Trinocular version

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-1 and OBL-1 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 10x18 mm / WF 10x20 mm
- Objectives: 4x / 10x / 40x / 100x
- Overall dimensions WxDxH 395x200x380 mm
- Net weight approx. 6,5 kg

Please find detailed information in the following charts.

STANDARD

360° | BINO | ABBE | HAL | LED | INFINITY (only OBL) | 230 V | 1 DAY | 3 YEARS WARRANTY

OPTION

TRINO | FL-HBO | FL-LED | PH | POLAR | SCALE

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

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Compound microscope KERN OBF-1

Model outfit		Model KERN			Order number	
		OBF 121	OBF 122	OBF 123		
Eyepieces	WF 10x / Ø 18 mm	●●	●●	●●	OBB-A1347	
	WF 16x / Ø 13 mm	oo	oo	oo	OBB-A1354	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	o	o	o	OBB-A1349	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (adjustable)	o	o	o	OBB-A1350	
	WF 10x / Ø 20 mm (reticule 0,1 mm) (adjustable)	o	o	o	OBB-A1352	
Achromatic objectives	4x / 0,10	●			OBB-A1111	
	10x / 0,25	●			OBB-A1108	
	40x / 0,65 (spring)	●			OBB-A1112	
	100x / 1,25 (oil) (spring)	●			OBB-A1109	
	20x / 0,40	o	o	o	OBB-A1110	
	60x / 0,80 (spring)	o	o	o	OBB-A1113	
Plan objectives	4x / 0,10		●	●	OBB-A1255	
	10x / 0,25		●	●	OBB-A1238	
	40x / 0,65 (spring)		●	●	OBB-A1256	
	100x / 1,25 (oil) (spring)		●	●	OBB-A1239	
	20x / 0,40		o	o	OBB-A1249	
	60x / 0,80 (spring)		o	o	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)	o	o	o	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	
Illumination	6V / 20W Halogen (transmitting)	●	●		OBB-A1204	
	3W LED illumination system (transmitting) (non-rechargeable)			●		
Field diaphragm	Field diaphragm	●	●	●		
Darkfield unit	N.A. 0,9 (Dry) Usable for 4x – 40x objectives	o	o	o	OBB-A1149	
Polarising unit	Analyser / Polariser	o	o	o	OBB-A1277	
Fluorescence unit	100W HBO Epi Fluorescence unit, three-hole slide (B / G) including centering objective	o	o	o	OBB-A1154	
	3W LED Epi Fluorescence unit, three-hole slide (B / G) including centering objective	o	o	o	OBB-A1157	
Filter	Blue	●	●	●	OBB-A1178	
	Green	o	o	o	OBB-A1194	
	Yellow	o	o	o	OBB-A1203	
C-Mount	0,47x (focus adjustable)	o	o	o	OBB-A1135	
	1x	o	o	o	OBB-A1142	

● = Standard configuration o = Option

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Compound microscope KERN OBL-1

Model outfit		Model KERN		Order number	
		OBL 125	OBL 127		
Eyepieces	WF 10x / Ø 20 mm	●●	●●	OBB-A1351	
	WF 16x / Ø 13 mm	○○	○○	OBB-A1354	
	WF 10x / Ø 18 mm (reticule 0,1 mm)	○	○	OBB-A1349	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (adjustable)	○	○	OBB-A1350	
	WF 10x / Ø 20 mm (reticule 0,1 mm) (adjustable)	○	○	OBB-A1352	
Infinity E-Plan objectives	4x / 0,10	●	●	OBB-A1161	
	10x / 0,25	●	●	OBB-A1159	
	40x / 0,65 (spring)	●	●	OBB-A1160	
	100x / 1,25 (oil) (spring)	●	●	OBB-A1158	
	Plan 20x / 0,40	○	○	OBB-A1250	
	Plan 60x / 0,80 (spring)	○	○	OBB-A1270	
Binocular tube	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm (for infinity system) · With diopter adjustment (one-sided)	●	●	OBB-A1130	
Trinocular tube	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm · Light distribution: 20:80 (for infinity system) · With diopter adjustment (one-sided)	○	○	OBB-A1346	
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	
Illumination	6V / 20W Halogen (transmitting)	●		OBB-A1204	
	3W LED illumination system (transmitting) (non-rechargeable)		●		
Field diaphragm	Field diaphragm	●	●		
Darkfield unit	N.A. 0,9 (Dry) Usable for 4x – 40x objectives	○	○	OBB-A1149	
Polarising unit	Analyser / Polariser	○	○	OBB-A1277	
Independent phase contrast unit (including PH-condenser and PH-slides)	Independent slot with ∞ PH-Plan objective 10x	○	○	OBB-A1215	
	Independent slot with ∞ PH-Plan objective 20x	○	○	OBB-A1217	
	Independent slot with ∞ PH-Plan objective 40x	○	○	OBB-A1219	
	Independent slot with ∞ PH-Plan objective 100x	○	○	OBB-A1213	
Fluorescence unit	100W HBO Epi Fluorescence unit, three-hole slide (B / G) including centering objective	○	○	OBB-A1154	
	3W LED Epi Fluorescence unit, three-hole slide (B / G) including centering objective	○	○	OBB-A1157	
Filter	Blue	●	●	OBB-A1178	
	Green	○	○	OBB-A1194	
	Yellow	○	○	OBB-A1203	
C-Mount	0,47x (focus adjustable)	○	○	OBB-A1135	
	1x	○	○	OBB-A1142	

● = Standard configuration ○ = Option

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

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

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

Integrated USB 3.0 digital camera
For direct transmitting of the picture 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 by the pictogram.

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

Rechargeable battery pack
Rechargeable set.

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

Power supply
Integrated in balance. 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.

Warranty
The warranty period is shown in the pictogram.

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: