













Objectives OBF





Simple polarising attachment

Darkfield unit

LAB LINE

The variable model for the flexible user in the laboratory and vocational training

Features

- · The KERN OBF and OBL models are excellent and robust laboratory microscopes for all common routine applications.
- · Thanks to the simple Koehler illumination, the adjustable field diaphragm and a pre-centred and height adjustable Abbe condenser with adjustable aperture diaphragm, these microscopes produce impressive images in both bright and dark field applications.
- The microscopes are equipped with wide field eyepieces, with achromatic, plan achromatic or infinity corrected E-plan objectives, depending on the model.
- · These binocular microscopes are equipped with diopter adjustment.
- · A trinocular head is optionally available, allowing a camera to be fitted.

- · A nosepiece for up to four objectives and a large stage are provided as standard.
- · The following optional accessories are available: A variety of eyepieces, objectives, a complete polarisation kit, a phase contrast unit, complete HBO and LED fluorescence kits and more.
- 20W halogen illumination and a 3W LED alternative version are available for illumination.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism.

Technical data

- Eyepieces: WF 10x18mm / WF 10x20 mm
- Objectives: 4x / 10x / 40x / 100x
- · Overall dimensions WxDxH 394x185x377 mm
- · Net weight approx. 6,5 kg

Please find detailed information in the following charts.

STANDARD								
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360°	BINO	ABBE	HAL	LED	INFINITY	230 V	1 DAY	WAR

)	∞	—		3 _{YEAF}
LED	INFINITY	230 V	1 DAY	WARRAN
	only OBL			



Model	Standard configuration			
KERN	Optical system	Tube	Illumination	
OBF 121	Achromatic	Binocular	6V / 20W Halogen (transmitting)	
OBF 122	Achromatic	Binocular	6V / 20W Halogen (transmitting)	
OBF 123	Achromatic	Binocular	3W LED (transmitting)	
OBL 125	Infinity	Binocular	6V / 20W Halogen (transmitting)	
OBL 127	Infinity	Binocular	3W LED (transmitting)	

Compound microscope KERN OBF-1



Model outfit			Model KERN	<u> </u>	Order number	
			OBF 122	OBF 123		
	WF 10x / Ø 18 mm	••	••	••	OBB-A1347	
	WF 16x/Ø 13 mm	00	00	00	OBB-A1354	
Eyepieces	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	0	0	0	OBB-A1349	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (adjustable)	0	0	0	OBB-A1350	
	WF 10x / Ø 20 mm (reticule 0,1 mm) (adjustable)	0	0	0	OBB-A1352	
	4x	•			OBB-A1111	
	10x	•			OBB-A1108	
Achromatic	40x (spring)	•			OBB-A1112	
objectives	100x / 1,25 (oil) (spring)	•			OBB-A1109	
	20x	0	0	0	OBB-A1110	
	60x (spring)	0	0	0	OBB-A1113	
	4x		•	•	OBB-A1255	
	10x		•	•	OBB-A1238	
	40x / 0,65 (spring)		•	•	OBB-A1256	
Plan objectives	100x / 1,25 (oil) (spring)		•	•	OBB-A1239	
	20x		0	0	OBB-A1249	
	60x (spring)		0	0	OBB-A1269	
Binocular tube	Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for non-infinity system) With diopter adjustment (one-sided)	•	•	•	OBB-A1129	
Trinocular tube	Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm Light distribution: 20:80 (for non-infinity system) With diopter adjustment (one-sided)	0	0	0	OBB-A1345	
Nosepiece	Quadplex	•	•	•		
Mechanical stage	Stage size: WxD 145x140 mm Travel: 76x52 mm Coaxial coarse and fine focusing knobs, scale: 2 µm Two slide holder	•	•	•		
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	•	•	•	OBB-A1103	
	6V / 20W Halogen (transmitting)	•	•		OBB-A1204	
Illumination	3W LED illumination system (transmitting) (non-rechargeable)			•		
Field diaphragm	Field diaphragm	•	•	•		
Darkfield unit	N.A. 0,9 (Dry) Usable for 4x - 40x objectives	0	0	0	OBB-A1149	
Polarising unit	Analyser / Polariser	0	0	0	OBB-A1277	
Eluaraccana ····*	100W HBO Epi Fluorescence unit, three-hole slide (B / G) including centering objective	0	0	0	OBB-A1154	
Fluorescence unit	3W LED Epi Fluorescence unit, three-hole slide (B / G) including centering objective	0	0	0	OBB-A1157	
	Blue	•	•	•	OBB-A1178	
Filter	Green	0	0	0	OBB-A1194	
	Yellow	0	0	0	OBB-A1203	
C Mount	0,47x (focus adjustable)	0	0	0	OBB-A1135	
C-Mount	1x	0	0	0	OBB-A1142	

Standard configuration

O = Option

Compound microscope KERN OBL-1



Eyepieces W W W Infinity E-Plan objectives PI PI Binocular tube	/F 10x / Ø 20 mm /F 16x / Ø 13 mm /F 10x / Ø 18 mm (reticule 0,1 mm) /F 10x / Ø 18 mm (reticule 0,1 mm) (adjustable) /F 10x / Ø 20 mm (reticule 0,1 mm) (adjustable) x 0x 0x (spring) 00x (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm	OBL 125 OO O	OBL 127	OBB-A1351 OBB-A1354 OBB-A1354 OBB-A1350 OBB-A1352 OBB-A1161 OBB-A1159 OBB-A1158 OBB-A1250 OBB-A1270	
Eyepieces W W W Infinity E-Plan objectives PI PI Binocular tube	/F 16x / Ø 13 mm /F 10x / Ø 18 mm (reticule 0,1 mm) /F 10x / Ø 18 mm (reticule 0,1 mm) (adjustable) /F 10x / Ø 20 mm (reticule 0,1 mm) (adjustable) x 0x 0x 0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	00 0 0 0	00 0 0 0 •	OBB-A1354 OBB-A1359 OBB-A1350 OBB-A1352 OBB-A1161 OBB-A1159 OBB-A1159 OBB-A1158 OBB-A1250 OBB-A1270	
Eyepieces W W Infinity E-Plan objectives Binocular tube	/F 10x / Ø 18 mm (reticule 0,1 mm) /F 10x / Ø 18 mm (reticule 0,1 mm) (adjustable) /F 10x / Ø 20 mm (reticule 0,1 mm) (adjustable) x 0x 0x (spring) 00x (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	0 0 0 • •	0 0 0 0	OBB-A1349 OBB-A1350 OBB-A1352 OBB-A1161 OBB-A1159 OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
Infinity E-Plan objectives 10 Pl Pl Binocular tube	/F 10x / Ø 18 mm (reticule 0,1 mm) (adjustable) /F 10x / Ø 20 mm (reticule 0,1 mm) (adjustable) x 0x 0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	0 0 • •	• • •	OBB-A1350 OBB-A1352 OBB-A1161 OBB-A1159 OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
Infinity E-Plan objectives 10 Pl Pl Binocular tube	/F 10x / Ø 20 mm (reticule 0,1 mm) (adjustable) x 0x 0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	• • •	•	OBB-A1352 OBB-A1161 OBB-A1159 OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
Infinity E-Plan objectives 10 Pl Pl Binocular tube	x 0x 0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•	OBB-A1161 OBB-A1159 OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
Infinity E-Plan objectives 10 Pl Pl Binocular tube	0x (spring) 0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•	OBB-A1159 OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
Infinity E-Plan objectives 10 Pl Pl Binocular tube	0x (spring) 00x (oil) (spring) lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•	OBB-A1160 OBB-A1158 OBB-A1250 OBB-A1270	
E-Plan objectives 10 Pl Pl Binocular tube	lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•	OBB-A1158 OBB-A1250 OBB-A1270	
E-Plan objectives 10 Pl Pl Binocular tube	lan 20x / 0,40 lan 60x / 0,80 (spring) Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	0	0	OBB-A1250 OBB-A1270	
Pl. Binocular tube	Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable			OBB-A1270	
Binocular tube	Siedentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 – 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•		
Binocular tube ·	Interpupillary distance: 50 - 75 mm (for infinity system) With diopter adjustment (one-sided) Siedentopf, 30° inclined, 360° rotatable	•	•	ODD 44400	
•	Siedentopf, 30° inclined, 360° rotatable			OBB-A1130	
Trinocular tube	Light distribution: 20:80 (for infinity system) With diopter adjustment (one-sided)	0	o	OBB-A1346	
Nosepiece Q	uadplex	•	•		
Mechanical stage	Stage size: WxD 145x140 mm Travel: 76x52 mm Coaxial coarse and fine focusing knobs, scale: 2 µm Two slide holder	•	•		
Condenser Ak	bbe N.A. 1,25 precentered (aperture diaphragm)	•	•	OBB-A1103	
6\	V / 20W Halogen (transmitting)	•		OBB-A1204	
Illumination 3V	W LED illumination system (transmitting)		•		
Field diaphragm Fi	ield diaphragm	•	•		
	.A. 0,9 (Dry) sable for 4x – 40x objectives	0	0	OBB-A1149	
Polarising unit Ar	nalyser / Polariser	0	0	OBB-A1277	
Independent phase	ndependent slot with ∞ PH-Plan objective 10x	0	0	OBB-A1215	
contrast unit In	ndependent slot with ∞ PH-Plan objective 20x	0	0	OBB-A1217	
	ndependent slot with ∞ PH-Plan objective 40x	0	0	OBB-A1219	
PH-slides)	ndependent slot with ∞ PH-Plan objective 100x	0	0	OBB-A1213	
in	00W HBO Epi Fluorescence unit, three-hole slide (B / G) cluding centering objective	0	0	OBB-A1154	
	W LED Epi Fluorescence unit, three-hole slide (B / G) cluding centering objective	0	0	OBB-A1157	
ВІ	lue	•	•	OBB-A1178	
Filter Gr	reen	0	0	OBB-A1194	
Ye	ellow	0	0	OBB-A1203	
	,47x (focus adjustable)	0	0	OBB-A1135	
C-Mount	x	0	0	OBB-A1142	

= Standard configuration

O = Option

KERN Pictograms:





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Monocular Microscope

For the inspection with one eye



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



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Binocular Microscope

For the inspection with both eyes



Phase contrast unit

For a higher contrast



Battery operation

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



Trinocular Microscope

For the inspection with both eyes and the additional option for the connection of a camera



Polarising unit

To polarise the light



Rechargeable battery pack

Rechargeable set.



Abbe Condenser

With high numerical aperture for the concentration and the focusing of light



Infinity system

Infinity corrected optical system



Mains adapter

230V/50Hz in standard version for EU. On request GB, AUS or USA version.



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Power supply

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



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Package shipment

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



Incident illumination

For non-transparent objects



Integrated scale

In the eyepiece



Warranty

The warranty period is shown in the pictogram.



Transmitting illumination

For transparent objects



Integrated USB 2.0 digital camera

For direct transmitting of the picture to a PC



Fluorescence illumination

For stereomicroscopes



Integrated USB 3.0 digital camera

For direct transmitting of the picture to a PC

Abbreviations

C-Mount Adapter for the connection of a

camera to a trinocular microscope

H(S)WF High (Super) Wide Field

(Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field

(Field number at least Ø 23 mm

for 10x eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to

Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: