

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 30W 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 (∅ 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

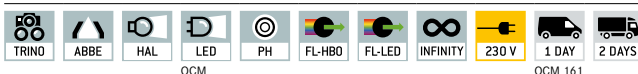
OCM 161

- 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



OCM 167/168

OCM 161

Model

Standard configuration

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

Model outfit		Model KERN					Order number
		OCM 161	OCM 165	OCM 166	OCM 167	OCM 168	
Eyepieces (30 mm)	HWF 10×/∅ 22 mm (adjustable)	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A1491
	HWF 10×/∅ 22 mm (reticule 0,1 mm) (adjustable)	○	○	○	○	○	OBB-A1523
Infinity Plan achromatic Fluor objectives for long working distance	4×/0,11 W.D. 12,1 mm	○	○	○	○	○	OBB-A1600
	10×/0,25 W.D. 10,3 mm	✓	✓	✓	✓	✓	OBB-A1601
	20×/0,45 W.D. 5,8 mm	✓	✓	✓	✓	✓	OBB-A1602
	40×/0,65 W.D. 5,1 mm	✓	✓	✓	✓	✓	OBB-A1603
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-A1503
	Specimen holder for 35 mm culture dish	○	○	○	○	○	OBB-A1507
	Specimen holder for 54 mm culture dish	✓	✓	✓	✓	✓	OBB-A1506
	Specimen holder for 65 mm culture dish	○	○	○	○	○	OBB-A1505
Condenser	Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm	✓	✓	✓	✓	✓	
Illumination	30 W Halogen spare bulb (transmitted)	✓	✓	✓			OBB-A1372
	5 W LED spare bulb (transmitted)				✓	✓	OBB-A1589
Phase contrast units	Phase contrast slide 4×	○	○	○	○	○	OBB-A1608
	Phase contrast slide 10×	✓	✓	✓	✓	✓	OBB-A1609
	Phase contrast slide 20×/40×	✓	✓	✓	✓	✓	OBB-A1610
	Infinity PH-Plan Fluor objective 4×	○	○	○	○	○	OBB-A1604
	Infinity PH-Plan Fluor objective 10×	○	○	○	○	○	OBB-A1605
	Infinity PH-Plan Fluor objective 20×	✓	✓	✓	✓	✓	OBB-A1606
	Infinity PH-Plan Fluor objective 40×	○	○	○	○	○	OBB-A1607
	Centering eyepiece	○	○	○	○	○	OBB-A1544
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-A1510
	Green	✓	✓	✓	✓	✓	OBB-A1511
	Yellow	○	○	○	○	○	OBB-A1512
	Grey	○	○	○	○	○	OBB-A1513
C-Mount	0,5×	○	○	○	○	○	OBB-A1515
	1×	○	○	○	○	○	OBB-A1514

✓ = Included with delivery

○ = Option

360° rotatable microscope head	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	Integrated scale In the eyepiece	Battery operation Ready for battery operation. The battery type is specified for each device.
Monocular Microscope For the inspection with one eye	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	SD card For data storage	Battery operation rechargeable Prepared for a rechargeable battery operation
Binocular Microscope For the inspection with both eyes	Phase contrast unit For a higher contrast	USB 2.0 interface For data transmission	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Darkfield condenser/unit For a higher contrast due to indirect illumination	USB 3.0 interface For data transmission	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Polarising unit To polarise the light	WIFI data interface: For transmitting of the picture to a mobile display device	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
Halogen illumination For pictures bright and rich in contrast	Infinity system Infinity corrected optical system	HDMI digital camera For direct transmitting of the picture to a display device	Pallet shipment The time required to manufacture the product internally is shown in days in the pictogram.
LED illumination Cold, energy-saving and especially long-life illumination	Zoom magnification For stereomicroscopes	PC software To transfer the measurements from the device to a PC.	
Incident illumination For non-transparent objects	Auto-focus For automatic control of the focus level	Automatic temperature compensation For measurements between 10 °C and 30 °C	
Transmitting illumination For transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working	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	
Fluorescence illumination For stereomicroscopes			

Abbreviations

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