



Trinocular version



Objectives OBF



Simple polarising attachment

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 microscopes are equipped with diopter adjustment.
- Available as binocular and trinocular models.
- 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

- Overall dimensions
WxDxH 395x200x380 mm
- Net weight approx. 6,5 kg

Please find detailed information in the following charts.

STANDARD



OPTION



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eye pieces	Quality of objectives	Objectives	Illumination	
KERN						
OBF 121	Binocular	WF 10x / Ø 18 mm	Achromatic	4x/10x/40x/100x	6V/20W Halogen (transmitted)	770,-
OBF 122	Binocular	WF 10x / Ø 18 mm	Plan	4x/10x/40x/100x	6V/20W Halogen (transmitted)	880,-
OBF 123	Binocular	WF 10x / Ø 18 mm	Plan	4x/10x/40x/100x	3W LED (transmitting)	860,-
OBF 131	Trinocular	WF 10x / Ø 18 mm	Achromatic	4x/10x/40x/100x	6V/20W Halogen (transmitted)	880,-
OBF 132	Trinocular	WF 10x / Ø 18 mm	Plan	4x/10x/40x/100x	6V/20W Halogen (transmitted)	990,-
OBF 133	Trinocular	WF 10x / Ø 18 mm	Plan	4x/10x/40x/100x	3W LED (transmitting)	970,-
OBL 125	Binocular	WF 10x / Ø 20 mm	Infinity E-Plan	4x/10x/40x/100x	6V/20W Halogen (transmitted)	930,-
OBL 127	Binocular	WF 10x / Ø 20 mm	Infinity E-Plan	4x/10x/40x/100x	3W LED (transmitting)	930,-
OBL 135	Trinocular	WF 10x / Ø 20 mm	Infinity E-Plan	4x/10x/40x/100x	6V/20W Halogen (transmitted)	1040,-
OBL 137	Trinocular	WF 10x / Ø 20 mm	Infinity E-Plan	4x/10x/40x/100x	3W LED (transmitting)	1040,-

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	○○	○○	○○	OBB-A1354
	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	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
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	○			OBB-A1110
	60x / 0,80 (spring)	○			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		○	○	OBB-A1249
	60x / 0,80 (spring)		○	○	OBB-A1269
	100x / 1,0 (water) (spring)		○	○	OBB-A1441
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)	○	○	○	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-A1370
	3W LED illumination system (transmitting) (non-rechargeable)			●	
Field diaphragm	Field diaphragm	●	●	●	
Darkfield condenser	N.A. 0,85-0,91 (Dry)	○	○	○	OBB-A1422
Polarising unit	Analyser / Polariser	○	○	○	OBB-A1277
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	●	●	●	
	Green	○	○	○	OBB-A1188
	Yellow	○	○	○	OBB-A1165
C-Mount	0,47x (focus adjustable)	○	○	○	OBB-A1135
	1x	○	○	○	OBB-A1142

● = Standard configuration

○ = Option

Model outfit		Model KERN			Order number
		OBF 131	OBF 132	OBF 133	
Eyepieces	WF 10x / Ø 18 mm	●●	●●	●●	OBB-A1347
	WF 16x / Ø 13 mm	○○	○○	○○	OBB-A1354
	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	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
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	○			OBB-A1110
	60x / 0,80 (spring)	○			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		○	○	OBB-A1249
	60x / 0,80 (spring)		○	○	OBB-A1269
	100x / 1,0 (water) (spring)		○	○	OBB-A1437
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)	●	●	●	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-A1370
	3W LED illumination system (transmitting) (non-rechargeable)			●	
Field diaphragm	Field diaphragm	●	●	●	
Darkfield condenser	N.A. 0,85-0,91 (Dry)	○	○	○	OBB-A1422
Polarising unit	Analyser / Polariser	○	○	○	OBB-A1277
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	●	●	●	
	Green	○	○	○	OBB-A1188
	Yellow	○	○	○	OBB-A1165
C-Mount	0,47x (focus adjustable)	○	○	○	OBB-A1135
	1x	○	○	○	OBB-A1142

● = Standard configuration

○ = Option

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
	Plan 100x / 1,0 (water) (spring)	○	○	OBB-A1437
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-A1370
	3W LED illumination system (transmitting) (non-rechargeable)		●	
Field diaphragm	Field diaphragm	●	●	
Darkfield condenser	N.A. 0,85-0,91 (Dry)	○	○	OBB-A1422
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	●	●	
	Green	○	○	OBB-A1188
	Yellow	○	○	OBB-A1165
C-Mount	0,47x (focus adjustable)	○	○	OBB-A1135
	1x	○	○	OBB-A1142

● = Standard configuration

○ = Option

Model outfit		Model KERN		Order number
		OBL 135	OBL 137	
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
	Plan 100x / 1,0 (water) (spring)	○	○	OBB-A1437
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-A1370
	3W LED illumination system (transmitting) (non-rechargeable)		●	
Field diaphragm	Field diaphragm	●	●	
Darkfield condenser	N.A. 0,85-0,91 (Dry)	○	○	OBB-A1422
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	●	●	
	Green	○	○	OBB-A1188
	Yellow	○	○	OBB-A1165
C-Mount	0,47x (focus adjustable)	○	○	OBB-A1135
	1x	○	○	OBB-A1142

● = standard configuration

○ = Option

 360°	360° rotatable microscope head	 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 MONO	Monocular Microscope For the inspection with one eye	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 BINO	Binocular Microscope For the inspection with both eyes	 PH	Phase contrast unit For a higher contrast	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 ACCU	Rechargeable battery pack Rechargeable set.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 DAYS	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated USB 2.0 digital camera For direct transmitting of the picture to a PC		
 FL	Fluorescence illumination For stereomicroscopes	 USB 3.0	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	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 Kamera	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10x eyepiece)
LWD	Long Working Distance	SWF	Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)		

Your KERN specialist dealer:



WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.