



OBN 141/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 20W halogen illumination unit (Philips) and a 100W Epi fluorescence incident illumination unit on the OBN 147/OBN 148 models ensure perfect illumination and stimulation of your fluorescence samples
- As an alternative, with the OBN 141 model we can offer you a fluorescence microscope with a 3W LED transmitted illumination unit and 3W LED Epi fluorescence incident illumination unit
- 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
- With the OBN 147/OBN 148 halogen variant you have a filter wheel which has up to 6 fittings. As standard this is fitted with a B/G or B/G/UV/V fluorescence filter. The OBN 141 LED variant is fitted with a B/G fluorescence filter with a changeover slider as standard. The changeover slider and the filter wheel mean that you can change the stimulation filter quickly
- A large selection of eyepieces, objectives, colour filters, darkfield condensers as well as a Butterfly Tube, 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 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

Applications/Samples

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

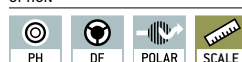
Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 530×220×490 mm
- Net weight approx. 23 kg

STANDARD



OPTION



Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OBN 141 <small>NEW</small>	Trinocular	WF 10×/ø 20 mm	Infinity Plan	4×/10×/20×/ 40×/100×	LED + 3 W LED Epi Fluorescence (B/G)	
OBN 147	Trinocular	WF 10×/ø 20 mm	Infinity Plan		Halogen + 100 W Epi Fluorescence (B/G)	↓
OBN 148	Trinocular	WF 10×/ø 20 mm	Infinity Plan		Halogen + 100 W Epi Fluorescence (B/G/UV/V)	↓

NEW New model

↓ Price reduction

Model outfit		Model KERN			Order number	
		OBN 141	OBN 147	OBN 148		
Eyepieces (23,2 mm)	WF 10×/ø 20 mm	✓✓	✓✓	✓✓	OBB-A1351	
	WF 16×/ø 13 mm	○ ○	○ ○	○ ○	OBB-A1354	
	WF 10×/ø 20 mm (reticule 0,1 mm) (adjustable)	○	○	○	OBB-A1352	
Infinity Plan achromatic objectives	4×/0,10 W.D. 12,1 mm	✓	✓	✓	OBB-A1263	
	10×/0,25 W.D. 4,64 mm	✓	✓	✓	OBB-A1243	
	20×/0,40 (spring) W.D. 2,41 mm	✓	✓	✓	OBB-A1250	
	40×/0,66 (spring) W.D. 0,65 mm	✓	✓	✓	OBB-A1257	
	100×/1,25 (oil) (spring) W.D. 0,19 mm	✓	✓	✓	OBB-A1240	
	2,5×/0,07 W.D. 8,47 mm	○	○	○	OBB-A1247	
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	○	○	OBB-A1270	
Trinocular tube	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided	✓	✓	✓		
	• Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided	○	○	○	OBB-A1382	
Mechanical stage	• 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, paraboloid)	○	○	○	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	✓				
Colour filters for transmitted illumination	Blue	✓	✓	✓		
	Green	○	○	○	OBB-A1188	
	Yellow	○	○	○	OBB-A1165	
	Gray	○	○	○	OBB-A1183	

✓ = Included with delivery

○ = Option

	360° rotatable microscope head		Fluorescence illumination for compound microscopes With 3 W LED illumination and filter		WLAN data interface: For transmitting of the picture to a mobile display device
	Monocular Microscope For the inspection with one eye		Phase contrast unit For a higher contrast		HDMI digital camera For direct transmitting of the picture to a display device
	Binocular Microscope For the inspection with both eyes		Darkfield condenser/unit For a higher contrast due to indirect illumination		PC software To transfer the measurements from the device to a PC.
	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera		Polarising unit To polarise the light		Automatic temperature compensation For measurements between 10 °C and 30 °C
	Abbe Condenser With high numerical aperture for the concentration and the focusing of light		Infinity system Infinity corrected optical system		Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
	Halogen illumination For pictures bright and rich in contrast		Zoom magnification For stereomicroscopes		Battery operation Ready for battery operation. The battery type is specified for each device.
	LED illumination Cold, energy saving and especially long-life illumination		Parallel optical system For stereomicroscopes, enables fatigue-proof working		Battery operation rechargeable Prepared for a rechargeable battery operation
	Incident illumination For non-transparent objects		Integrated scale In the eyepiece		Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
	Transmitting illumination For transparent objects		SD card For data storage		Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
	Fluorescence illumination For stereomicroscopes		USB 2.0 digital camera For direct transmitting of the picture to a PC		Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter		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 Ø 23 mm for 10× 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 10× eyepiece)

Your KERN specialist dealer:

