



Easy connection to the PC,
Laptop not included in delivery
Please find the description of the
software in chapter 8 (p. 93)

LAB LINE

The digital all-round talent for your applications, documentation and live transmissions through an integrated camera

Features

- The KERN OBD is an excellent, stable laboratory microscope with integrated camera and infinity optical system, based on the OBL series
- A strong and continuously adjustable 20 W halogen illumination unit (Philips) ensures the optimum lighting conditions
- The fixed, pre-centred and focusable 1,25 Abbe condenser with aperture diaphragm and field diaphragm gives you a simplified Koehler illumination, without having to move the centre
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides

- A large selection of eyepieces, objectives and colour filters, a simple polarising unit as well as phase contrast units are available to you as accessories
- Multi-lingual software, USB cable, calibration scale as well as a protective dust cover, eye cups and multi-lingual user instructions are included in the scope of delivery
- Please find detailed information in the following model outfit list

Scope of application

- Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, Sewage treatment plants, Oncology, entomology, vets, water analysis and breweries, if necessary, for training where there will be lots of people observing the screen/beamer at the same time

Applications/Samples

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

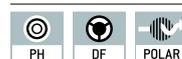
Technical data

- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions WxDxH
395x200x430 mm
- Net weight approx. 7 kg

STANDARD



OPTION



Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OBD 127	Binocular/3MP digital/USB 2.0	HWF 10x/φ 20 mm	Infinity E-Plan	4x/10x/40x/100x	6 V/20 W Halogen (transmitted)	↓
OBD 128	Binocular/5MP digital/USB 2.0	HWF 10x/φ 20 mm	Infinity E-Plan		6 V/20 W Halogen (transmitted)	↓

↓ Price reduction

Model outfit		Model KERN		Order number	
		OBD 127	OBD 128		
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	OBB-A1404	
	WF 16×/∅ 13 mm	○○	○○	OBB-A1354	
	HWF 10×/∅ 20 mm (with Pointer)	○	○	OBB-A1448	
Infinity E-Plan objectives	4×/0,10 W.D. 12,1 mm	✓	✓	OBB-A1161	
	10×/0,25 W.D. 2,1 mm	✓	✓	OBB-A1159	
	40×/0,65 (spring) W.D. 0,58 mm	✓	✓	OBB-A1160	
	100×/1,25 (oil) (spring) W.D. 0,19 mm	✓	✓	OBB-A1158	
	Plan 20×/0,40 (spring) W.D. 2,41 mm	○	○	OBB-A1250	
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	○	OBB-A1270	
	Plan 100×/1,15 (water) (spring) W.D. 0,18 mm	○	○	OBB-A1437	
Digital tube Trinocular (3MP)	<ul style="list-style-type: none"> • 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Diopter adjustment: One-sided • Light distribution 80:20 • Built-in digital 3MP Camera with ½" CMOS • USB port for PC without extra power supply • With multilingual (DE, EN, FR, IT, ES) software "Microscope VIS" for Windows XP, Vista, 7, 8, 10 	✓		OBB-A1126	
Digital tube Trinocular (5MP)	<ul style="list-style-type: none"> • 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Diopter adjustment: One-sided • Light distribution 80:20 • Built-in digital 5 MP Camera with ½,5" CMOS • USB port for PC without extra power supply • With multilingual (DE, EN, FR, IT, ES) software "Microscope VIS" for Windows XP, Vista, 7, 8, 10 		✓	OBB-A1127	
Object micrometer	For calibrating the software measuring function, 0.01 mm division	✓	✓	OBB-A1224	
Mechanical stage	<ul style="list-style-type: none"> • Stage size W×D 145×130 mm • Travel 76×52 mm • Two slide holder • Coaxial coarse and fine focusing knobs, scale: 2 µm 	✓	✓		
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	OBB-A1103	
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	OBB-A1422	
Illumination	6 V/20 W Halogen spare bulb (transmitted)	✓	✓	OBB-A1370	
Polarising unit	Analyser/Polariser	○	○	OBB-A1277	
Phase contrast units (including PH-condenser and PH-slides)	Single unit with ∞ PH-Plan objective 10×	○	○	OBB-A1215	
	Single unit with ∞ PH-Plan objective 20×	○	○	OBB-A1217	
	Single unit with ∞ PH-Plan objective 40×	○	○	OBB-A1219	
	Single unit with ∞ PH-Plan objective 100×	○	○	OBB-A1213	
If required, there are several magnification levels, please contact our OPTICS product management team					
Colour filters for transmitted illumination	Blue (built-in)	✓	✓		
	Green	○	○	OBB-A1188	
	Yellow	○	○	OBB-A1165	
	Gray	○	○	OBB-A1183	

✓ = Included with delivery

○ = Option

 360°	360° rotatable microscope head	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 WLAN	WLAN data interface: For transmitting of the picture to a mobile display device
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 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	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 TL	Transmitting illumination For transparent objects	 SD	SD card For data storage	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 FL	Fluorescence illumination For stereomicroscopes	 USB 2.0	USB 2.0 digital camera For direct transmitting of the picture to a PC	 1 DAY	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 USB 3.0	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	LWD	Long Working Distance	SWF	Super Wide Field (Field number at least \varnothing 23 mm for 10 \times 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 Kamera	Single-Lens Reflex camera	WF	Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)

Your KERN specialist dealer: