

1



# COMPOUND MICROSCOPES

Compound, Phase contrast, Digital, Fluorescence and Inverted microscopes

## Note

Please request special conditions for a classroom set



Objectives OBS



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 0.5W 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 the OBS 102 (fixed condenser) ensures the very best concentration of light and illumination of the sample. The OBS 103, 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)
- Triple (OBS 101, 102) or quadplex (OBS 103, 104, 105, 106) nosepiece
- Tube 45° (OBS 101, 102, 103, 105) or 30° (OBS 104, 106) inclined/360° rotatable
- Diopter adjustment: Both-sided (for binocular models)
- Overall dimensions W×D×H 130×300×310 mm
- Net weight approx. 3 kg

#### STANDARD



not  
OBS 101, 102

Model	Standard configuration						Price excl. of VAT ex works €
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	Stage	
<b>OBS 101</b>	Monocular	WF 10×/ø 18 mm	Achromatic	4×/10×/40×	0,5W LED (transmitted) (battery incl., rechargeable)	fix	<b>195,-</b>
<b>OBS 102</b>	Monocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	fix	<b>205,-</b>
<b>OBS 103</b>	Monocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	fix	<b>215,-</b>
<b>OBS 104</b>	Binocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	fix	<b>295,-</b>
<b>OBS 105</b>	Monocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	mechanical	<b>255,-</b>
<b>OBS 106</b>	Binocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	mechanical	<b>340,-</b>

Model outfit		Model KERN						Order number	Price/piece excl. of VAT ex works €
		OBS 101	OBS 102	OBS 103	OBS 104	OBS 105	OBS 106		
Eyepieces (23,2 mm)	WF 10×/ø 18 mm	✓	✓	✓	✓✓	✓	✓✓	OBB-A1473	35,–
	WF 16×/ø 13 mm	○	○	○	○○	○	○○	OBB-A1474	35,–
	WF 20×/ø 11 mm	○	○	○	○○	○	○○	OBB-A1475	35,–
	WF 10×/ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A1561	35,–
Achromatic objectives	4×/0,10 W.D. 18,0 mm	✓	✓	✓	✓	✓	✓	OBB-A1476	40,–
	10×/0,25 W.D. 7,0 mm	✓	✓	✓	✓	✓	✓	OBB-A1477	45,–
	40×/0,65 (spring-loaded) W.D. 0,53 mm	✓	✓	✓	✓	✓	✓	OBB-A1478	50,–
	60×/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	○	○	OBB-A1479	65,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	○	○	○	OBB-A1480	70,–
E-Plan objectives	4×/0,10 W.D. 14,5 mm	○	○	○	○	○	○	OBB-A1562	45,–
	10×/0,25 W.D. 5,65 mm	○	○	○	○	○	○	OBB-A1563	60,–
	40×/0,65 (spring-loaded) W.D. 0,85 mm	○	○	○	○	○	○	OBB-A1564	90,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	○	○	○	OBB-A1565	95,–
	100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	○	○	OBB-A1442	190,–
	Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	○	○	OBB-A1441	205,–
Monocular tube	45° inclined/360° rotatable	✓	✓	✓		✓		OBB-A1471	
Binocular tube	<ul style="list-style-type: none"> <li>45° inclined/360° rotatable</li> <li>Interpupillary distance 55-75 mm</li> <li>Diopter adjustment: Both-sided</li> </ul>				✓		✓	OBB-A1472	
Fixed stage	<ul style="list-style-type: none"> <li>Stage size W×D 110×120 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2,5 µm</li> </ul>	✓	✓	✓	✓				
Mechanical stage	<ul style="list-style-type: none"> <li>Stage size W×D 115×125 mm</li> <li>Travel 75×18 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2,5 µm</li> </ul>					✓	✓		
Condenser	Simple condenser N.A. 0,65	✓							
	Simple condenser N.A. 0,65 (aperture diaphragm)		✓						
	Abbe N.A. 1,25 (aperture diaphragm)			✓	✓	✓	✓		
Illumination	0,5 W LED illumination system (transmitted) (rechargeable)	✓	✓	✓	✓	✓	✓		
Colour filters for transmitted illumination	Blue			✓	✓	✓	✓	OBB-A1466	25,–
	Green			○	○	○	○	OBB-A1467	25,–
	Yellow			○	○	○	○	OBB-A1468	25,–
	Grey			○	○	○	○	OBB-A1184	25,–

✓ = Included with delivery

○ = Option

1



**Note**  
Please request special conditions for a classroom set



Monocular version



Objectives OBT

**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 accurately, all models have a coarse and fine focusing knob on both sides. The mechanical angle table enables you to work with the samples and move them rapidly (for OBT 103, 104, 105, 106 models)
- A large selection of different eyepieces and objectives is also available
- 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 use

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

- Technical data**
- Finite optical system (DIN)
  - Triple (OBT 101) or quadplex (OBT 102, 103, 104, 105, 106) nosepiece
  - Tube 45° inclined/360° rotatable
  - Diopter adjustment: Both-sided (for binocular models)
  - Overall dimensions WxDxH 195x147x325 mm
  - Net weight approx. 2,5 kg

STANDARD

not OBT 101

OPTION

Model	Standard configuration						Price excl. of VAT ex works €
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	Stage	
OBT 101	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×	1W LED (transmitted)	fix	230,-
OBT 102	Monocular	HWF 10×/ø 18 mm	Achromatic		1W LED (transmitted)	fix	250,-
OBT 103	Monocular	HWF 10×/ø 18 mm	Achromatic		1W LED (transmitted)	mechanical	285,-
OBT 104	Binocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×/100×	1W LED (transmitted)	mechanical	380,-
OBT 105	Monocular	HWF 10×/ø 18 mm	Achromatic		1W LED (transmitted)	mechanical	310,-
OBT 106	Binocular	HWF 10×/ø 18 mm	Achromatic		1W LED (transmitted)	mechanical	390,-

Model outfit		Model KERN						Order number	Price/piece excl. of VAT ex works €
		OBT 101	OBT 102	OBT 103	OBT 104	OBT 105	OBT 106		
Eyepieces (23,2 mm)	WF 10×/∅ 18 mm	✓	✓	✓	✓✓	✓	✓✓	OBB-A3200	35,-
	WF 10×/∅ 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A3201	35,-
	WF 10×/∅ 18 mm (reticule 0,1 mm)	○	○	○	○	○	○	OBB-A3202	35,-
Achromatic objectives	4×/0,10 W.D. 27 mm	✓	✓	✓	✓	✓	✓	OBB-A3203	30,-
	10×/0,25 W.D. 7 mm	✓	✓	✓	✓	✓	✓	OBB-A3204	35,-
	40×/0,65 (spring-loaded) W.D. 0,6 mm	✓	✓	✓	✓	✓	✓	OBB-A3205	45,-
	100×/1,25 (oil) (spring-loaded) W.D. 0,2 mm	○	○	○	○	✓	✓	OBB-A3207	65,-
	60×/0,85 (spring-loaded) W.D. 0,4 mm	○	○	○	○	○	○	OBB-A3206	55,-
Monocular tube	45° inclined/360° rotatable	✓	✓	✓	○	✓	○	OBB-A3221	
Binocular tube	<ul style="list-style-type: none"> <li>Siedentopf 45° inclined/360° rotatable</li> <li>Interpupillary distance 48–75 mm</li> <li>Diopter adjustment: One-sided</li> </ul>	○	○	○	✓	○	✓	OBB-A3222	
Fixed stage	<ul style="list-style-type: none"> <li>Stage size W×D 115×110 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2 µm</li> </ul>	✓	✓						
Mechanical stage	<ul style="list-style-type: none"> <li>Stage size W×D 115×110 mm</li> <li>Travel 52×20 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2 µm</li> <li>One slide holder</li> </ul>			✓	✓	✓	✓		
Condenser	Simple condenser N.A. 0,65	✓							
	Abbe N.A. 1,25 (aperture diaphragm)		✓	✓	✓	✓	✓		
Illumination	1 W LED spare bulb (transmitted)	✓	✓	✓	✓	✓	✓	OBB-A3208	30,-
Colour filters for transmitted illumination	Blue	○	○	○	○	○	○	OBB-A3212	25,-
	Green	○	○	○	○	○	○	OBB-A3210	25,-
	Yellow	○	○	○	○	○	○	OBB-A3211	25,-
	Grey	○	○	○	○	○	○	OBB-A3209	25,-

✓ = Included with delivery

○ = Option



## Note

Please request special conditions  
for a classroom set



Monocular version



Trinocular version



Butterfly tube

## Educational Line

### Elegant, dynamic and impressive – the new all-round compound microscope for schools, training and laboratories

#### Features

- The brand new OBE-12/13 range stands out through its exclusive, dynamic device, which is second to none in terms of sturdy construction and ergonomics. The clever storage compartment on the back will enable quick practical storage for your power cable. Thanks to the USB connection technology, it is also possible to supply power using an external powerbank
- The impressive, infinitely dimmable 3 W LED guarantees bright illumination of your sample
- A further highlight is the butterfly lens barrel which enables you to achieve the ideal viewing angle and is integrated as standard on all binocular and trinocular models. The height-adjustable and thereby focusable 1.25 Abbe condenser with aperture diaphragm is a further quality feature of the OBE range and guarantees the very best concentration of light

- Height adjustment of the fully-equipped mechanical stage is carried out using a coarse and fine focusing knob on both sides. The ergonomically designed coaxial drive enables you to work with the samples and move them rapidly
- A large selection of different eyepieces and objectives 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 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

- Training, haematology, sediment investigation, doctor's practise

#### Applications/Samples

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

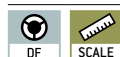
#### Technical data

- Finite optical system
- Quadplex nosepiece
- Butterfly 30° inclined
- Monocular lens barrel 30° inclined
- Diopter adjustment: One-sided (for binocular and trinocular models)
- Overall dimensions W×D×H  
360×150×320 mm
- Net weight approx. 4,6 kg

#### STANDARD



#### OPTION



#### Model

#### Standard configuration

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	Price excl. of VAT ex works €
<b>OBE 121</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×	3W LED (transmitted)	<b>490,-</b>
<b>OBE 122</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3W LED (transmitted)	<b>580,-</b>
<b>OBE 124</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3W LED (transmitted)	<b>690,-</b>
<b>OBE 131</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×/100×	3W LED (transmitted)	<b>540,-</b>
<b>OBE 132</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3W LED (transmitted)	<b>640,-</b>
<b>OBE 134</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3W LED (transmitted)	<b>760,-</b>

Model outfit		Model KERN						Order number	Price/piece excl. of VAT ex works €
		OBE 121	OBE 122	OBE 124	OBE 131	OBE 132	OBE 134		
Eyepieces (23,2 mm)	HWF 10×/ø 18 mm	✓	✓✓	✓✓	✓	✓✓	✓✓	OBB-A1403	50,–
	WF 16×/ø 13 mm	○	○○	○○	○	○○	○○	OBB-A1354	50,–
	HWF 10×/ø 18 mm (with pointer)	○	○	○	○	○	○	OBB-A1348	45,–
	HWF 10×/ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	○	○	OBB-A1349	65,–
Achromatic objectives	4×/0,10 W.D. 18,6 mm	✓	✓	✓	✓	✓	✓	OBB-A1111	40,–
	10×/0,25 W.D. 6,5 mm	✓	✓	✓	✓	✓	✓	OBB-A1108	50,–
	40×/0,65 (spring-loaded) W.D. 0,47 mm	✓	✓	✓	✓	✓	✓	OBB-A1112	80,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	✓	✓	✓	OBB-A1109	115,–
	20×/0,40 (spring-loaded) W.D. 1,75 mm	○	○	○	○	○	○	OBB-A1110	95,–
	60×/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	○	○	OBB-A1113	115,–
	E-Plan 100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	○	○	OBB-A1442	190,–
	Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	○	○	OBB-A1441	205,–
Monocular tube	30° inclined	✓			✓				
Binocular tube	• Butterfly 30° inclined • Interpupillary distance 48 – 75 mm • Diopter adjustment: One-sided		✓			✓			
Trinocular tube	• See binocular tube • Light distribution 20:80			✓			✓		
Mechanical stage	• Stage size W×D 125×115 mm • Travel 50×70 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	✓	✓	OBB-A1101	95,–
Darkfield unit	Usable for 4× – 40× objectives	○	○	○	○	○	○	OBB-A1148	95,–
Illumination	3 W LED illumination system (transmitted)	✓	✓	✓	✓	✓	✓		
Colour filters for transmitted illumination	Blue	○	○	○	○	○	○	OBB-A1466	25,–
	Green	○	○	○	○	○	○	OBB-A1467	25,–
	Yellow	○	○	○	○	○	○	OBB-A1468	25,–
	Grey	○	○	○	○	○	○	OBB-A1184	25,–
C-Mount	0,5× (focus adjustable)			○			○	OBB-A1137	175,–
	1×			○			○	OBB-A1139	110,–

✓ = Included with delivery

○ = Option



Trinocular version



Simple polarising attachment

## 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 HBO and 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, oncology, entomology, vets, water analysis, sewage treatment plants and breweries

#### Applications/Samples

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

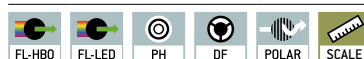
#### Technical data

- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H  
395×200×380 mm
- Net weight approx. 6,7 kg

#### STANDARD



#### OPTION



#### Model

#### Standard configuration

	Tube	Eyepiece	Objective quality	Objectives	Illumination	Price excl. of VAT ex works €
<b>KERN</b>						
<b>OBL 127</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	3 W LED (transmitted)	<b>1060,-</b>
<b>OBL 137</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	3 W LED (transmitted)	<b>1200,-</b>



Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OBL 127	OBL 137		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	OBB-A1404	105,–
	WF 16×/ø 13 mm	○ ○	○ ○	OBB-A1354	50,–
<b>Infinity E-Plan objectives</b>	HWF 10×/ø 20 mm (with Pointer)	○	○	OBB-A1448	90,–
	4×/0,10 W.D. 12,1 mm	✓	✓	OBB-A1161	100,–
	10×/0,25 W.D. 2,1 mm	✓	✓	OBB-A1159	165,–
	40×/0,65 (spring-loaded) W.D. 0,58 mm	✓	✓	OBB-A1160	290,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	OBB-A1158	365,–
	Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm	○	○	OBB-A1250	290,–
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	OBB-A1270	390,–
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	OBB-A1437	490,–
<b>Binocular tube</b>	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm (for infinity system)</li> <li>• Diopter adjustment: One-sided</li> </ul>	✓	○	OBB-A1578	
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Light distribution 20:80 (for infinity system)</li> <li>• Diopter adjustment: One-sided</li> </ul>	○	✓	OBB-A1580	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size W×D 145×130 mm</li> <li>• Travel 76×52 mm</li> <li>• Coaxial coarse and fine focusing knobs, scale: 2 µm</li> <li>• Two slide holder</li> </ul>	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	OBB-A1103	95,–
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	OBB-A1422	250,–
<b>Illumination</b>	20 W Halogen spare bulb (transmitted)			OBB-A1643	60,–
	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		
<b>Polarising unit</b>	Analyser/Polariser	○	○	OBB-A1277	290,–
<b>Phase contrast units</b> (including PH-condenser and PH-slides)	Single unit with ∞ PH-Plan objective 10×	○	○	OBB-A1215	340,–
	Single unit with ∞ PH-Plan objective 20×	○	○	OBB-A1217	390,–
	Single unit with ∞ PH-Plan objective 40×	○	○	OBB-A1219	470,–
	Single unit with ∞ PH-Plan objective 100×	○	○	OBB-A1213	570,–
	If required, there are several magnification levels, please contact our OPTICS-Team				
<b>Fluorescence unit</b>	100 W HBO Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	OBB-A1153	3490,–
	3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	OBB-A1157	3550,–
<b>Colour filters</b> for transmitted illumination	Blue (built-in)	✓	✓		
	Green	○	○	OBB-A1188	25,–
	Yellow	○	○	OBB-A1165	25,–
	Grey	○	○	OBB-A1183	25,–
<b>C-Mount</b>	0,5× (focus adjustable)		○	OBB-A1515	200,–
	1×		○	OBB-A1514	130,–

✓ = Included with delivery

○ = Option



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
- Depending on the application, there is a choice of models with strong, infinitely dimmable 3W LED or 20W halogen illumination (Philips)
- A special fixed, pre-centred phase contrast condenser as well as field diaphragm give you a simplified Koehler 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 polarising 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, 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
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H  
395×200×380 mm
- Net weight approx. 6,7 kg

#### STANDARD



#### OPTION



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OBL 146</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan/ Plan		3 W LED (transmitted)	<b>1660,-</b>
<b>OBL 155</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan/ Plan	4×/PH10×/ PH40×/100×	20 W Halogen (transmitted)	<b>1490,-</b>
<b>OBL 156</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan/ Plan		3 W LED (transmitted)	<b>1780,-</b>

Model outfit		Model KERN			Order number	Price/piece excl. of VAT ex works €
		OBL 155	OBL 146	OBL 156		
Eyepieces (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	✓✓	OBB-A1404	105,-
	WF 16×/ø 13 mm	○ ○	○ ○	○ ○	OBB-A1354	50,-
Infinity E-Plan objectives	HWF 10×/ø 20 mm (with Pointer)	○	○	○	OBB-A1448	90,-
	4×/0,11 W.D. 12,1 mm	✓	✓	✓	OBB-A1161	100,-
	10×/0,25 W.D. 2,1 mm	○	○	○	OBB-A1159	165,-
	40×/0,65 (spring-loaded) W.D. 0,58 mm	○	○	○	OBB-A1160	290,-
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	OBB-A1158	365,-
	Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm	○	○	○	OBB-A1250	290,-
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	OBB-A1270	390,-
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	OBB-A1437	490,-
Binocular tube	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm (for infinity system)</li> <li>• Diopter adjustment: One-sided</li> </ul>	○	✓	○	OBB-A1578	
Trinocular tube	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Light distribution 20:80 (for infinity system)</li> <li>• Diopter adjustment: One-sided</li> </ul>	✓	○	✓	OBB-A1582	
Mechanical stage	<ul style="list-style-type: none"> <li>• Stage size W×D 145×130 mm</li> <li>• Travel 76×52 mm</li> <li>• Coaxial coarse and fine focusing knobs, scale: 2 µm</li> <li>• Two slide holder</li> </ul>	✓	✓	✓		
PH condenser	Abbe N.A. 1,25 precentered, for bright field and phase contrast	✓	✓	✓	OBB-A1398	165,-
Phase contrast units	Infinity PH-Plan objective 10×	✓	✓	✓	OBB-A1390	185,-
	Infinity PH-Plan objective 20×	○	○	○	OBB-A1391	220,-
	Infinity PH-Plan objective 40×	✓	✓	✓	OBB-A1392	285,-
	Infinity PH-Plan objective 100×	○	○	○	OBB-A1393	375,-
	PH slide 10×	✓	✓	✓	OBB-A1399	85,-
	PH slide 20×	○	○	○	OBB-A1400	85,-
	PH slide 40×	✓	✓	✓	OBB-A1401	85,-
	PH slide 100×	○	○	○	OBB-A1402	85,-
	Centering eyepiece	✓	✓	✓		
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	OBB-A1422	250,-
Illumination	20 W Halogen spare bulb (transmitted)	✓			OBB-A1643	60,-
	3 W LED illumination system (transmitted) (non-rechargeable)		✓	✓		
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓		
	Green	✓	✓	✓	OBB-A1188	25,-
	Yellow	○	○	○	OBB-A1165	25,-
	Grey	○	○	○	OBB-A1183	25,-
C-Mount	0,5× (focus adjustable)	○		○	OBB-A1515	200,-
	1×	○		○	OBB-A1514	130,-

For further optional accessories, please see the list of items for the OBL-12 and OBL-13 series from page 17

✓ = Included with delivery

○ = Option



OBN-13



OBN-15



OBN-15: Mounted phase contrast condenser



Quintuple PH universal rotary condenser with 10×/20×/40×/100×

Infinity PH-Plan objectives (complete set, for OBN-15 included)

## Professional Line

### Professionalism and versatility united in one microscope – with Koehler illumination for demanding applications

#### Features

- The OBN series stands out because of its unbeatable and consistently high quality and its ergonomic design. The range of modular components means that the OBN series can be individually customised for the professional user
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen transmitted illumination (Philips)
- In addition the microscope is available as a pre-configured phase contrast microscope, which, through the combination of a professional quintuple condenser wheel, phase contrast condenser and Infinity Plan phase contrast objectives makes it a high-quality, fully-equipped microscope for all applications related to contrast procedures
- 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
- A wide variety of modular systems, such as, for example, a swing-out condenser, various eyepieces, objectives, colour filters, phase contrast units, a darkfield condenser, a simple polarising unit, Butterfly tube, through to complete fluorescence units are available to you as accessories
- The centring eyepiece for adjusting the phase contrast (OBN-15), a protective dust cover, eye cups as well as multi-lingual user instructions are included with the 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

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

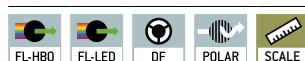
#### Technical data

- 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	Price excl. of VAT ex works €
<b>KERN</b>						
<b>OBN 132</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/10×/20×/40×/100×	20 W Halogen (transmitted)	<b>1680,-</b>
<b>OBN 135</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	40×/100×	3 W LED (transmitted)	<b>1690,-</b>
<b>OBN 158</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/PH10×/PH20×/PH40×/PH100×	20 W Halogen (transmitted)	<b>2970,-</b>
<b>OBN 159</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	PH40×/PH100×	3 W LED (transmitted)	<b>2990,-</b>

Model outfit		Model KERN				Order number	Price/piece excl. of VAT ex works €
		OBN 132	OBN 135	OBN 158	OBN 159		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404	105,–
	WF 16×/ø 13 mm	○ ○	○ ○	○ ○	○ ○	OBB-A1354	50,–
<b>Infinity Plan achromatic objectives</b>	4×/0,11 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1263	120,–
	10×/0,25 W.D. 4,64 mm	✓	✓	○	○	OBB-A1243	215,–
	20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	✓	○	○	OBB-A1250	290,–
	40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	✓	○	○	OBB-A1257	315,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	○	○	OBB-A1240	340,–
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	○	OBB-A1270	390,–
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	OBB-A1437	490,–
<b>Trinocular tube</b>	<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>	✓	✓	✓	✓		
<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>Condenser</b>	Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	○	○	OBB-A1102	95,–
	Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	○	○	○	○	OBB-A1104	240,–
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	○	OBB-A1421	290,–
	N.A. 1,3 (oil, cardioid)	○	○	○	○	OBB-A1538	660,–
<b>Koehler illumination</b>	20 W Halogen spare bulb (transmitted)	✓		✓		OBB-A1643	60,–
	3 W LED illumination system (transmitted) (non-rechargeable)		✓		✓		
<b>Polarising unit</b>	Analyser/Polariser	○	○	○	○	OBB-A1283	290,–
<b>Phase contrast units</b>	Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	○	○	✓	✓	OBB-A1237	1790,–
	Single unit with ∞ PH-Plan objective 10×	○	○			OBB-A1214	340,–
	Single unit with ∞ PH-Plan objective 20×	○	○			OBB-A1216	390,–
	Single unit with ∞ PH-Plan objective 40×	○	○			OBB-A1218	470,–
	Single unit with ∞ PH-Plan objective 100×	○	○			OBB-A1212	570,–
	Centering eyepiece	○	○	✓	✓		
	If required, there are several magnification levels, please contact our OPTICS-Team						
<b>C-Mount</b>	1×	○	○	○	○	OBB-A1140	110,–
	0,57× (focus adjustable)	○	○	○	○	OBB-A1136	175,–
<b>Fluorescence unit</b>	100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective	○	○	○	○	OBB-A1155	4970,–
	100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective	○	○	○	○	OBB-A1153	3490,–
	3 W LED Epi Fluorescence unit (B/G) including centering objective	○	○	○	○	OBB-A1156	3550,–
<b>Colour filters</b> for transmitted illumination	Blue	✓		✓	✓		
	Green	○	○	✓	✓	OBB-A1188	25,–
	Yellow	○	○	○	○	OBB-A1165	25,–
	Grey	○	○	○	○	OBB-A1183	25,–

✓ = Included with delivery

○ = Option





## Note

Semi apochromatic objectives available as accessories (see model outfit list page 27)



Illumination unit



Sextuple filter wheel OBN 148

## 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
- The powerful, dimmable 20W halogen illumination unit (Philips) and a 100W Epi fluorescence incident illumination unit on the OBN 147/OBN 148 models 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 3W LED transmitted illumination unit and 3W 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. 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 translucent, thin, low-contrast, challenging samples (e.g. immunofluorescence, FISH, DAPI staining, etc.)

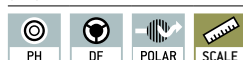
#### Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H  
530×220×490 mm
- Net weight approx. 16 kg

#### STANDARD



#### OPTION



#### Model

#### Standard configuration

	Tube	Eyepiece	Objective quality	Objectives	Illumination	Price excl. of VAT ex works €
<b>KERN</b>						
<b>OBN 141</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/10×/20×/	LED + 3 W LED Epi Fluorescence (B/G)	<b>5190,-</b>
<b>OBN 147</b>	Trinocular	WF 10×/ø 20 mm	Infinity Plan	40×/100×	Halogen + 100 W Epi Fluorescence (B/G)	<b>5170,-</b>
<b>OBN 148</b>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan		Halogen + 100 W Epi Fluorescence (B/G/UV/V)	<b>6550,-</b>



Model outfit		Model KERN			Order number	Price/piece excl. of VAT ex works €
		OBN 141	OBN 147	OBN 148		
Eyepieces (23,2 mm)	HWF 10×/ø 20 mm	✓✓		✓✓	OBB-A1404	105,–
	WF 10×/ø 20 mm		✓✓		OBB-A1351	95,–
	WF 16×/ø 13 mm	○○	○○	○○	OBB-A1354	50,–
	WF 10×/ø 20 mm (reticle 0,1 mm) (adjustable)	○	○	○	OBB-A1352	155,–
Infinity Plan achromatic objectives	4×/0,10 W.D. 12,1 mm	✓	✓	✓	OBB-A1263	120,–
	10×/0,25 W.D. 4,64 mm	✓	✓	✓	OBB-A1243	215,–
	20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	✓	✓	OBB-A1250	290,–
	40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	✓	✓	OBB-A1257	315,–
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	OBB-A1240	340,–
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	OBB-A1270	390,–
Infinity Plan Semi Apochromatic objectives	10×/0,3 W.D. 7,68 mm	○	○	○	OBB-A1634	395,–
	20×/0,5 W.D. 1,96 mm	○	○	○	OBB-A1635	690,–
	40×/0,75 (spring-loaded) W.D. 0,78 mm	○	○	○	OBB-A1636	1050,–
	100×/1,3 (oil) (spring-loaded) W.D. 0,15 mm	○	○	○	OBB-A1637	1370,–
Trinocular tube	<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>	✓	✓	✓		
Mechanical stage	<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>	✓	✓	✓		
Condenser	Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	✓	OBB-A1102	95,–
	Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	○	○	○	OBB-A1104	240,–
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	OBB-A1421	290,–
	N.A. 1,3 (oil, cardioid)	○	○	○	OBB-A1538	660,–
Koehler illumination	20 W Halogen spare bulb (transmitted)		✓	✓	OBB-A1643	60,–
	3 W LED illumination system (transmitted) (non-rechargeable)	✓				
Polarising unit	Analyser/Polariser	○	○	○	OBB-A1283	290,–
Phase contrast units	Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	○	○	○	OBB-A1237	1790,–
	Single unit with ∞ PH-Plan objective 10×	○	○	○	OBB-A1214	340,–
	Single unit with ∞ PH-Plan objective 20×	○	○	○	OBB-A1216	390,–
	Single unit with ∞ PH-Plan objective 40×	○	○	○	OBB-A1218	470,–
	Single unit with ∞ PH-Plan objective 100×	○	○	○	OBB-A1212	570,–
	If required, there are several magnification levels, please contact our OPTICS-Team					
C-Mount	1×	○	○	○	OBB-A1140	110,–
	0,57× (focus adjustable)	○	○	○	OBB-A1136	175,–
Fluorescence unit	100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective			✓		
	100 W HBO Epi Fluorescence unit, 6-filter-disc (B/G) including centering objective		✓			
	3 W LED Epi Fluorescence unit (B/G) including centering objective	✓				
Colour filters for transmitted illumination	Blue	✓	✓	✓		
	Green	○	○	○	OBB-A1188	25,–
	Yellow	○	○	○	OBB-A1165	25,–
	Grey	○	○	○	OBB-A1183	25,–

✓ = Included with delivery

○ = Option



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 (Ø 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	Price excl. of VAT ex works €
<b>KERN</b>						
<b>OCM 161</b>	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan		30 W Halogen (transmitted)	<b>3790,-</b>
<b>OCM 165</b>	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan		30 W Halogen + 100 W Epi Fluorescence (B/G)	<b>9180,-</b>
<b>OCM 166</b>	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan	LWD10×/LWD20×/LWD40×/LWD20×PH	30 W Halogen + 100 W Epi Fluorescence (UV/V/B/G)	<b>10790,-</b>
<b>OCM 167</b>	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan		5W-LED + 5W Epi Fluorescence (B/G)	<b>9180,-</b>
<b>OCM 168</b>	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan		5W-LED + 5W Epi Fluorescence (UV/V/B/G)	<b>10790,-</b>

Model outfit		Model KERN					Order number	Price/piece excl. of VAT ex works €
		OCM 161	OCM 165	OCM 166	OCM 167	OCM 168		
<b>Eyepieces</b> (30 mm)	HWF 10×/ø 22 mm (adjustable)	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A1491	100,–
	HWF 10×/ø 22 mm (reticule 0,1 mm) (adjustable)	○	○	○	○	○	OBB-A1523	155,–
<b>Infinity Plan achromatic Fluor objectives</b> for long working distance	4×/0,11 W.D. 12,1 mm	○	○	○	○	○	OBB-A1600	140,–
	10×/0,25 W.D. 10,3 mm	✓	✓	✓	✓	✓	OBB-A1601	210,–
	20×/0,45 W.D. 5,8 mm	✓	✓	✓	✓	✓	OBB-A1602	290,–
	40×/0,65 W.D. 5,1 mm	✓	✓	✓	✓	✓	OBB-A1603	360,–
<b>Trinocular tube</b>	• 45° inclined • Interpupillary distance 48–76 mm • Light distribution 100:0 • Diopter adjustment: Both-sided	✓	✓	✓	✓	✓		
	• 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	✓	✓	✓	✓	✓		
<b>Mechanical stage</b>	Drop specimen holder (ø 110)	✓	✓	✓	✓	✓	OBB-A1503	35,–
	Specimen holder for 35 mm culture dish	○	○	○	○	○	OBB-A1507	65,–
	Specimen holder for 54 mm culture dish	✓	✓	✓	✓	✓	OBB-A1506	65,–
	Specimen holder for 65 mm culture dish	○	○	○	○	○	OBB-A1505	65,–
<b>Condenser</b>	Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm	✓	✓	✓	✓	✓		
<b>Illumination</b>	30 W Halogen spare bulb (transmitted)	✓	✓	✓			OBB-A1372	40,–
	5 W LED spare bulb (transmitted)				✓	✓	OBB-A1589	90,–
<b>Phase contrast units</b>	Phase contrast slide 4×	○	○	○	○	○	OBB-A1608	95,–
	Phase contrast slide 10×	✓	✓	✓	✓	✓	OBB-A1609	95,–
	Phase contrast slide 20×/40×	✓	✓	✓	✓	✓	OBB-A1610	95,–
	Infinity PH-Plan Fluor objective 4×	○	○	○	○	○	OBB-A1604	680,–
	Infinity PH-Plan Fluor objective 10×	○	○	○	○	○	OBB-A1605	260,–
	Infinity PH-Plan Fluor objective 20×	✓	✓	✓	✓	✓	OBB-A1606	360,–
	Infinity PH-Plan Fluor objective 40×	○	○	○	○	○	OBB-A1607	410,–
	Centering eyepiece	○	○	○	○	○	OBB-A1544	120,–
<b>Fluorescence unit</b>	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)					✓		
<b>Colour filters</b> for transmitted illumination	Blue	✓	✓	✓	✓	✓	OBB-A1510	25,–
	Green	✓	✓	✓	✓	✓	OBB-A1511	25,–
	Yellow	○	○	○	○	○	OBB-A1512	25,–
	Grey	○	○	○	○	○	OBB-A1513	25,–
<b>C-Mount</b>	0,5×	○	○	○	○	○	OBB-A1515	200,–
	1×	○	○	○	○	○	OBB-A1514	130,–

✓ = Included with delivery

○ = Option