

Inverted microscope KERN OCM-1



OCM 161



OCM 165-168



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 30 W halogen illumination unit ensures the optimum illumination in the bright field of your samples. In addition, either an Osram 100 W-HBO- (OCM 165/166) or a 5 W-LED Epi fluorescence incident illumination unit (OCM 167/168) are available to you as a fluorescence microscope for perfect illumination and stimulation 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 110 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 W×D×H 304×599×530 mm
- Net weight approx. 13,5 kg

OCM 165-168

- Overall dimensions W×D×H 304×782×530 mm
- Net weight approx. 21 kg

STANDARD



Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OCM 161	Trinocular	HWF 10×/ϕ 22 mm	Infinity Plan	LWD10×/LWD20×/ LWD40×/LWD20×PH	30 W Halogen (transmitted)	
OCM 165	Trinocular	HWF 10×/ϕ 22 mm	Infinity Plan		30 W Halogen + 100 W Epi Fluorescence (B/G)	
OCM 166	Trinocular	HWF 10×/ϕ 22 mm	Infinity Plan		30 W Halogen + 100 W Epi Fluorescence (UV/V/B/G)	
OCM 167	Trinocular	HWF 10×/ϕ 22 mm	Infinity Plan		5W-LED + 5W Epi Fluorescence (B/G)	
OCM 168	Trinocular	HWF 10×/ϕ 22 mm	Infinity Plan		5W-LED + 5W Epi Fluorescence (UV/V/B/G)	

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Model outfit		Model KERN					Order number	
		OCM 161	OCM 165	OCM 166	OCM 167	OCM 168		
Eyepieces (30 mm)	HWF 10×/ø 22 mm (adjustable)	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A 1491	
	HWF 10×/ø 22 mm (reticule 0,1 mm) (adjustable)	○	○	○	○	○	OBB-A 1523	
Infinity Plan achromatic Fluor objectives for long working distance	4×/0,11 W.D. 12,1 mm	○	○	○	○	○	OBB-A 1600	
	10×/0,25 W.D. 10,3 mm	✓	✓	✓	✓	✓	OBB-A 1601	
	20×/0,40 W.D. 5,8 mm	✓	✓	✓	✓	✓	OBB-A 1602	
	40×/0,60 W.D. 5,1 mm	✓	✓	✓	✓	✓	OBB-A 1603	
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 (ø 110)	✓	✓	✓	✓	✓	OBB-A 1503	
	Specimen holder for 35 mm culture dish	○	○	○	○	○	OBB-A 1507	
	Specimen holder for 54 mm culture dish	✓	✓	✓	✓	✓	OBB-A 1506	
	Specimen holder for 65 mm culture dish	○	○	○	○	○	OBB-A 1505	
Condenser	Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm	✓	✓	✓	✓	✓		
Illumination	30 W Halogen spare bulb (transmitted)	✓	✓	✓			OBB-A 1372	
	5 W LED spare bulb (transmitted)				✓	✓	OBB-A 1589	
Phase contrast units	Phase contrast slide 4x	○	○	○	○	○	OBB-A 1608	
	Phase contrast slide 10x	✓	✓	✓	✓	✓	OBB-A 1609	
	Phase contrast slide 20x/40x	✓	✓	✓	✓	✓	OBB-A 1610	
	Infinity PH-Plan Fluor objective 4×	○	○	○	○	○	OBB-A 1604	
	Infinity PH-Plan Fluor objective 10x	○	○	○	○	○	OBB-A 1605	
	Infinity PH-Plan Fluor objective 20x	✓	✓	✓	✓	✓	OBB-A 1606	
	Infinity PH-Plan Fluor objective 40x	○	○	○	○	○	OBB-A 1607	
	Centering eyepiece	○	○	○	○	○	OBB-A 1544	
Fluorescence unit	100 W HBO Epi Fluorescence unit, two-hole slide (B/G)		✓					
	100 W HBO Epi Fluorescence unit, four-hole slide (UV/V/B/G)			✓				
	5 W HBO Epi Fluorescence unit, two-hole slide (B/G)				✓			
	5 W HBO Epi Fluorescence unit, four-hole slide (UV/V/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		USB 3.0 digital camera For direct transmitting of the picture to a PC
	Monocular Microscope For the inspection with one eye		Phase contrast unit For a higher contrast		WLAN data interface For transmitting of the picture to a mobile display device
	Binocular Microscope For the inspection with both eyes		Darkfield condenser/unit For a higher contrast due to indirect illumination		HDMI digital camera For direct transmitting of the picture to a display device
	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera		Polarising unit To polarise the light		PC software To transfer the measurements from the device to a PC
	Abbe Condenser With high numerical aperture for the concentration and the focusing of light		Infinity system Infinity corrected optical system		Automatic temperature compensation For measurements between 10 °C and 30 °C
	Halogen illumination For pictures bright and rich in contrast		Zoom magnification For stereomicroscopes		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
	LED illumination Cold, energy-saving and especially long-life illumination		Auto-focus For automatic control of the focus level		Battery operation Ready for battery operation. The battery type is specified for each device.
	Incident illumination For non-transparent objects		Parallel optical system For stereomicroscopes, enables fatigue-proof working		Battery operation rechargeable Prepared for a rechargeable battery operation
	Transmitting illumination For transparent objects		Integrated scale In the eyepiece		Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
	Fluorescence illumination For stereomicroscopes		SD card For data storage		Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter		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.

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 Ø 23 mm for 10× 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 Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer: