

Inverted microscope KERN OCM-1



N.A. 0,3 Abbe Condenser with phase contrast slide



Coaxial control knobs for x/y can be fitted either left or right

LAB LINE

The inverted biological laboratory microscope – also with fluorescence

Features

- The OCM range stands out through its design which is ergonomic, robust and extremely stable. This design, with its large working distance, is particularly suitable for the monitoring and analysis of cell cultures, for example
- A strong and continuously adjustable 30W halogen illumination unit ensures the optimum illumination in the bright field of your samples. An additional Osram 100 W Epi fluorescence illumination unit is available to you as a fluorescence microscope (OCM 165) for perfect illumination and excitation of your fluorescence samples
- A special Abbe N.A. 0.3 condenser with aperture diaphragm and large working distance of 72 mm guarantees the very best working practise in the bright field and with fluorescence applications
- As standard, the OCM range is fitted with a trinocular eyepiece tube

- The mechanical stage including specimen holder (\varnothing 118 mm) means that you can work quickly and effectively. Further brackets for petri dishes are included with delivery or available as accessories
- Further options such as, for example, a selection of eyepieces, objectives, specimen holders and other phase contrast units can be integrated as accessories
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

Scope of application

- Research and breeding of cell cultures and tissue cultures

Applications/Samples

- Particularly for viewing samples in culture vessels (flasks, petri dishes, microtitre plates), translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, tissue, microorganisms if necessary, immunofluorescence, FISH, DAPI staining etc.)

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 45° inclined
- Diopter adjustment: Both-sided

OCM 161

- Overall dimensions WxDxH 304x599x530 mm
- Net weight approx. 13,5 kg

OCM 165

- Overall dimensions WxDxH 304x782x530 mm
- Net weight approx. 21 kg

STANDARD



Model	Standard configuration				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
KERN					
OCM 161	Trinocular	HWF 10x/ \varnothing 22 mm	Infinity Plan	LWD 10x/LWD 20x/ LWD 40x/LWD 20x-PH	30 W Halogen (transmitted)
OCM 165	Trinocular	HWF 10x/ \varnothing 22 mm	Infinity Plan		30 W Halogen + 100 W Epi Fluorescence (B/G)

Inverted microscope KERN OCM-1

Model outfit		Model KERN		Order number	
		OCM 161	OCM 165		
Eyepieces (30 mm)	HWF 10×/∅ 22 mm (adjustable)	✓✓	✓✓	OBB-A 1491	
	HWF 10×/∅ 20 mm (reticule 0,1 mm) (adjustable)	○	○	OBB-A 1523	
Infinity Plan achromatic objectives for long working distance	4×/0,11 W.D. 12,1 mm	○	○	OBB-A 1493	
	10×/0,25 W.D. 8,3 mm	✓	✓	OBB-A 1494	
	20×/0,40 W.D. 7,2 mm	✓	✓	OBB-A 1495	
	40×/0,60 W.D. 3,4 mm	✓	✓	OBB-A 1496	
Trinocular tube	<ul style="list-style-type: none"> • 45° inclined • Interpupillary distance 48–76 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	✓	✓		
Mechanical stage	<ul style="list-style-type: none"> • Stage size W×D 210×241 mm • Travel 128×80 mm • Coaxial coarse and fine focusing knobs • The x/y control knobs can be fitted either left or right • Suitable for attaching a 96-hole microtitre plate 	✓	✓		
	Drop specimen holder (∅ 110)	✓	✓	OBB-A 1503	
	Specimen holder for 35 mm culture dish	○	○	OBB-A 1505	
	Specimen holder for 54 mm culture dish	✓	✓	OBB-A 1506	
	Specimen holder for 65 mm culture dish	○	○	OBB-A 1507	
Condenser	Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm	✓	✓		
Illumination	30 W Halogen spare bulb (transmitted)	✓	✓	OBB-A 1372	
Phase contrast units	Phase contrast slide (universal)	✓	✓	OBB-A 1500	
	Infinity PH-Plan objective 10×	○	○	OBB-A 1497	
	Infinity PH-Plan objective 20×	✓	✓	OBB-A 1498	
	Infinity PH-Plan objective 40×	○	○	OBB-A 1499	
	Centering eyepiece	✓	✓	OBB-A 1544	
Fluorescence unit	100 W HBO Epi Fluorescence unit, two-hole slide (B/G)		✓		
Colour filters for transmitted illumination	Blue	✓	✓	OBB-A 1510	
	Green	✓	✓	OBB-A 1511	
	Yellow	○	○	OBB-A 1512	
	Grey	○	○	OBB-A 1513	
C-Mount	0,5×	○	○	OBB-A 1515	
	1×	○	○	OBB-A 1514	

✓ = Included with delivery

○ = Option

Pictograms

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 microscope. 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 \varnothing 23 mm for 10 \times 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 camera Single-Lens Reflex camera	WF Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)

Your KERN specialist dealer: