 231



The modern compound microscope for teaching in your class room



Category	
Brand	Optics
Product categoriy	Microscope
Product group	Compound microscope
Product family	OBT-2

Display	
Display type	LCD
Display screen size	7"
Display resolution	1844×1080
Languages of the user interface	German English French Russian

Construction	
Dimension (W×D×H)	182×195×360 mm
Dimension display device (W×D×H)	182×15×125 mm
Material display housing	plastic
Optical system	Finite
Tube angle of inclination	30°
Tube 360° rotation	✓
Light distribution	0:100
Contrasting methods	Bright field
Standard objectives	4× 10× 40× 100×
Lens quality	achromatic
Nosepiece screw-in locations	4
Colour temperature	6000 K

Functions	
Camera - Applicable software	S-Viewer (OXM 904) integrated camera software
Camera - Software functions	Image capturing Video capturing Measurements
Supported operating systems	Win 7 Win 8 Win 10 Win 11
Memory - total size	16 GB
System requirements CPU	Intel Core i3 or higher AMD Ryzen 5 or higher
System requirements RAM	8 GB or more
System requirements SSD storage	128 GB SSD or more
System requirements graphics card	NVIDIA GeForce RTX 3060 AMD Radeon RX 6600
System requirements screen	20" HD or larger
System requirements clock speeds	-
Interface	
Interfaces	USB 2.0 MicroSD card slot
Interfaces  Objective	
	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic
Objective	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1
Objective Objectives - Details	Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring
Objectives Objectives - Details Objectives magnifications	Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring
Objective  Objectives - Details  Objectives magnifications  Illumination	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x
Objective Objectives - Details Objectives magnifications Illumination Illuminance	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x  Transmitted light
Objective  Objectives - Details  Objectives magnifications  Illumination  Illuminance  Illumination type transmitted light  Illumination intensity transmitted	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x  Transmitted light LED
Objectives - Details  Objectives magnifications  Illumination  Illuminance  Illumination type transmitted light  Illumination intensity transmitted  light	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x  Transmitted light LED 1 W
Objectives Objectives - Details Objectives magnifications Illumination Illumination type transmitted light Illumination intensity transmitted light Illumination dimmable	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x  Transmitted light LED  1 W  Transmitted light
Objectives Objectives - Details Objectives magnifications Illumination Illuminance Illumination type transmitted light Illumination intensity transmitted light Illumination dimmable Filter possible	MicroSD card slot  Objective Achromatic 10x / 0,25 Objective Achromatic 100x / 1,25 oil, spring Objective Achromatic 4x / 0,1 Objective Achromatic 40x / 0,65 spring 4x / 10x / 40x / 100x  Transmitted light LED  1 W  Transmitted light

Field of view [Max]

Fine drive minimum

1

4,5 mm

0,0025 mm

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Focusing mechanism coaxial coarse and fine drive

Condensor
Condensor type Abbe

Camera	
Cameratype	Tablet camera
Camera - Resolution	2 MP
Camera - Sensor type	CMOS
Camera - Sensor size	1/2,8"
Camera - Framerate	60 fps
Camera- Mounting types	Plug-in connection
Camera - Exposure method	Rolling Shutter
Camera - Sensor Diagonal	6,46 mm
Camera - Pixel size	2,9×2,9 µm
Camera - FPS range 1	30 FPS
Camera - Resolution range 1	1844x1080
Camera - Exposure time [Min]	0,03 ms
Camera - Exposure time [Max]	40 ms

Power Supply	
Supplied power supply	Power supply unit
Plug-in power supply type	Power adapter
Plug-in power supply / adapter for countries - optional	EURO
Input voltage power supply / power [Max]	100 - 240 V
Power supply cable removable	removable
Input voltage device / power [Max]	5 V, 2 A
Power socket for mains adapter	Hollow plug inside plus, Ø outside 5,5 mm; Ø inside 2,1 mm

Environmental conditions	
Storage temperature [Min]	-5 °C
Storage temperature [Max]	40 °C

Approval		
CE mark	✓	

Packing & Shipping	
Delivery time	1 d
Dimensions packaging (W×D×H)	275×205×540 mm
Shipping method	Parcel service
Net weight approx.	3,0 kg
Gross weight approx.	3,8 kg

Shipping weight 6,1 kg

# Product information GTIN/EAN number 4045761484894 REACH classification no prohibited substances

## Pictograms

#### **STANDARD**



### **OPTION**

