

## Compound microscope KERN OBT-1





Monocular version



**Objectives OBT** 

# EDUCATIONAL LINE

# The modern compound microscope for teaching in your class room

#### Features

- The KERN OBT range is a high-quality school microscope, which will impress you with its intuitive control elements, sturdy construction and modern design
- The infinitely dimmable 1W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use is also no problem through optional battery operation
- The simple 0.65 condenser lens with adjustable aperture diaphragm on the OBT 101 ensures the very best concentration of light and illumination of the sample. The OBT 102, 103, 104, 105, 106 models have a 1.25 Abbe condenser which is height-adjustable and can therefore be focussed and has an aperture diaphragm, which ensures the very best concentration of light
- To focus the object accurately, all models have a coarse and fine focusing knob on both sides. The mechanical angle table enables you to work with the samples and move them rapidly (for OBT 103, 104, 105, 106 models)
- A large selection of different eyepieces and objectives is also available
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

#### Scope of application

• Primary school, secondary school, training, hobby use

#### **Applications/Samples**

 Translucent, thin, high-contrast, less complex samples (e.g. plant tissue, coloured cells/ parasites)

#### **Technical data**

- Finite optical system (DIN)
- Triple (OBT 101) or quadplex (OBT 102, 103, 104, 105, 106) nosepiece
- Tube 45° inclined/360° rotatable
- Diopter adjustment: Both-sided (for binocular models)
- Overall dimensions W×D×H
   195×147×325 mm
- Net weight approx. 2,5 kg

STANDAR	D						OPTION	-
Q	0	00	$\boldsymbol{\Delta}$	Đ				hun
360*	MONO	BINO	ABBE	LED	230 V	1 DAY	BATT	SCALE
			not OBT 101					

	061 101						
Model	Standard configuration						
KERN	Tube         Eyepiece         Objective quality		Objectives	Illumination	Stage		
OBT 101	Monocular	HWF 10×/Ø 18 mm	Achromatic		1W LED (transmitted)	fix	
OBT 102	Monocular	HWF 10×/Ø 18 mm	Achromatic	4×/10×/40×	1W LED (transmitted)	fix	
OBT 103	Monocular	HWF 10×/Ø 18 mm	Achromatic	4^/10^/40^	1W LED (transmitted)	mechanical	
OBT 104	Binocular	HWF 10×/Ø 18 mm	Achromatic		1W LED (transmitted)	mechanical	
OBT 105	Monocular	HWF 10×/Ø 18 mm	Achromatic	4x/10x/40x/100x	1W LED (transmitted)	mechanical	
OBT 106	Binocular	HWF 10×/Ø 18 mm	Achromatic	4X/10X/40X/100X	1W LED (transmitted)	mechanical	



# Compound microscope KERN OBT-1

Model outfit	it			Mode	KERN	Order number			
		OBT 101	OBT 102	OBT 103	OBT 104	OBT 105	OBT 106		
	WF 10×/Ø 18 mm	1	1	1	11	1	11	OBB-A3200	
Eyepieces (23,2 mm)	WF 10×/Ø 18 mm (with Pointer)	0	0	0	0	0	0	OBB-A3201	
(,_	WF 10×/Ø 18 mm (reticule 0,1 mm)	0	0	0	0	0	0	OBB-A3202	
	4×/0,10 W.D. 27 mm	1	1	1	~	~	✓	OBB-A3203	
	10×/0,25 W.D. 7 mm	1	1	1	~	~	✓	OBB-A3204	
Achromatic objectives	40×/0,65 (spring-loaded) W.D. 0,6 mm	1	1	1	~	~	✓	OBB-A3205	
	100×/1,25 (oil) (spring-loaded) W.D. 0,2 mm	0	0	0	0	~	✓	OBB-A3207	
	60×/0,85 (spring-loaded) W.D. 0,4 mm	0	0	0	0	0	0	OBB-A3206	
Monocular tube	45° inclined/360° rotatable	✓	1	1	0	~	0	OBB-A3221	
Binocular tube	<ul> <li>Siedentopf 45° inclined/360° rotatable</li> <li>Interpupillary distance 48–75 mm</li> <li>Diopter adjustment: One-sided</li> </ul>	0	0	0	*	0	*	OBB-A3222	
Fixed stage	<ul> <li>Stage size W×D 115×110 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2 μm</li> </ul>	*	~						
Mechanical stage	<ul> <li>Stage size W×D 115×110 mm</li> <li>Travel 52×20 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2 µm</li> <li>One slide holder</li> </ul>			~	*	*	~		
	Simple condenser N.A. 0,65	<ul> <li>✓</li> </ul>							
Condenser	Abbe N.A. 1,25 (aperture diaphragm)		1	✓	~	1	✓		
Illumination	1 W LED spare bulb (transmitted)	~	~	~	~	~	~	OBB-A3208	
	Blue	0	0	0	0	0	0	OBB-A3212	
Colour filters	Green	0	0	0	0	0	0	OBB-A3210	
for transmitted illumination	Yellow	0	0	0	0	0	0	OBB-A3211	
	Grey	0	0	0	0	0	0	OBB-A3209	

 $\checkmark$  = Included with delivery

O = Option

# **KERN OPTICS CATALOGUE 2021**



360° rotatable Q microscope head



360°

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 100W 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



Infinity system Infinity corrected optical system

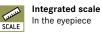


PARALLEL

Zoom magnification For stereomicroscopes



Parallel optical system For stereomicroscopes, enables fatigue-proof working



SD card For data storage



÷

USB 3.0

USB 2.0 digital camera For direct transmitting of the picture to a PC USB 2.0



1 DAY

Package shipment

Power supply

The time required to manufacture the product internally is shown in days in the pictogram

## Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	LWD	Long Working Distance	SWF	Super Wide Field (Field number at least Ø 23 mm for 10× eyepiece)
FPS	Frames per second	N.A.	Numerical Aperture	W.D.	Working Distance
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	SLR camera	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer:





WLAN data interface For transmitting of the picture to a mobile display device

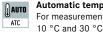
HDMI

devic

HDMI digital camera For direct transmitting of the picture to a display

o I
SOFTWARE
JOI THAILE

PC software To transfer the measurements from the device to a PC



Automatic temperature compesation For measurements between

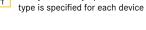


Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram

BATT

**Battery operation** ..... Ready for battery operation. The battery





Battery operation rechargeable Prepared for a rechargeable battery



Mains adapter 230V/50Hz in standard version for EU.

On request GB, AUS or USA version

Integrated in microscope. 230V/50Hz

-6 230 V

