

1

COMPOUND MICROSCOPES

Compound, Phase contrast, Fluorescence and Inverted microscopes





OBS 101



OBS 104



OBS 106

Educational Line

The school microscope – for the first steps in microscopy and for use in biology lessons

Features

- The KERN OBS range is a solid and simple school microscope range, which is easy to use due to its intuitive control elements
- The continuously dimmable 0,5 W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use is also no problem through the use of rechargeable batteries
- The simple 0.65 condenser on the OBS 101 (condenser disc) and on the OBS 102 (fixed condenser) ensures the very best concentration of light and illumination of the sample. The OBS 104, 105 and 106 models have a 1.25 Abbe condenser which is height-adjustable and can therefore be focussed and has an aperture diaphragm, which ensures the very best concentration of light

- To focus the object, all models have a coarse and fine focusing knob on both sides. The mechanical stage enables you to work with the samples and move them rapidly (only for OBS 105, 106)
- A large selection of different eyepieces and objectives is also available
- Please find detailed information in the following model outfit list

Scope of application

- Primary school, secondary school, training, hobby use

Applications/Samples

- Translucent, thin, high-contrast, less complex samples (e.g. plant tissue, coloured cells/parasites)

Technical data

- Finite optical system DIN
- OBS 101, 102: 3-fold lens revolving unit
OBS 104, 105, 106: 4-fold lens revolving unit
- OBS 101, 102, 105: Tube 45° inclined/360° rotatable
OBS 104, 106: Tube 30° inclined/360° rotatable
- Diopter adjustment, both-sided (for binocular models)
- Overall dimensions W×D×H 130×300×310 mm
- Net weight
OBS 101, 102: approx. 2,2 kg
OBS 104, 105, 106: approx. 3,2 kg

STANDARD



OBS 104 - 106

Note: Please request special conditions for a classroom set

Model	Tube	Eyepiece	Objective quality	Objectives	Illumination	Stage
KERN						
OBS 101*	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	0,5W LED (transmitted) (battery incl., rechargeable)	fix
OBS 102*	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	0,5W LED (transmitted) (battery incl., rechargeable)	fix
OBS 104*	Binocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	0,5W LED (transmitted) (battery incl., rechargeable)	fix
OBS 105*	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	0,5W LED (transmitted) (battery incl., rechargeable)	mechanical
OBS 106*	Binocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	0,5W LED (transmitted) (battery incl., rechargeable)	mechanical

* ONLY WHILE STOCKS LAST

Model outfit	Model KERN					Order number	
	OBS 101	OBS 102	OBS 104	OBS 105	OBS 106		
Eyepieces (23,2 mm)	WF 10x/Ø 18 mm	✓	✓	✓✓	✓	✓✓	OBB-A1473
	WF 16x/Ø 13 mm	○	○	○○	○	○○	OBB-A1474
	WF 20x/Ø 11 mm	○	○	○○	○	○○	OBB-A1475
	WF 10x/Ø 18 mm (with Pointer)	○	○	○	○	○	OBB-A1561
Achromatic objectives	4x/0,1 W.D. 18 mm	✓	✓	✓	✓	✓	OBB-A1476
	10x/0,25 W.D. 7 mm	✓	✓	✓	✓	✓	OBB-A1477
	40x/0,65 (spring-loaded) W.D. 0,53 mm	✓	✓	✓	✓	✓	OBB-A1478
	60x/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	○	OBB-A1479
	100x/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	○	○	OBB-A1480
E-Plan objectives	4x/0,1 W.D. 14,5 mm	○	○	○	○	○	OBB-A1562
	10x/0,25 W.D. 5,65 mm	○	○	○	○	○	OBB-A1563
	40x/0,65 (spring-loaded) W.D. 0,85 mm	○	○	○	○	○	OBB-A1564
	100x/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	○	○	OBB-A1565
	E-Plan 100x/0,8 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	○	OBB-A1442
	Plan 100x/1 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	○	OBB-A1441
Monocular tube	45° inclined/360° revolving	✓	✓		✓		OBB-A1471
Binocular tube	· Siedentopf 45° inclined/360° rotatable · Interpupillary distance 55 mm – 75 mm · Diopter adjustment both-sided			✓		✓	OBB-A1472
Fixed stage	· Stage size W×D 110×120 mm · Coaxial coarse and fine focusing knobs, scale: 2,5 µm	✓	✓	✓			OBB-A1483
Mechanical stage	· Stage size B×T 125×115 mm · Travel 75×18 mm · Coaxial coarse and fine focusing knobs, scale: 2,5 µm				✓	✓	OBB-A1484
Condenser	Simple condenser N.A. 0,65	✓					OBB-A1486
	Simple condenser N.A. 0,65 (with aperture diaphragm)		✓				OBB-A1566
	Abbe N.A. 1,25 (aperture diaphragm)			✓	✓	✓	OBB-A1487
Colour filters for transmitted illumination	Blue			✓	✓	✓	OBB-A1466
	Green			○	○	○	OBB-A1467
	Yellow			○	○	○	OBB-A1468
	Grey			○	○	○	OBB-A1184

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *internet*



OBT 231



Monocular version



Binocular version



LCD display ODC 231

Educational Line

The modern compound microscope for teaching in your class room

Features

- The KERN OBT range is a high-quality school microscope, which will impress you with its intuitive control elements, sturdy construction and modern design.
- The infinitely dimmable 1W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use is also no problem through optional battery operation
- The simple 0.65 condenser lens with adjustable aperture diaphragm on the OBT 101 ensures the very best concentration of light and illumination of the sample. The OBT 102, 103, 104, 105, 106 models have a 1.25 Abbe condenser which is height-adjustable and can therefore be focussed and has an aperture diaphragm, which ensures the very best concentration of light.
- To focus the object, all models have a coarse and fine focusing knob on both sides. The mechanical stage enables you to work with the

samples and move them rapidly (only for OBT 103, 104, 105, 106)

- A large selection of different eyepieces and objectives is also available
- KERN OBT 231: Digital kit with LCD display for viewing samples, USB dual power supply for microscopes and displays, software for measurements as well as a USB interface and micro SD card slot for documenting recordings
- KERN ODC 231: LCD display, can be retrofitted on all models of the OBT range, see model fittings table
- 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

- Primary school, secondary school, training, hobby

Applications/Samples

- Translucent, thin, high-contrast, less complex samples (e.g. plant tissue, coloured cells/parasites)

Technical data

- Finite optical system DIN
- OBT 101: 3-fold lens revolving unit, OBT 102, 103, 104, 105, 106, OBT 231: 4-fold lens revolving unit
- OBT-1: Tube 45° inclined/360° rotatable
- Diopter adjustment, one-sided (for binocular models)
- Overall dimensions W×D×H
OBT-1: 195×147×325 mm
OBT-2: 182×195×360 mm
- Net weight
OBT-1: approx. 2,8 kg
OBT-2: approx. 3,0 kg

STANDARD



OPTION



nicht OBT 101

Model Tube Eyepiece Objective quality Objectives Illumination Stage

KERN

OBT 101	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	1 W LED (transmitted)	fix
OBT 102	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	1 W LED (transmitted)	fix
OBT 103	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	1 W LED (transmitted)	mechanical
OBT 104	Binocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x	1 W LED (transmitted)	mechanical
OBT 105	Monocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x / 100x	1 W LED (transmitted)	mechanical
OBT 106	Binocular	WF 10x/Ø 18 mm	achromatic	4x / 10x / 40x / 100x	1 W LED (transmitted)	mechanical
OBT 231	LCD Display	-	achromatic	4x / 10x / 40x / 100x	1 W LED (transmitted)	mechanical

Note: Please request special conditions for a classroom set

Model outfit	Model KERN							Order number
	OBT 101	OBT 102	OBT 103	OBT 104	OBT 105	OBT 106	OBT 231	
Eyepieces (23,2 mm)	WF 10x/Ø 18 mm	✓	✓	✓	✓✓	✓	✓✓	OBB-A3200
	WF 10x/Ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A3201
	WF 10x/Ø 18 mm (reticule 0,1 mm)	○	○	○	○	○	○	OBB-A3202
Achromatic objectives	4x/0,1 W.D. 27 mm	✓	✓	✓	✓	✓	✓	OBB-A3203
	10x/0,25 W.D. 7 mm	✓	✓	✓	✓	✓	✓	OBB-A3204
	40x/0,65 (spring-loaded) W.D. 0,6 mm	✓	✓	✓	✓	✓	✓	OBB-A3205
	100x/1,25 (oil) (spring-loaded) W.D. 0,2 mm	○	○	○	○	✓	✓	OBB-A3207
Monocular tube	45° inclined/360° revolving	✓	✓	✓	○	✓	○	OBB-A3221
Binocular tube	· Siedentopf 45° inclined/360° rotatable · Interpupillary distance 48 mm – 75 mm · Diopter adjustment one-sided	○	○	○	✓	○	✓	OBB-A3222
Tube with LCD display	· Tablet camera 2 MP · CMOS 1/2,8" · USB 2.0	○	○	○	○	○	✓	ODC 231
Fixed stage	· Stage size B×T 115×110 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓					
Mechanical stage	· Stage size B×T 115×110 mm · Travel 52×20 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm · Holder for one slide				✓	✓	✓	✓
Condenser	Simple condenser N.A. 0,65	✓						OBB-A3223
	Abbe N.A. 1,25 (aperture diaphragm)		✓	✓	✓	✓	✓	OBB-A3224
Colour filters for transmitted illumination	Blue	○	○	○	○	○	○	OBB-A3212
	Green	○	○	○	○	○	○	OBB-A3210
	Yellow	○	○	○	○	○	○	OBB-A3211
	Grey	○	○	○	○	○	○	OBB-A3209

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *Internet*

Model outfit	Model KERN						Order number	
	OBE 121	OBE 122	OBE 124	OBE 131	OBE 132	OBE 134		
Eyepieces (23,2 mm)	HWF 10x/Ø 18 mm	✓	✓✓	✓✓	✓	✓✓	✓✓	OBB-A1403
	WF 16x/Ø 13 mm	○	○○	○○	○	○○	○○	OBB-A1354
	HWF 10x/Ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	○	○	OBB-A1349
	HWF 10x/Ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A1348
Achromatic objectives	4x/0,1 W.D. 18,6 mm	✓	✓	✓	✓	✓	✓	OBB-A1111
	10x/0,25 W.D. 6,5 mm	✓	✓	✓	✓	✓	✓	OBB-A1108
	40x/0,65 (spring-loaded) W.D. 0,47 mm	✓	✓	✓	✓	✓	✓	OBB-A1112
	100x/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	✓	✓	✓	OBB-A1109
	20x/0,4 (spring-loaded) W.D. 1,75 mm	○	○	○	○	○	○	OBB-A1110
	60x/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	○	○	OBB-A1113
	E-Plan 100x/0,8 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	○	○	OBB-A1442
	Plan 100x/1 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	○	○	OBB-A1441
	Monocular tube	Butterfly 30° inclined	✓			✓		
Binocular tube	· Butterfly 30° inclined · Interpupillary distance 48 mm – 75 mm · Diopter adjustment one-sided			✓		✓		
Trinocular tube	· see binocular tube · Light distribution 20:80			✓		✓		
Mechanical stage	· Stage size B×T 125×115 mm · Travel 50×70 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓	✓	✓	✓	✓	OBB-A1329
Condenser	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	✓	✓	OBB-A1101
Darkfield unit	Usable for 4x – 40x objectives	○	○	○	○	○	○	OBB-A1148
Colour filters for transmitted illumination	Blue	○	○	○	○	○	○	OBB-A1466
	Green	○	○	○	○	○	○	OBB-A1467
	Yellow	○	○	○	○	○	○	OBB-A1468
	Grey	○	○	○	○	○	○	OBB-A1184
C-Mount	0,5x (focus adjustable)			○			○	OBB-A1137
	1x			○			○	OBB-A1139

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *Internet*



Trinocular version



Simple polarising unit

Lab Line

The flexible laboratory assistant with infinity optical system and fixed, pre-centred Koehler illumination

Features

- The OBL series stands out through its infinity optical unit and is therefore ideally suited for all demanding transmitted illumination applications. The robust and ergonomic stand base guarantees safe and comfortable working
- The fixed, pre-centred and focusable 1,25 Abbe condenser with aperture diaphragm and field diaphragm gives you a simplified Koehler illumination, without having to move the centre.
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides

- A large selection of eyepieces, objectives and colour filters as well as a darkfield condenser, a simple polarising unit, different phase contrast kits through to LED fluorescence units are available to you as accessories
- 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 to the trinocular version. 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, veterinary practices, water analysis, breweries

Applications/Samples

- Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue)

Technical data

- Infinity optical system
- 4-fold lens revolving unit
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment, one-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 7 kg

STANDARD



OPTION



Model	Tube	Eyepiece	Objective quality	Objectives	Illumination
KERN					
OBL 127	Binocular	HWF 10x/Ø 20 mm	Infinity E-Plan	4x / 10x / 40x / 100x	3 W LED (transmitted)
OBL 137	Trinocular	HWF 10x/Ø 20 mm	Infinity E-Plan	4x / 10x / 40x / 100x	3 W LED (transmitted)

Model outfit	Model KERN		Order number	
	OBL 127	OBL 137		
Eyepieces (23,2 mm)	HWF 10x/Ø 20 mm	✓✓	✓✓	OBB-A1404
	WF 16x/Ø 13 mm	○○	○○	OBB-A1354
	HWF 10x/Ø 20 mm (with Pointer)	○	○	OBB-A1448
Infinity E-Plan objectives	4x/0,11 W.D. 12,1 mm	✓	✓	OBB-A1161
	10x/0,25 W.D. 2,1 mm	✓	✓	OBB-A1159
	40x/0,66 (spring-loaded) W.D. 0,58 mm	✓	✓	OBB-A1160
	100x/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	OBB-A1158
	Plan 20x/0,45 (spring-loaded) W.D. 2,41 mm	○	○	OBB-A1250
	Plan 60x/0,8 (spring-loaded) W.D. 0,33 mm	○	○	OBB-A1270
	Plan 100x/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	OBB-A1437
Binocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm - 75 mm · Diopter adjustment one-sided	✓	○	OBB-A1578
Trinocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm - 75 mm · Light distribution 20:80 · Diopter adjustment one-sided	○	✓	OBB-A1580
Mechanical stage	· Stage size B×T 145×130 mm · Travel 76×52 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm · Two slide holder	✓	✓	
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	OBB-A1103
Darkfield condenser	N.A. 0,85-0,91 (dry, paraboloid)	○	○	OBB-A1422
Polarising unit	Analyser/Polariser	○	○	OBB-A1277
Phase contrast units	Single unit with ∞ PH-Plan-objective 10×	○	○	OBB-A1215
	Single unit with ∞ PH-Plan-objective 20×	○	○	OBB-A1217
	Single unit with ∞ PH-Plan-objective 40 ×	○	○	OBB-A1219
	Single unit with ∞ PH-Plan-objective 100×	○	○	OBB-A1213
Fluorescence unit	100 W HBO Epi fluorescent unit, 6-filter-disc (B/G) including centring objective lens	○	○	OBB-A1153
	5W LED Epi Fluorecence unit (B/G) including centering objective	○	○	OBB-A1157
Colour filters for transmitted illumination	Blue	○	○	OBB-A1170
	Green	○	○	OBB-A1188
	Yellow	○	○	OBB-A1165
	Grey	○	○	OBB-A1183
C-Mount	0,5x (focus adjustable)		○	OBB-A1515
	1x		○	OBB-A1514

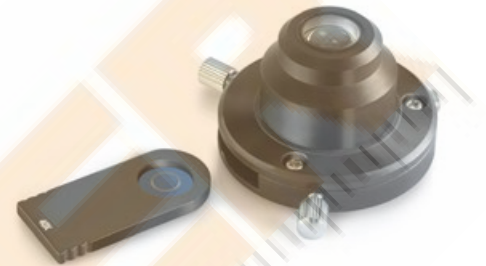
✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *internet*



Mounted phase contrast condenser



Simple PH condenser with 40× PH slide

Lab Line

High-quality phase contrast microscope – specially pre-configured with a series of options for flexible expansion

Features

- We have developed this series specially for general applications with phase contrast method. In addition, the stable, modular construction system of the OBL series offers many more options.
- The impressive, infinitely dimmable 3W LED guarantees bright illumination of your sample
- A special fixed, pre-centred phase contrast condenser as well as field diaphragm give you a simplified Köhler illumination and thereby a powerful phase-contrast display of your sample
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides
- A large selection of eyepieces, objectives and colour filters, a simple polarizing unit as well as further phase contrast units are available to you as accessories
- 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 to the trinocular version. 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, veterinary practices, water analysis, 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
- 4-fold lens revolving unit
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment, one-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 6 kg

STANDARD



OPTION



Model	Tube	Eyepiece	Objective quality	Objectives	Illumination
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KERN

OBL 146	Binocular	HWF 10x/Ø 20 mm	Infinity E-Plan / Plan	4x / 10x / 40x / 100x	3 W LED (transmitted)
OBL 156	Trinocular	HWF 10x/Ø 20 mm	Infinity E-Plan / Plan	4x / 10x / 40x / 100x	3 W LED (transmitted)

Model outfit	Model KERN		Order number	
	OBL 146	OBL 156		
Eyepieces (23,2 mm)	HWF 10x/Ø 20 mm	✓✓	✓✓	OBB-A1404
	WF 16x/Ø 13 mm	○○	○○	OBB-A1354
	HWF 10x/Ø 20 mm (with Pointer)	○	○	OBB-A1448
Infinity E-Plan objectives	4x/0,11 W.D. 12,1 mm	✓	✓	OBB-A1161
	10x/0,25 W.D. 2,1 mm	○	○	OBB-A1159
	40x/0,66 (spring-loaded) W.D. 0,58 mm	○	○	OBB-A1160
	100x/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	OBB-A1158
	Plan 20x/0,45 (spring-loaded) W.D. 2,41 mm	○	○	OBB-A1250
	Plan 60x/0,8 (spring-loaded) W.D. 0,33 mm	○	○	OBB-A1270
	Plan 100x/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	OBB-A1437
Binocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm - 75 mm · Diopter adjustment one-sided	✓	○	OBB-A1578
Trinocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm - 75 mm · Light distribution 20:80 · Diopter adjustment one-sided	○	✓	OBB-A1580
Mechanical stage	· Stage size B×T 145×130 mm · Travel 76×52 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm · Two slide holder	✓	✓	
PH condenser	Abbe N.A. 1,25 precentered, for bright field and phase contrast	✓	✓	OBB-A1398
Phase contrast units	Infinity PH-Plan-objective 10x	✓	✓	OBB-A1390
	Infinity PH-Plan-objective 20x	○	○	OBB-A1391
	Infinity PH-Plan-objective 40x	✓	✓	OBB-A1392
	Infinity PH-Plan-objective 100x	○	○	OBB-A1393
	PH Slider 10×	✓	✓	OBB-A1399
	PH Slider 20×	○	○	OBB-A1400
	PH Slider 40×	✓	✓	OBB-A1401
	PH Slider 100×	○	○	OBB-A1402
	Centring eyepiece	✓	✓	OBB-A1383
	Darkfield condenser	N.A. 0,85-0,91 (dry, paraboloid)	○	○
Colour filters for transmitted illumination	Blue	✓	✓	OBB-A1170
	Green	✓	✓	OBB-A1188
	Yellow	○	○	OBB-A1165
	Grey	○	○	OBB-A1183
C-Mount	0,5x (focus adjustable)		○	OBB-A1515
	1x		○	OBB-A1514

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *internet*

Model outfit		Model KERN				Order number
		OBN 132	OBN 135	OBN 158	OBN 159	
Eyepieces (23,2 mm)	HWF 10x/Ø 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404
	WF 16x/Ø 13 mm	○○	○○	○○	○○	OBB-A1354
Infinity Plan achromatic objectives	4x/0,11 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1263
	10x/0,25 W.D. 4,64 mm	✓	✓	○	○	OBB-A1243
	20x/0,45 (spring-loaded) W.D. 2,41 mm	✓	✓	○	○	OBB-A1250
	40x/0,65 (spring-loaded) W.D. 0,65 mm	✓	✓	○	○	OBB-A1257
	100x/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	○	○	OBB-A1240
	Plan 60x/0,8 (spring-loaded) W.D. 0,33 mm	○	○	○	○	OBB-A1270
	Plan 100x/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	OBB-A1437
Trinocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm – 75 mm · Light distribution 0:100 · Diopter adjustment both-sided	✓	✓	✓	✓	OBB-A1382
Mechanical stage	· Stage size B×T 175×145 mm · Travel 78×55 mm · Coaxial coarse and fine focusing knobs · Holder for two slides	✓	✓	✓	✓	OBB-A1330
Condenser	Abbe N.A. 1,25 can be centred (with aperture diaphragm)	✓	✓	○	○	OBB-A1102
	“Swing-out” condenser N.A. 0,9/0,13 can be centred (with aperture diaphragm)	○	○	○	○	OBB-A1104
Darkfield condenser	N.A. 0,85-0,91 (dry, paraboloid)	○	○	○	○	OBB-A1421
	N.A. 1,3 (oil, cardioid)	○	○	○	○	OBB-A1538
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1283
Phase contrast units	Quintuple condenser wheel with 10x/20x/40x/100x Infinity PH Plan objectives (complete set)	○	○	✓	✓	OBB-A1237
	Single unit with ∞ PH-Plan-objective 10x	○	○			OBB-A1214
	Single unit with ∞ PH-Plan-objective 20x	○	○			OBB-A1216
	Single unit with ∞ PH-Plan-objective 40x	○	○			OBB-A1218
	Single unit with ∞ PH-Plan-objective 100x	○	○			OBB-A1212
	Centring eyepiece	○	○	✓	✓	OBB-A1383
Fluorescence unit	100W-HBO-Epi-Flourescence unit, 6-filter-disc (UV/V/B/G) including centering-objective	○	○	○	○	OBB-A1155
	100 W HBO Epi fluorescent unit, 6-filter-disc (B/G) including centring objective lens	○	○	○	○	OBB-A1153
	5W LED Epi Flourescence unit, 6-filter-disc (B/G) including centering objective	○	○	○	○	OBB-A1156
Colour filters for transmitted illumination	Blue	✓	○	✓	✓	OBB-A1170
	Green	○	○	✓	✓	OBB-A1188
	Yellow	○	○	○	○	OBB-A1165
	Grey	○	○	○	○	OBB-A1183
C-Mount	1x	○	○	○	○	OBB-A1514
	0,5x (focus adjustable)	○	○	○	○	OBB-A1515

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *internet*



OBN 142



Illumination unit



Sextuple filter wheel

Professional Line

The fluorescence microscope for the professional user

Features

- The fluorescence microscope in the OBN-14 series is based on the usual high quality and versatility of the OBN series. The outstanding, stable design in combination with high-quality optics set the standard in fluorescence microscopy in this class
- OBN 147/148: The powerful, dimmable 20W halogen illumination unit (Philips) and a 100W Epi fluorescence incident illumination unit ensure perfect illumination and stimulation of your fluorescence samples
- As an alternative, with the OBN 141 model we can offer you a fluorescence microscope with a 3 W-LED transmitted illumination unit and 5 W-LED Epi fluorescence incident illumination unit
- This series has a professional Koehler illumination unit with an adjustable field diaphragm as well as a height-adjustable 1,25 Abbe condenser which can be centred and which has an adjustable aperture 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
- As standard, the filter wheel which has up to 6 fittings is fitted with a B/G fluorescence filter (OBN 141/OBN 147) or B/G/UV/V fluorescence filter (OBN 148)
- A large selection of eyepieces, objectives, colour filters, darkfield condensers as well as a Butterfly Tube, polarising and phase contrast units can easily be integrated thanks to the modular construction system
- The centring objective for adjusting the fluorescence, 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 to the trinocular version. 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, veterinary practices, water analysis, breweries

Applications/Samples

- Specially for translucent, thin, low-contrast, challenging samples (e.g. Immunofluorescence, FISH, DAPI staining, etc.)

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment, both-sided
- Overall dimensions W×D×H 510×470×515 mm
- Net weight approx. 13 kg

STANDARD



OPTION



OBN 147/148 OBN 141/142 OBN 141/142 147/148

Model Tube Eyepiece Objective quality Objectives Illumination

KERN

OBN 141	Trinocular	HWF 10x/Ø 20 mm	Infinity Plan	4x / 10x / 20x / 40x / 100x	LED + 5 W LED Epi Fluorescence (B/G)
OBN 142	Trinocular	HWF 10x/Ø 20 mm	Infinity Plan	4x / 10x / 20x / 40x / 100x	LED + 5 W LED Epi Fluorescence (UV/V/B/G)
OBN 147*	Trinocular	HWF 10x/Ø 20 mm	Infinity Plan	4x / 10x / 20x / 40x / 100x	Halogen + 100 W Epi Fluorescence (B/G)
OBN 148	Trinocular	HWF 10x/Ø 20 mm	Infinity Plan	4x / 10x / 20x / 40x / 100x	Halogen + 100 W Epi Fluorescence (UV/V/B/G)

* ONLY WHILE STOCKS LAST

Model outfit		Model KERN				Order number
		OBN 141	OBN 142	OBN 147	OBN 148	
Eyepieces (23,2 mm)	HWF 10x/Ø 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404
	WF 10x/Ø 20 mm	○	○	○	○	OBB-A1351
	WF 16x/Ø 13 mm	○	○	○	○	OBB-A1354
	WF 10x/Ø 20 mm (reticule 0,1 mm) (adjustable)	○	○	○	○	OBB-A1352
Infinity Plan achromatic objectives	4x/0,11 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1263
	10x/0,25 W.D. 4,64 mm	✓	✓	✓	✓	OBB-A1243
	20x/0,45 (spring-loaded) W.D. 2,41 mm	✓	✓	✓	✓	OBB-A1250
	40x/0,65 (spring-loaded) W.D. 0,65 mm	✓	✓	✓	✓	OBB-A1257
	100x/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	✓	OBB-A1240
	Plan 60x/0,8 (spring-loaded) W.D. 0,33 mm	○	○	○	○	OBB-A1270
Infinity Plan Semi Achromatic objectives	10x/0,3 W.D. 7,68 mm	○	○	○	○	OBB-A1634
	20x/0,5 W.D. 1,96 mm	○	○	○	○	OBB-A1635
	40x/0,75 (spring-loaded) W.D. 0,78 mm	○	○	○	○	OBB-A1636
	100x/1,3 (oil) (spring-loaded) W.D. 0,15 mm	○	○	○	○	OBB-A1637
Trinocular tube	· Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 mm – 75 mm · Light distribution 0:100 · Diopter adjustment both-sided	✓	✓	✓	✓	OBB-A1382
Mechanical stage	· Stage size B×T 175×145 mm · Travel 78×55 mm · Coaxial coarse and fine focusing knobs · Holder for two slides	✓	✓	✓	✓	OBB-A1330
Condenser	Abbe N.A. 1,25 can be centred (with aperture diaphragm)	✓	✓	✓	✓	OBB-A1102
	“Swing-out” condenser N.A. 0,9/0,13 can be centred (with aperture diaphragm)	○	○	○	○	OBB-A1104
Darkfield condenser	N.A. 0,85-0,91 (dry, paraboloid)	○	○	○	○	OBB-A1421
	N.A. 1,3 (oil, cardiod)	○	○	○	○	OBB-A1538
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1283
Phase contrast units	Quintuple condenser wheel with 10x/20x/40x/100x Infinity PH Plan objectives (complete set)	○	○	○	○	OBB-A1237
	Single unit with ∞ PH-Plan-objective 10x	○	○	○	○	OBB-A1214
	Single unit with ∞ PH-Plan-objective 20x	○	○	○	○	OBB-A1216
	Single unit with ∞ PH-Plan-objective 40x	○	○	○	○	OBB-A1218
	Single unit with ∞ PH-Plan-objective 100x	○	○	○	○	OBB-A1212
Fluorescence unit	100W-HBO-Epi-Flourescence unit, 6-filter-disc (UV/V/B/G) including centering-objective				✓	OBB-A1155
	100 W HBO Epi fluorescent unit, 6-filter-disc (B/G) including centring objective lens			✓		OBB-A1153
	5W LED Epi Flourescence unit, 6-filter-disc (UV/V/B/G) including centering objective		✓			OBB-A1654
	5W LED Epi Flourescence unit, 6-filter-disc (B/G) including centering objective	✓				OBB-A1156
Colour filters for transmitted illumination	Blue	○	○	✓	✓	OBB-A1170
	Green	○	○	○	○	OBB-A1188
	Yellow	○	○	○	○	OBB-A1165
	Grey	○	○	○	○	OBB-A1183
C-Mount	1x	○	○	○	○	OBB-A1514
	0,5x (focus adjustable)	○	○	○	○	OBB-A1515

✓ = included with the delivery

○ = Option

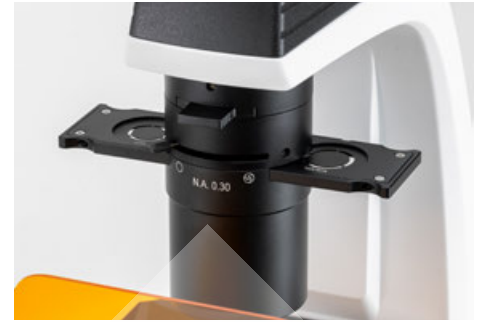
Further accessories and spare parts
see internet



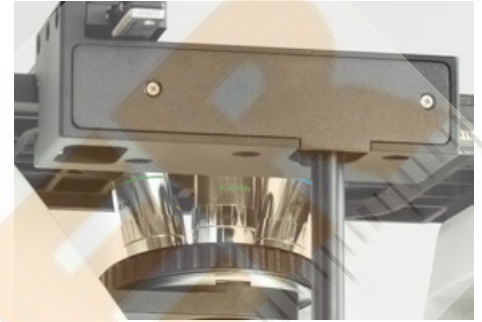
OCM 161/162



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
- A powerful and continuously adjustable 30 W halogen illumination or 5 W LED illumination ensures optimum illumination in the bright field of your samples. For the models with an additional fluorescence unit, you can choose either an Osram 100 W-HBO- or an 5 W-LED epi-fluorescence unit
- 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
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list
- 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 optics
- Quintuple nosepiece
- Siedentopf 45° inclined
- Diopter adjustment, both-sided

OCM 161/162

- Overall dimensions W×D×H 660×600×335 mm
- Net weight approx. 15 kg

OCM 165-168

- Overall dimensions W×D×H 782×304×530 mm
- Net weight approx. 22 kg

STANDARD



OCM 161/165/166
OCM 162/167/168
OCM 165/166

OCM 161/162
OCM 165-168

Model Tube Eyepiece Objective quality Objectives Illumination

KERN

OCM 161	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	30 W Halogen (transmitted)
OCM 162 <small>NEW</small>	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	5 W LED (transmitted)
OCM 165	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	30 W Halogen + 100 W Epi Fluorescence (B/G)
OCM 166	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	30 W Halogen + 100 W Epi Fluorescence (UV/V/B/G)
OCM 167	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	5 W LED + 5 W LED Epi Fluorescence (B/G)
OCM 168	Trinocular	HWF 10x/∅ 22 mm	Infinity Plan	10x / 20x / 40x	5 W LED + 5 W LED Epi Fluorescence (UV/V/B/G)

NEW New model

Model outfit		Model KERN						Order number
		OCM 161	OCM 162	OCM 165	OCM 166	OCM 167	OCM 168	
Eyepieces (30 mm)	HWF 10x/Ø 22 mm (adjustable)	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A1491
	HWF 10x/Ø 22 mm (reticule 0,1 mm) (adjustable)	○	○	○	○	○	○	OBB-A1523
Infinity Plan achromatic Fluor objectives	4x/0,11 W.D. 12,1 mm	○	○	○	○	○	○	OBB-A1600
	10x/0,25 W.D. 10,3 mm	✓	✓	✓	✓	✓	✓	OBB-A1601
	20x/0,45 W.D. 5,8 mm	✓	✓	✓	✓	✓	✓	OBB-A1602
	40x/0,65 W.D. 5,1 mm	✓	✓	✓	✓	✓	✓	OBB-A1603
Trinocular tube	· 45° inclined · Interpupillary distance 48 mm – 76 mm · Light distribution 100:0 · Diopter adjustment both-sided	✓	✓	✓	✓	✓	✓	
	· Stage size B×T 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 microtiter plate	✓	✓	✓	✓	✓	✓	
Mechanical stage	Specimen holder (Ø 110)	✓	✓	✓	✓	✓	✓	OBB-A1503
	Specimen holder for 35 mm petri dish	○	○	○	○	○	○	OBB-A1507
	Specimen holder for 54 mm petri dish	✓	✓	✓	✓	✓	✓	OBB-A1506
	Specimen holder for 65 mm petri dish	○	○	○	○	○	○	OBB-A1505
Condenser	Abbe N.A. 0,3 (with aperture diaphragm), LWD 72 mm	✓	✓	✓	✓	✓	✓	
	Phase contrast slide 4x	○	○	○	○	○	○	OBB-A1608
Phase contrast units	Phase contrast slide 10x	✓	✓	✓	✓	✓	✓	OBB-A1609
	Phase contrast slide 20x/40x	✓	✓	✓	✓	✓	✓	OBB-A1610
	Infinity PH-Plan Fluor objective 4x	○	○	○	○	○	○	OBB-A1604
	Infinity PH-Plan Fluor objective 10x	○	○	○	○	○	○	OBB-A1605
	Infinity PH-Plan Fluor objective 20x	✓	✓	✓	✓	✓	✓	OBB-A1606
	Infinity PH-Plan Fluor objective 40x	○	○	○	○	○	○	OBB-A1607
	Centring eyepiece	✓	✓	✓	✓	✓	✓	OBB-A1544
Colour filters for transmitted illumination	Blue	✓	✓	✓	✓	✓	✓	OBB-A1510
	Green	✓	✓	✓	✓	✓	✓	OBB-A1511
	Yellow	○	○	○	○	○	○	OBB-A1512
	Grey	○	○	○	○	○	○	OBB-A1513
C-Mount	0,5x (focus adjustable)	○	○	○	○	○	○	OBB-A1515
	1x	○	○	○	○	○	○	OBB-A1514

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see internet



Cleaning Sets for Microscopes

Features

- This economical and fully equipped 7-piece cleaning set contains everything you need for the very best care of your microscope.
- A silicon hand blower, dust brush, 60 ml of cleaning liquid, lint-free duster, optical cleaning cloths and cleaning swabs. You get all that in a high-quality KERN storage bag which you can also easily fix onto your belt.
- You can use this set not only to gently clean your microscope, but also for example your camera, binoculars or all other optical surfaces.
- The cleaning liquid is also available separately

STANDARD



Model

Description

KERN

OCS 901
OCS-A1101

7-piece cleaning sets for microscopes und other optical instruments
Cleaning liquid