



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 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 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					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OBN 158</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/PH10×/PH20×/PH40×/PH100×	6 V/20 W Halogen (transmitted)	↓

↓ Price reduction

Model outfit		Model KERN	Order number	
		OBN 158		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	OBB-A1404	
	WF 16×/ø 13 mm	○○	OBB-A1354	
<b>Infinity Plan achromatic objectives</b>	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	
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Siedentopf 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	✓		
	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	○	OBB-A1382	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size W×D 175×145 mm</li> <li>• Travel 78×55 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> <li>• Two slide holder</li> </ul>	✓		
<b>PH condenser</b>	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	✓		
<b>Phase contrast units</b>	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	✓		
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	OBB-A1421	
<b>Koehler illumination</b>	6 V/20 W Halogen spare bulb (transmitted)	✓	OBB-A1370	
<b>Colour filters</b> for transmitted illumination	Blue	○	OBB-A1170	
	Green	✓		
	Yellow	○	OBB-A1165	
	Gray	○	OBB-A1183	
<b>C-Mount</b>	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 23				

✓ = Included with delivery

○ = Option

 360°	<b>360° rotatable microscope head</b>	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 WLAN	<b>WLAN data interface:</b> For transmitting of the picture to a mobile display device
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 PH	<b>Phase contrast unit</b> For a higher contrast	 HDMI	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 DF	<b>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	 SOFTWARE	<b>PC software</b> To transfer the measurements from the device to a PC.
 TRINO	<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	<b>Polarising unit</b> To polarise the light	 AUTO ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 ABBE	<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 INFINITY	<b>Infinity system</b> Infinity corrected optical system	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 LED	<b>LED illumination</b> Cold, energy saving and especially long-life illumination	 PARALLEL	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 RECHARGE	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 TL	<b>Transmitting illumination</b> For transparent objects	 SD	<b>SD card</b> For data storage	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 FL	<b>Fluorescence illumination</b> For stereomicroscopes	 USB 2.0	<b>USB 2.0 digital camera</b> For direct transmitting of the picture to a PC	 1 DAY	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 FL-HBO	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 USB 3.0	<b>USB 3.0 digital camera</b> For direct transmitting of the picture to a PC		

## Abbreviations

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

## Your KERN specialist dealer: