Fluorescence microscope KERN OBN-14

OBN 147

Illumination unit

Quintuple filter disc

PROFESSIONAL LINE

The fluorescing model for the flexible and professional user

Features

- The KERN OBN-14 is based on the basic KERN OBN-13 model.
- It is an excellent and stable laboratory microscope for all common routine applications in light and fluorescence microscopy, providing impressive images.
- These trinocular microscopes are equipped with wide field eyepieces with a large field of view, diopter adjustment on both sides and infinity corrected plan achromatic objectives as standard.
- Either blue / green or blue / green / UV / V fluorescence filters, and a centering objective for the fluorescence illumination are included with the microscope, depending on the model.
- The professional Koehler illumination is easily adjustable. It includes an adjustable field diaphragm, and a centerable and height adjustable Abbe condenser with adjustable aperture diaphragm. This provides impressive images in either bright or dark field applications.
- A nosepiece for up to 5 objectives and a large stage are also provided as standard.
- The following optional accessories are available: A variety of eyepieces, objectives, a complete polarisation kit, a swing-out condenser, a phase contrast set, and more.
- One of the central features of this highly variable and simultaneously robust series of fluorescence microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

Technical data

- Eyepieces: WF 10x20 mm
- Objectives: 4x / 10x / 20x / 40x / 100x
- Overall dimensions WxDxH 306x200x460 mm
- Net weight approx. 16 kg

Please find detailed information in the following charts.

STANDARD

OPTION

Model	Standard configuration			
KERN	Optical system	Tube	Illumination	
OBN 147	Infinity	Trinocular	Halogen + 100W Epi Fluorescence (B / G)	
OBN 148	Infinity	Trinocular	Halogen + 100W Epi Fluorescence (B / G / UV / V)	

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Fluorescence microscope KERN OBN-14

Model outfit		Model KERN		Order number	
		OBN 147	OBN 148		
Eyepieces	WF 10x / Ø 20 mm	●●	●●	OBB-A1351	
	WF 16x / Ø 13 mm	○○	○○	OBB-A1354	
	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 Plan achromatic objectives	4x / 0,10	●	●	OBB-A1263	
	10x / 0,25	●	●	OBB-A1243	
	20x / 0,40	●	●	OBB-A1250	
	40x / 0,66 (spring)	●	●	OBB-A1257	
	100x / 1,25 (oil) (spring)	●	●	OBB-A1240	
	2,5x / 0,07	○	○	OBB-A1247	
	60x / 0,80 (spring)	○	○	OBB-A1270	
Binocular tube	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm · With diopter adjustment (both-sided)	○	○	OBB-A1125	
Trinocular tube	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm · Light distribution: 100:0 · With diopter adjustment (both-sided)	●	●	OBB-A1344	
Nosepiece	Quintuple	●	●		
Mechanical stage	· Stage size: WxD 190x140 mm, Travel: 78x55 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	
Koehler illumination	6V / 20W Halogen (transmitting)	●	●	OBB-A1204	
Polarising unit	Analyser / Polariser	○	○	OBB-A1283	
Phase contrast unit	Quintuple hole turret with 10x / 20x / 40x / 100x Infinity-PH-Plan objectives (complete set)	○	○	OBB-A1237	
	Independent slot with ∞ PH-Plan objective 10x	○	○	OBB-A1214	
	Independent slot with ∞ PH-Plan objective 20x	○	○	OBB-A1216	
	Independent slot with ∞ PH-Plan objective 40x	○	○	OBB-A1218	
	Independent slot with ∞ PH-Plan objective 100x	○	○	OBB-A1212	
Darkfield unit	N.A. 0,9 (Dry) Usable for 4x – 40x objectives	○	○	OBB-A1150	
C-Mount	1x	○	○	OBB-A1140	
	0,57x (focus adjustable)	○	○	OBB-A1136	
Fluorescence unit	100W HBO Epi Fluorescence unit 6-filter disc (UV / V / B / G) including centering objective		●	OBB-A1155	
	100W HBO Epi Fluorescence unit, two-hole slide (B / G) including centering objective	●		OBB-A1153	
Field diaphragm	Field diaphragm	●	●		
Filter	Blue	●	●	OBB-A1170	
	Green	○	○	OBB-A1187	
	Yellow	○	○	OBB-A1201	
	Grey	○	○	OBB-A1183	

● = Standard configuration ○ = Option

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KERN Pictograms:

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

Trinocular Microscope
For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser
With high numerical aperture for the concentration and the focusing of light

Halogen illumination
For pictures bright and rich in contrast

LED illumination
Cold, energy saving and especially long-life illumination

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

Fluorescence illumination for compound microscopes
With 100 W mercury lamp and filter

Fluorescence illumination for compound microscopes
With 3 W LED illumination and filter

Phase contrast unit
For a higher contrast

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

Integrated USB 2.0 digital camera
For direct transmitting of the picture to a PC

Integrated USB 3.0 digital camera
For direct transmitting of the picture to a PC

Automatic temperature compesation
For measurements between 10 °C and 30 °C

Protection against dust and water splashes IPxx
The type of protection is shown by the pictogram.

Battery operation
Ready for battery operation. The battery type is specified for each device.

Rechargeable battery pack
Rechargeable set.

Mains adapter
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Power supply
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

Package shipment
The time required to manufacture the product internally is shown in days in the pictogram.

Warranty
The warranty period is shown in the pictogram.

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope

H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: