# Compound microscope KERN OBN-13







Abbe condenser center-adjustable, also available with swing-out lens



Butterfly head (optionally available)

## **PROFESSIONAL LINE**

Professionalism and versatility united in one microscope – with Koehler illumination for demanding applications

### Features

OTANDADD

- The OBN series stands out because of its unbeatable and consistently high quality and its ergonomic design. The range of modular components means that the OBN series can be individually customised for the professional user.
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen transmitted illumination (Philips).
- This series has a professional Koehler illumination unit with an adjustable field diaphragm as well as a height-adjustable 1,25 Abbe condenser which can be centred and which has an adjustable aperture diaphragm.
- The extremely large mechanical stage with ergonomic, coaxial coarse and fine focusing knob on both sides enables you to adjust and focus your sample rapidly and accurately.

- A wide variety of modular systems, such as, for example, a swing-out condenser, various eyepieces, objectives, colour filters, phase contrast units, a darkfield condenser, a simple polarising unit through to complete fluorescence units are available to you as accessories.
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery.
- A C-mount adapter is required to connect a camera. You can select this adapter from the following model outfit list.
- Please find detailed information in the following charts.

#### Scope of application

 Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, Sewage treatment plants, Oncology, entomology, vets, water analysis and breweries

### Applications/Samples

• Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue)

### Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- · Diopter adjustment: Both-sided
- Overall dimensions W×D×H
   390×200×400 mm
- Net weight approx. 9 kg

SIANDARD					OPTION									
Q		$\boldsymbol{\Delta}$	Ð	$\mathbf{\infty}$	<b></b>		<b>3</b> YEARS	00			0	$\bigcirc$		Luun
360°	TRINO	ABBE	HAL	INFINITY	230 V	1 DAY	WARRANTY	BINO	FL-HBO	FL-LED	PH	DF	POLAR	SCALE

Model	Standard configuration							
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination			
OBN 132	Trinocular	WF 10×/Ø 20 mm	Infinity Plan	4×/10×/20×/	6 V/20 W Halogen (transmitted)			
OBN 135 🔤	Trinocular	WF 10×/Ø 20 mm	Infinity Plan	40×/100×	3 W LED (transmitted)			
New model								

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# Compound microscope KERN OBN-13



Model outfit	Mode	I KERN	Order number		
		OBN 132	OBN 135	-	
	WF 10×/Ø 20 mm	<b>44</b>	44	OBB-A1351	
Eyepieces (23,2 mm)	WF 16×/Ø 13 mm	00	00	OBB-A1354	
	WF 10×/Ø 20 mm (reticule 0,1 mm) (adjustable)	0	0	OBB-A1352	
	4×/0,10	✓	✓	OBB-A1263	
	10×/0,25	✓	✓	OBB-A1243	
	20×/0,40	✓	✓	OBB-A1250	
Infinity	40×/0,66 (spring)	✓	✓	OBB-A1257	
Plan achromatic objectives	100×/1,25 (oil) (spring)	✓	✓	OBB-A1240	
	2,5×/0,07	0	0	OBB-A1247	
	60×/0.80 (spring)	0	0	OBB-A1270	
	Plan 100×/1,15 (water) (spring)	0	0	OBB-A1437	
Tuin and a state	<ul> <li>Siedentopf 30° inclined/360° rotatable</li> <li>Interpupillary distance 50 - 75 mm</li> <li>Light distribution 100:0</li> <li>Diopter adjustment: Both-sided</li> </ul>	√	✓		
Trinocular tube	<ul> <li>Butterfly 30° inclined/360° rotatable</li> <li>Interpupillary distance 50 - 75 mm</li> <li>Light distribution 100:0</li> <li>Diopter adjustment: Both-sided</li> </ul>	0	0	OBB-A1382	
Mechanical stage	<ul> <li>Stage size W×D 175×145 mm</li> <li>Travel 78×55 mm</li> <li>Coaxial coarse and fine focusing knobs</li> <li>Two slide holder</li> </ul>	1	~		
	Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	OBB-A1102	
Condenser	Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	0	0	OBB-A1104	
Darkfield condenser	N.A. 0,85 – 0,91 (dry)	~	~	OBB-A1421	
	6 V/20 W Halogen spare bulb (transmitted)	✓		OBB-A1370	
Koehler illumination	3 W LED illumination system (transmitted) (non-rechargeable)		✓		
Polarising unit	Analyser/Polariser	0	0	OBB-A1283	
	Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	0	0	OBB-A1237	
	Single unit with $\infty$ PH-Plan objective 10×	0	0	OBB-A1214	
Phase contrast units	Single unit with $\infty$ PH-Plan objective 20×	0	0	OBB-A1216	
unitə	Single unit with $\infty$ PH-Plan objective 40×	0	0	OBB-A1218	
	Single unit with $\infty$ PH-Plan objective 100×	0	0	OBB-A1212	
	If required, there are several magnification levels, please conta	eam			
C Mount	1×	0	0	OBB-A1140	
C-Mount	0,57× (focus adjustable)	0	0	OBB-A1136	
	100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective	0	0	OBB-A1155	
Fluorescence unit	100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective	0	0	OBB-A1153	
	3 W LED Epi Fluorescence unit (B/G) including centering objective	0	0	OBB-A1156	
	Blue (fitted to the condenser)	✓	✓		
Colour filters for transmitted	Green	0	0	OBB-A1188	
illumination	Yellow	0	0	OBB-A1165	
	Gray	0	0	OBB-A1183	

# **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



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HAL

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

# Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope
FPS	Frames per second
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



Phase contrast unit For a higher contrast

Darkfield condenser/unit

For a higher contrast due to indirect





Polarising unit To polarise the light

Infinity system

illumination





Zoom magnification For stereomicroscopes



Parallel optical system For stereomicroscopes, enables fatigue-proof working

Infinity corrected optical system



Integrated scale In the eyepiece

HDMI digital camera

SLR Kamera Single-Lens Reflex camera

display device



USB 2.0

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HDMI

LWD

N.A.

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

For direct transmitting of the picture to a



Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC



SD card For data storage

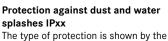


PC software To transfer the measurements from the device to a PC.



Automatic temperature compesation For measurements between 10 °C and 30 °C





pictogram. **Battery operation** 



Ready for battery operation. The battery type is specified for each device.



Battery operation rechargable Prepared for a rechargable battery



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



### Power supply

pictogram.

operation

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

On request GB, AUS or USA version.

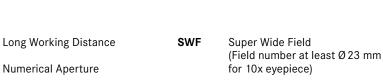


## Package shipment The time required to manufacture the

product internally is shown in days in the pictogram. Warrantv

The warranty period is shown in the

**3**YEARS WARRANTY



WF

W.D. Working Distance	e
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Wide Field (Field number up to Ø22 mm for 10x eyepiece)

Your KERN specialist dealer:

