

NEW



Mounted phase contrast condenser



Quintuple PH universal rotary condenser with 10×/20×/40×/100× Infinity PH-Plan objectives (complete set)

PROFESSIONAL LINE

The powerful, fully-equipped phase contrast microscope with varied options

Features

- This series stands out through its wide-ranging phase-contrast feature which goes beyond the standard OBN level of quality.
- A strong and continuously adjustable 20 W halogen transmitted illumination unit (Philips) ensures the optimum illumination of your samples.
- This series has a professional Koehler illumination unit with a special height-adjustable PH universal rotary condenser which can be centred as well as an aperture diaphragm and field 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.
- The combination of a professional quintuple condenser wheel, the phase contrast condenser and the Infinity Plan phase contrast objectives makes the KERN OBN 158 a high-quality, fully-equipped microscope for all applications related to contrast procedures.
- A wide variety of modular systems, such as, for example, a swing-out condenser, various eyepieces, objectives. colour filters, a darkfield condenser, a simple polarising unit, Butterfly Tube, through to complete fluorescence units are available to you as accessories.
- This centring eyepiece for adjusting the phase contrast, 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 extremely translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue) with phase contrast

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 390×200×400 mm
- Net weight approx. 9 kg

STANDARD



OPTION



Model	Standard configuration					
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OBN 158	Trinocular	WF 10×/⌀ 20 mm	Infinity Plan	4×/PH10×/PH20×/ PH40×/PH100×	6 V/20 W Halogen (transmitted)	

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Model outfit		Model KERN	Order number	
		OBN 158		
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 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	✓		
PH condenser	Universal rotary condenser for bright field and phase contrast suitable for 10×/20×/40×/100× PH objectives center-adjustable PH ring units; with aperture diaphragm	✓		
Phase contrast units	Infinity PH-Plan objective 10×	✓	OBB-A1390	
	Infinity PH-Plan objective 20×	✓	OBB-A1391	
	Infinity PH-Plan objective 40×	✓	OBB-A1392	
	Infinity PH-Plan objective 100×	✓	OBB-A1393	
	Centering eyepiece	✓		
Darkfield condenser	N.A. 0,85 – 0,91 (dry)	○	OBB-A1421	
Koehler illumination	6 V/20 W Halogen spare bulb (transmitted)	✓	OBB-A1370	
Colour filters for transmitted illumination	Blue	○	OBB-A1170	
	Green	✓		
	Yellow	○	OBB-A1165	
	Gray	○	OBB-A1183	
C-Mount	1×	○	OBB-A1140	
	0,57× (focus adjustable)	○	OBB-A1136	
For further optional accessories, please see the list of items for the OBN-13 series from page 22				

✓ = Included with delivery ○ = 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

Darkfield condenser/unit
For a higher contrast due to indirect illumination

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

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

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

HDMI digital camera
For direct transmitting of the picture to a display device

SD card
For data storage

PC software
To transfer the measurements from the device 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.

Battery operation rechargable
Prepared for a rechargable battery operation

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

FPS Frames per second

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 ⌀ 23 mm for 10× eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)

Your KERN specialist dealer: