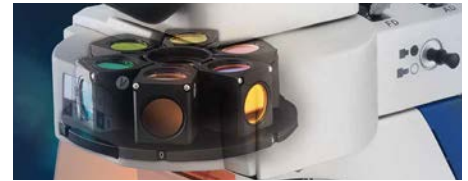




OBN 147



Illumination unit



Sextuple filter wheel OBN 148

PROFESSIONAL LINE

The fluorescence microscope for the professional user

Features

- The fluorescence microscope in the OBN-14 series is based on the usual high quality and versatility of the OBN series. The outstanding, stable design in combination with high-quality optics set the standard in fluorescence microscopy in this class.
- The powerful, dimmable 20 W halogen illumination unit (Philips) and a 100 W Epi fluorescence illumination unit ensure perfect illumination and excitation of your fluorescence samples.
- 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.
- Depending on the version, in addition to the strong 100 W Epi fluorescence unit a modular filter wheel (up to 6 times) (B/G) or (B/G/UV/V) is integrated into the standard product. By turning this filter wheel you can change the excitation filter quickly.
- A large selection of eyepieces, objectives, colour filters, darkfield condensers as well as polarising and phase contrast units can easily be integrated thanks to the modular construction system.
- The centring objective for adjusting the fluorescence, 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

- Specially for translucent, thin, low-contrast, challenging samples (e.g. immuno fluorescence, FISH, DAPI staining, etc.)

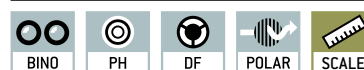
Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions WxDxH 530x220x490 mm
- Net weight approx. 23 kg

STANDARD



OPTION



































Model	Standard configuration				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
KERN					
OBN 147	Trinocular	WF 10x/φ 20 mm	Infinity Plan	4x/ 10x/20x/ 40x/ 100x	Halogen + 100 W Epi Fluorescence (B/G)
OBN 148	Trinocular	WF 10x/φ 20 mm	Infinity Plan		Halogen + 100 W Epi Fluorescence (B/G/UV/V)

Model outfit		Model KERN		Order number	
		OBN 147	OBN 148		
Eyepieces (23,2 mm)	WF 10×/∅ 20 mm	✓✓	✓✓	OBB-A1351	
	WF 16×/∅ 13 mm	○○	○○	OBB-A1354	
	WF 10×/∅ 20 mm (reticule 0,1 mm) (adjustable)	○	○	OBB-A1352	
Infinity Plan achromatic objectives	4×/0,10	✓	✓	OBB-A1263	
	10×/0,25	✓	✓	OBB-A1243	
	20×/0,40	✓	✓	OBB-A1250	
	40×/0,66 (spring)	✓	✓	OBB-A1257	
	100×/1,25 (oil) (spring)	✓	✓	OBB-A1240	
	2,5×/0,07	○	○	OBB-A1247	
	60×/0,80 (spring)	○	○	OBB-A1270	
Trinocular tube	<ul style="list-style-type: none"> • Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	✓	✓		
	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	○	○	OBB-A1382	
Mechanical stage	<ul style="list-style-type: none"> • Stage size W×D 175×145 mm • Travel 78×55 mm • Coaxial coarse and fine focusing knobs • Two slide holder 	✓	✓		
Condenser	Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	OBB-A1102	
	Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	○	○	OBB-A1104	
Darkfield condenser	N.A. 0,85 – 0,91 (dry)	✓	✓	OBB-A1421	
Koehler illumination	6 V/20 W Halogen spare bulb (transmitted)	✓	✓	OBB-A1370	
Polarising unit	Analyser/Polariser	○	○	OBB-A1283	
Phase contrast units	Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	○	○	OBB-A1237	
	Single unit with ∞ PH-Plan objective 10×	○	○	OBB-A1214	
	Single unit with ∞ PH-Plan objective 20×	○	○	OBB-A1216	
	Single unit with ∞ PH-Plan objective 40×	○	○	OBB-A1218	
	Single unit with ∞ PH-Plan objective 100×	○	○	OBB-A1212	
If required, there are several magnification levels, please contact our OPTICS product management team					
C-Mount	1×	○	○	OBB-A1140	
	0,57× (focus adjustable)	○	○	OBB-A1136	
Fluorescence unit	100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective		✓		
	100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective	✓			
	3 W LED Epi Fluorescence unit (B/G) including centering objective	○	○	OBB-A1156	
Colour filters for transmitted illumination	Blue (fitted to the condenser)	✓	✓		
	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	 SD	SD card For data storage
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 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	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated 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	Fluorescence illumination For stereomicroscopes	 USB 3.0	Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device		

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 Ø 23 mm for 10x 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 Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: