

Fluorescence Microscope KERN OBN-14

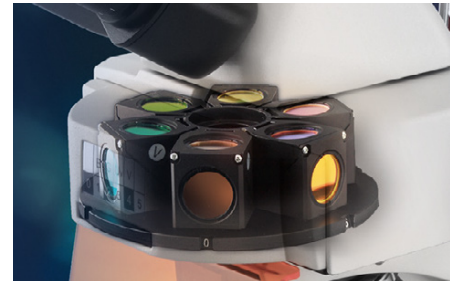


Note

Semi apochromatic objectives available as accessories (see model outfit list page 27)



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
- As standard, the filter wheel which has up to 6 fittings is fitted with a B/G fluorescence filter (OBN 141/OBN 147) or B/G/UV/V fluorescence filter (OBN 148)
- 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.)

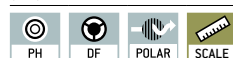
Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions WxDxH 530x220x490 mm
- Net weight approx. 16 kg

STANDARD



OPTION



Model

Standard configuration

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OBN 141	Trinocular	HWF 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	40×/100×	Halogen + 100 W Epi Fluorescence (B/G)
OBN 148	Trinocular	HWF 10×/ø 20 mm	Infinity Plan		Halogen + 100 W Epi Fluorescence (B/G/UV/V)

Model outfit		Model KERN			Order number
		OBN 141	OBN 147	OBN 148	
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓✓		✓✓	OBB-A1404
	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 W.D. 12,1 mm	✓	✓	✓	OBB-A1263
	10×/0,25 W.D. 4,64 mm	✓	✓	✓	OBB-A1243
	20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	✓	✓	OBB-A1250
	40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	✓	✓	OBB-A1257
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	OBB-A1240
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	OBB-A1270
Infinity Plan Semi Apochromatic objectives	10×/0,3 W.D. 7,68 mm	○	○	○	OBB-A1634
	20×/0,5 W.D. 1,96 mm	○	○	○	OBB-A1635
	40×/0,75 (spring-loaded) W.D. 0,78 mm	○	○	○	OBB-A1636
	100×/1,3 (oil) (spring-loaded) W.D. 0,15 mm	○	○	○	OBB-A1637
Trinocular tube	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	✓	✓	✓	
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, paraboloid)	○	○	○	OBB-A1421
	N.A. 1,3 (oil, cardioid)	○	○	○	OBB-A1538
Koehler illumination	20 W Halogen spare bulb (transmitted)		✓	✓	OBB-A1643
	3 W LED illumination system (transmitted) (non-rechargeable)	✓			
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-Team				
C-Mount	When several magnification levels are required, please contact us				
	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, 6-filter-disc (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
	Grey	○	○	○	OBB-A1183

✓ = Included with delivery

○ = Option

360° rotatable microscope head	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	Integrated scale In the eyepiece	Battery operation Ready for battery operation. The battery type is specified for each device.
Monocular Microscope For the inspection with one eye	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	SD card For data storage	Battery operation rechargeable Prepared for a rechargeable battery operation
Binocular Microscope For the inspection with both eyes	Phase contrast unit For a higher contrast	USB 2.0 interface For data transmission	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Darkfield condenser/unit For a higher contrast due to indirect illumination	USB 3.0 interface For data transmission	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Polarising unit To polarise the light	WIFI data interface: For transmitting of the picture to a mobile display device	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
Halogen illumination For pictures bright and rich in contrast	Infinity system Infinity corrected optical system	HDMI digital camera For direct transmitting of the picture to a display device	Pallet shipment The time required to manufacture the product internally is shown in days in the pictogram.
LED illumination Cold, energy-saving and especially long-life illumination	Zoom magnification For stereomicroscopes	PC software To transfer the measurements from the device to a PC.	
Incident illumination For non-transparent objects	Auto-focus For automatic control of the focus level	Automatic temperature compensation For measurements between 10 °C and 30 °C	
Transmitting illumination For transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working	Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013	
Fluorescence illumination For stereomicroscopes			

Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	SLR camera	Single-Lens Reflex camera
FPS	Frames per second	SWF	Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	W.D.	Working Distance
LWD	Long Working Distance	WF	Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)
N.A.	Numerical Aperture		