































## **MICROSCOPES & REFRACTOMETERS**

for laboratories, industry, food industry and quality assurance

PROFESSIONAL  
MEASURING



**2018**

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

## Your advantages

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### reliable

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#### [www.kern-sohn.com](http://www.kern-sohn.com)

Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary, images and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.

#### Sales conditions

- The prices are valid from 01.01.2018 – 31.12.2018. In Europe, all prices do not include the applicable V.A.T.
- Delivery conditions: We supply ex works from Balingen, i. e. the transport costs are invoiced separately. Delivery is usually via parcel service
- Sale or return: within 14 days of purchase
- You can find our full terms and conditions on the internet at [www.kern-sohn.com/en/kern/general\\_terms.html](http://www.kern-sohn.com/en/kern/general_terms.html)

We weigh almost everything ... and that's not all!



Balances & Test service catalogue



Medical scales catalogue



Microscopes & refractometers catalogue



SAUTER measuring equipment catalogue



DAkkS calibration service brochure



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For over 170 years, KERN & SOHN has been synonymous with high precision weighing and measuring technology. This claim is the driving force for the development of our microscope and refractometer ranges.

Thanks to consistent customer focus paired with smart ideas and the latest available technology we are proud to be suppliers of high-quality, durable top microscopes and refractometers, which help you to be as efficient as possible in your daily work.

When developing our microscopes we have concentrated on the very best optical quality and have used only high-quality glass and the latest technologies to achieve this. The high-quality Philips halogen and modern LED illumination produce razor-sharp images with high contrast and which will impress you with their brilliant true-colour display – you must have noticed this yourself.

Your advantages:

- all mechanical parts have been designed for a long service life
- special attention has been given to the ergonomics of our microscopes, as this allows the user to work for several hours in a comfortable position which does not cause fatigue
- our microscopes are fully-equipped and can be used immediately
- Highlight for 2018: die KERN camera software – you will be amazed at how user-friendly and intuitive it is
- and much more...



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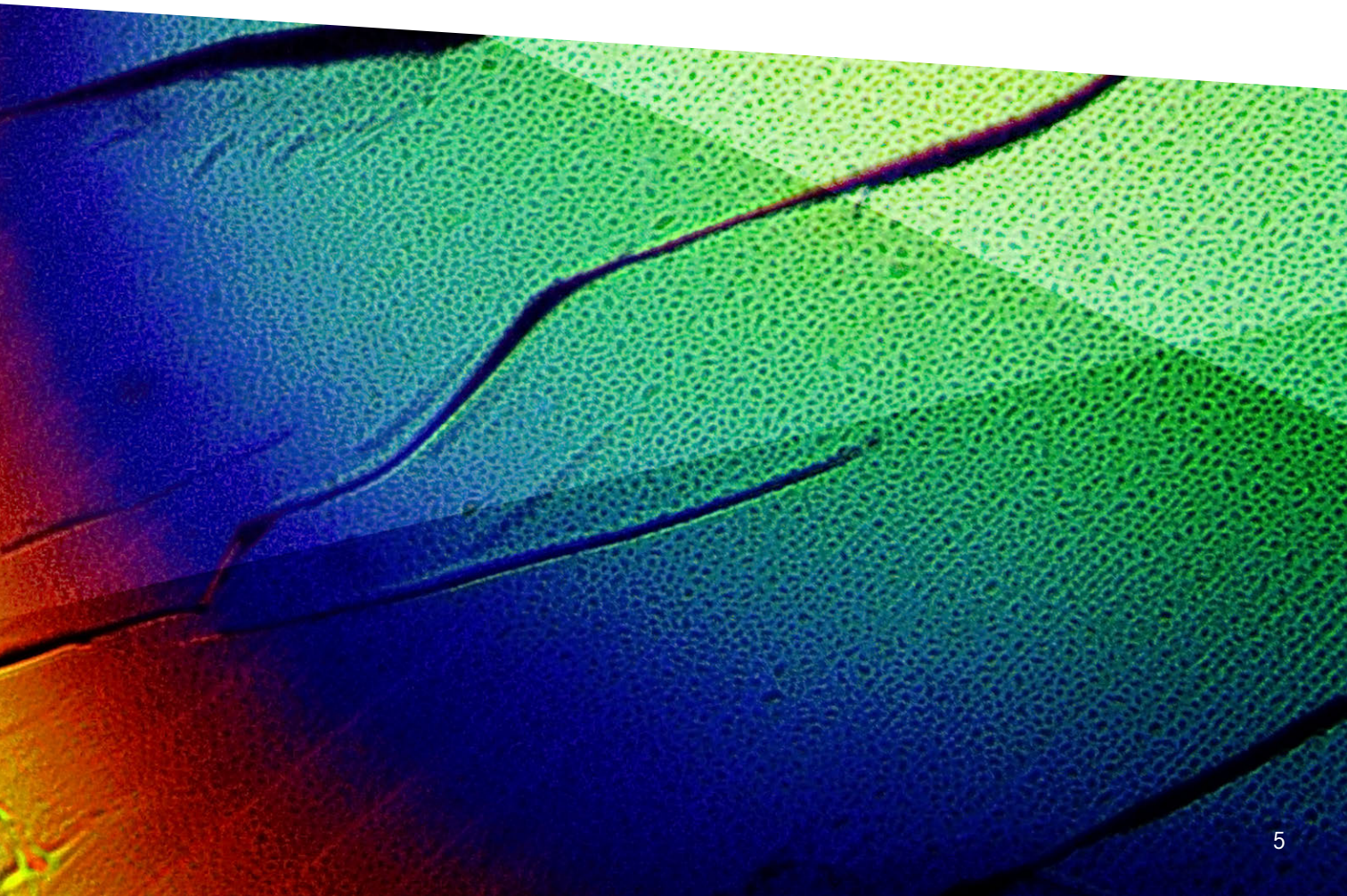
**KERN OBF-1**

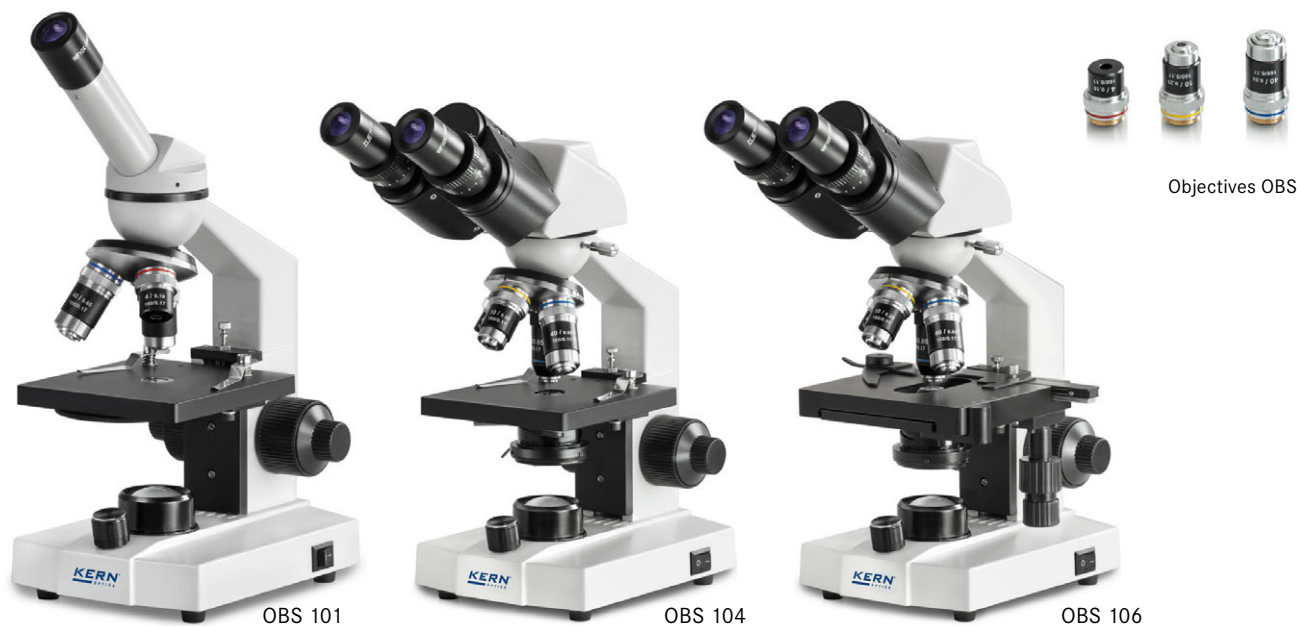
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from €

**750,-**

## Microscopes





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 lens with rotating aperture diaphragm disc on the OBS 101 ensures the very best concentration of light and illumination of the sample. The OBS 104 and OBS 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 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) or quadplex (OBS 104, OBS 106) nosepiece
- Tube 45° (OBS 101) or 30° (OBS 104, OBS 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

360°

MONO

BINO

ABBE

LED

RECHARGE

230 V

1 DAY

OBS 104  
OBS 106

Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	Stage	
KERN							
OBS 101	Monocular	WF 10×/ø 18 mm	Achromatic	4×/10×/40×	0,5W LED (transmitted) (battery incl., rechargeable)	fix	205,-
OBS 104	Binocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	fix	325,-
OBS 106	Binocular	WF 10×/ø 18 mm	Achromatic		0,5W LED (transmitted) (battery incl., rechargeable)	mechanical	360,-

Price reduction



Model outfit		Model KERN			Order number	Price/piece excl. of VAT ex works €
		OBS 101	OBS 104	OBS 106		
Eyepieces (23,2 mm)	WF 10×/ø 18 mm	✓	✓✓	✓✓	OBB-A1473	30,–
	WF 16×/ø 13 mm	○	○○	○○	OBB-A1474	30,–
	WF 20×/ø 11 mm	○	○○	○○	OBB-A1475	30,–
Achromatic objectives	4×/0,10 W.D. 18,0 mm	✓	✓	✓	OBB-A1476	35,–
	10×/0,25 W.D. 7,0 mm	✓	✓	✓	OBB-A1477	40,–
	40×/0,65 (spring) W.D. 0,53 mm	✓	✓	✓	OBB-A1478	45,–
	60×/0,85 (spring) W.D. 0,1 mm	○	○	○	OBB-A1479	60,–
	100×/1,25 (oil) (spring) W.D. 0,07 mm	○	○	○	OBB-A1480	65,–
	E-Plan 100×/0,80 (dry) (spring) W.D. 0,15 mm	○	○	○	OBB-A1442	170,–
	Plan 100×/1,0 (water) (spring) W.D. 0,18 mm	○	○	○	OBB-A1441	170,–
Monocular tube	45° inclined/360° rotatable	✓			OBB-A1471	
Binocular tube	• 30° inclined/360° rotatable • Interpupillary distance 55-75 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	✓	✓			
Mechanical stage	• Stage size W×D 115×125 mm • Travel 75×18 mm • Coaxial coarse and fine focusing knobs, scale: 2,5 µm			✓		
Condenser	Simple condenser N.A. 0,65	✓				
	Abbe N.A. 1,25 (aperture diaphragm)		✓	✓		
Illumination	0,5 W LED illumination system (transmitted) (rechargeable)	✓	✓	✓		
Colour filters for transmitted illumination	Blue	✓	✓	✓	OBB-A1466	19,–
	Green	○	○	○	OBB-A1467	19,–
	Yellow	○	○	○	OBB-A1468	19,–
	Gray	○	○	○	OBB-A1184	19,–

✓ = Included with delivery

○ = Option



Trinocular version



Monocular version



Objectives OBE



Simple polarising unit



Darkfield unit

## EDUCATIONAL LINE

The fully equipped all-round compound microscope for school, training and laboratories

### Features

- The KERN OBE series is a range of high-quality, fully-equipped compound microscopes, which can't be beaten in terms of ease of use and ergonomic design
- The strong and continuously dimmable 3 W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use of several models is also no problem through the use of rechargeable batteries
- The height-adjustable and thereby focusable 1,25 Abbe condenser with aperture diaphragm is a further quality feature of the OBE series and ensures 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, a simple polarising unit and a darkfield kit 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
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided (for binocular and trinocular models)
- Overall dimensions W×D×H 320×180×365 mm
- Net weight approx. 5,5 kg

#### STANDARD



#### OPTION



OBE 103,  
OBE 113

Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OBE 101</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×	3 W LED (transmitted)	<b>385,-</b>
<b>OBE 102</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)	<b>480,-</b>
<b>OBE 103</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)	<b>550,-</b>
<b>OBE 104</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)	<b>590,-</b>
<b>OBE 111</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×/100×	3 W LED (transmitted)	<b>450,-</b>
<b>OBE 112</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)	<b>540,-</b>
<b>OBE 113</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)	<b>610,-</b>
<b>OBE 114</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)	<b>650,-</b>

Price reduction



Model outfit		Model KERN				Order number	Price/piece excl. of VAT ex works €
		OBE 101	OBE 102	OBE 103	OBE 104		
Eyepieces (23,2 mm)	HWF 10×/ø 18 mm	✓	✓✓	✓✓	✓✓	OBB-A1403	45,-
	WF 16×/ø 13 mm	○	○○	○○	○○	OBB-A1354	45,-
	HWF 10×/ø 18 mm (with Pointer)	○	○	○	○	OBB-A1348	40,-
	HWF 10×/ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	OBB-A1349	60,-
Achromatic objectives	4×/0,10 W.D. 18,6 mm	✓	✓	✓	✓	OBB-A1111	35,-
	10×/0,25 W.D. 6,5 mm	✓	✓	✓	✓	OBB-A1108	45,-
	40×/0,65 (spring) W.D. 0,47 mm	✓	✓	✓	✓	OBB-A1112	70,-
	100×/1,25 (oil) (spring) W.D. 0,07 mm	○	○	○	○	OBB-A1109	105,-
	20×/0,40 (spring) W.D. 1,75 mm	○	○	○	○	OBB-A1110	85,-
	60×/0,85 (spring) W.D. 0,1 mm	○	○	○	○	OBB-A1113	105,-
	E-Plan 100×/0,80 (dry) (spring) W.D. 0,15 mm	○	○	○	○	OBB-A1442	170,-
	Plan 100×/1,0 (water) (spring) W.D. 0,18 mm	○	○	○	○	OBB-A1441	170,-
Monocular tube	30° inclined/360° rotatable	✓				OBB-A1227	
Binocular tube	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Diopter adjustment: One-sided		✓	✓		OBB-A1123	
Trinocular tube	• see binocular tube • Light distribution 20:80				✓	OBB-A1341	
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	85,-
Darkfield unit	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	85,-
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1276	265,-
Illumination	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
Colour filters for transmitted illumination	Blue	○	○	○	○	OBB-A1466	19,-
	Green	○	○	○	○	OBB-A1467	19,-
	Yellow	○	○	○	○	OBB-A1468	19,-
	Gray	○	○	○	○	OBB-A1184	19,-
C-Mount	0,5× (focus adjustable)				○	OBB-A1137	160,-
	1×				○	OBB-A1139	100,-

✓ = Included with delivery

○ = Option

Model outfit		Model KERN				Order number	Price/piece excl. of VAT ex works €
		OBE 111	OBE 112	OBE 113	OBE 114		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 18 mm	✓	✓✓	✓✓	✓✓	OBB-A1403	45,-
	WF 16×/ø 13 mm	○	○○	○○	○○	OBB-A1354	45,-
	HWF 10×/ø 18 mm (with Pointer)	○	○	○	○	OBB-A1348	40,-
	HWF 10×/ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	OBB-A1349	60,-
<b>Achromatic objectives</b>	4×/0,10 W.D. 18,6 mm	✓	✓	✓	✓	OBB-A1111	35,-
	10×/0,25 W.D. 6,5 mm	✓	✓	✓	✓	OBB-A1108	45,-
	40×/0,65 (spring) W.D. 0,47 mm	✓	✓	✓	✓	OBB-A1112	70,-
	100×/1,25 (oil) (spring) W.D. 0,07 mm	✓	✓	✓	✓	OBB-A1109	105,-
	20×/0,40 (spring) W.D. 1,75 mm	○	○	○	○	OBB-A1110	85,-
	60×/0,85 (spring) W.D. 0,1 mm	○	○	○	○	OBB-A1113	105,-
	E-Plan 100×/0,80 (dry) (spring) W.D. 0,15 mm	○	○	○	○	OBB-A1442	170,-
	Plan 100×/1,0 (water) (spring) W.D. 0,18 mm	○	○	○	○	OBB-A1441	170,-
<b>Monocular tube</b>	30° inclined/360° rotatable	✓				OBB-A1227	
<b>Binocular tube</b>	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Diopter adjustment: One-sided		✓	✓		OBB-A1123	
<b>Trinocular tube</b>	• see binocular tube • Light distribution 20:80				✓	OBB-A1341	
<b>Mechanical stage</b>	• Stage size W×D 125×115 mm • Travel 50×70 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	OBB-A1101	85,-
<b>Darkfield unit</b>	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	85,-
<b>Polarising unit</b>	Analyser/Polariser	○	○	○	○	OBB-A1276	265,-
<b>Illumination</b>	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
<b>Colour filters</b> for transmitted illumination	Blue	○	○	○	○	OBB-A1466	19,-
	Green	○	○	○	○	OBB-A1467	19,-
	Yellow	○	○	○	○	OBB-A1468	19,-
	Gray	○	○	○	○	OBB-A1184	19,-
<b>C-Mount</b>	0,5× (focus adjustable)				○	OBB-A1137	160,-
	1×				○	OBB-A1139	100,-

✓ = Included with delivery

○ = Option



Trinocular version



Simple polarising attachment

## LAB LINE

The high-performance compound microscope for every laboratory with fixed, pre-centred Koehler illumination

### Features

- The KERN OBF models are excellent, stable laboratory microscopes for all common routine applications. A central feature of this adaptable, robust microscope series is the stable mechanism which can be adjusted precisely
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen illumination (Philips)
- 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 and a simple polarising unit 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 and breweries

### Applications/Samples

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

### Technical data

- Finite optical system (DIN)
- 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>OBF 121</b>	Binocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×/100×	6 V/20 W Halogen (transmitted)	<b>750,-</b> ↓
<b>OBF 122</b>	Binocular	HWF 10×/ø 18 mm	Plan		6 V/20 W Halogen (transmitted)	<b>860,-</b> ↓
<b>OBF 123</b>	Binocular	HWF 10×/ø 18 mm	Plan		3 W LED (transmitted)	<b>840,-</b> ↓
<b>OBF 131</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		6 V/20 W Halogen (transmitted)	<b>860,-</b> ↓
<b>OBF 132</b>	Trinocular	HWF 10×/ø 18 mm	Plan		6 V/20 W Halogen (transmitted)	<b>970,-</b> ↓
<b>OBF 133</b>	Trinocular	HWF 10×/ø 18 mm	Plan		3 W LED (transmitted)	<b>950,-</b> ↓

↓ Price reduction



Model outfit		Model KERN						Order number	Price/piece excl. of VAT ex works €
		OBF 121	OBF 131	OBF 122	OBF 132	OBF 123	OBF 133		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 18 mm	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A1403	45,–
	WF 16×/ø 13 mm	○	○	○	○	○	○	OBB-A1354	45,–
	HWF 10×/ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A1348	40,–
	HWF 10×/ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	○	○	OBB-A1349	60,–
<b>Achromatic objectives</b>	4×/0,10 W.D. 18,6 mm	✓	✓					OBB-A1111	35,–
	10×/0,25 W.D. 6,5 mm	✓	✓					OBB-A1108	45,–
	40×/0,65 (spring) W.D. 0,47 mm	✓	✓					OBB-A1112	70,–
	100×/1,25 (oil) (spring) W.D. 0,07 mm	✓	✓					OBB-A1109	105,–
	20×/0,40 (spring) W.D. 1,75 mm	○	○					OBB-A1110	85,–
	60×/0,85 (spring) W.D. 0,1 mm	○	○					OBB-A1113	105,–
<b>Plan objectives</b>	4×/0,10 W.D. 14,5 mm			✓	✓	✓	✓	OBB-A1255	65,–
	10×/0,25 W.D. 5,65 mm			✓	✓	✓	✓	OBB-A1238	80,–
	40×/0,65 (spring) W.D. 0,85 mm			✓	✓	✓	✓	OBB-A1256	115,–
	100×/1,25 (oil) (spring) W.D. 0,07 mm			✓	✓	✓	✓	OBB-A1239	150,–
	20×/0,40 (spring) W.D. 1,5 mm			○	○	○	○	OBB-A1249	115,–
	60×/0,85 (spring) W.D. 0,07 mm			○	○	○	○	OBB-A1269	155,–
	100×/1,0 (water) (spring) W.D. 0,18 mm	○	○	○	○	○	○	OBB-A1441	170,–
<b>Binocular tube</b>	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm (for non-infinity system) • Diopter adjustment: One-sided	✓	○	✓	○	✓	○	OBB-A1129	
<b>Trinocular tube</b>	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 20:80 (for non-infinity system) • Diopter adjustment: One-sided	○	✓	○	✓	○	✓	OBB-A1345	
<b>Mechanical stage</b>	• Stage size W×D 145×130 mm • Travel 76×52 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm • Two slide holder	✓	✓	✓	✓	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	✓	✓	✓	✓	OBB-A1103	85,–
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	○	○	○	OBB-A1422	230,–
<b>Illumination</b>	6 V/20 W Halogen spare bulb (transmitted)	✓	✓	✓	✓			OBB-A1370	25,–
	3 W LED illumination system (transmitted) (non-rechargeable)					✓	✓		
<b>Polarising unit</b>	Analyser/Polariser	○	○	○	○	○	○	OBB-A1277	265,–
<b>Colour filters</b> for transmitted illumination	Blue (built-in)	✓	✓	✓	✓	✓	✓		
	Green	○	○	○	○	○	○	OBB-A1188	19,–
	Yellow	○	○	○	○	○	○	OBB-A1165	19,–
	Gray	○	○	○	○	○	○	OBB-A1183	19,–
<b>C-Mount</b>	0,47× (focus adjustable)		○		○		○	OBB-A1135	160,–
	1×		○		○		○	OBB-A1142	100,–

✓ = 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
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen illumination (Philips)
- 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 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					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OBL 125</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	6 V/20 W Halogen (transmitted)	<b>910,-</b>
<b>OBL 127</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)	<b>910,-</b>
<b>OBL 135</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan		6 V/20 W Halogen (transmitted)	<b>1020,-</b>
<b>OBL 137</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)	<b>1020,-</b>

Price reduction

Model outfit		Model KERN				Order number	Price/piece excl. of VAT ex works €
		OBL 125	OBL 135	OBL 127	OBL 137		
Eyepieces (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404	95,–
	WF 16×/ø 13 mm	○ ○	○ ○	○ ○	○ ○	OBB-A1354	45,–
	HWF 10×/ø 20 mm (with Pointer)	○	○	○	○	OBB-A1448	80,–
Infinity E-Plan objectives	4×/0,10 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1161	90,–
	10×/0,25 W.D. 2,1 mm	✓	✓	✓	✓	OBB-A1159	150,–
	40×/0,65 (spring) W.D. 0,58 mm	✓	✓	✓	✓	OBB-A1160	265,–
	100×/1,25 (oil) (spring) W.D. 0,19 mm	✓	✓	✓	✓	OBB-A1158	335,–
	Plan 20×/0,40 (spring) W.D. 2,41 mm	○	○	○	○	OBB-A1250	265,–
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	○	○	○	OBB-A1270	360,–
	Plan 100×/1,15 (water) (spring) W.D. 0,18 mm	○	○	○	○	OBB-A1437	445,–
Binocular tube	<ul style="list-style-type: none"> <li>Siedentopf 30° inclined/360° rotatable</li> <li>Interpupillary distance 50 – 75 mm (for infinity system)</li> <li>Diopter adjustment: One-sided</li> </ul>	✓	○	✓	○	OBB-A1130	
Trinocular tube	<ul style="list-style-type: none"> <li>Siedentopf 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-A1346	
					✓	OBB-A1549	
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>	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	✓	✓	OBB-A1103	85,–
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	○	OBB-A1422	230,–
Illumination	6 V/20 W Halogen spare bulb (transmitted)	✓	✓			OBB-A1370	25,–
	3 W LED illumination system (transmitted) (non-rechargeable)			✓	✓		
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1277	265,–
Phase contrast units (including PH-condenser and PH-slides)	Single unit with ∞ PH-Plan objective 10×	○	○	○	○	OBB-A1215	310,–
	Single unit with ∞ PH-Plan objective 20×	○	○	○	○	OBB-A1217	350,–
	Single unit with ∞ PH-Plan objective 40×	○	○	○	○	OBB-A1219	420,–
	Single unit with ∞ PH-Plan objective 100×	○	○	○	○	OBB-A1213	510,–
	If required, there are several magnification levels, please contact our OPTICS product management team						
Fluorescence unit	100 W HBO Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	○	OBB-A1154	2350,–
	3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	○	OBB-A1157	3110,–
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓	✓		
	Green	○	○	○	○	OBB-A1188	19,–
	Yellow	○	○	○	○	OBB-A1165	19,–
	Gray	○	○	○	○	OBB-A1183	19,–
C-Mount	0,47× (focus adjustable)	○	○	○		OBB-A1135	160,–
	0,5× (focus adjustable)				○	OBB-A1515	185,–
	1×	○	○	○		OBB-A1142	100,–
					○	OBB-A1514	120,–

✓ = Included with delivery

○ = Option





Easy connection to the PC,  
Laptop not included in delivery  
Please find the description of the  
software in chapter 8 (p. 93)

LAB LINE

The digital all-round talent for your applications, documentation and live transmissions through an integrated camera

Features

- The KERN OBD is an excellent, stable laboratory microscope with integrated camera and infinity optical system, based on the OBL series
- A strong and continuously adjustable 20 W halogen illumination unit (Philips) ensures the optimum lighting conditions
- 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, a simple polarising unit as well as phase contrast units are available to you as accessories
- Multi-lingual software, USB cable, calibration scale as well as a protective dust cover, eye cups and multi-lingual user instructions are included in the scope of delivery
- 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, if necessary, for training where there will be lots of people observing the screen/beamer at the same time

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  
395×200×430 mm
- Net weight approx. 7 kg

STANDARD



OPTION



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OBD 127	Binocular/3MP digital/USB 2.0	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	6 V/20 W Halogen (transmitted)	1510,-
OBD 128	Binocular/5MP digital/USB 2.0	HWF 10×/ø 20 mm	Infinity E-Plan		6 V/20 W Halogen (transmitted)	1600,-

Price reduction

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OBD 127	OBD 128		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	OBB-A1404	95,–
	WF 16×/ø 13 mm	○○	○○	OBB-A1354	45,–
	HWF 10×/ø 20 mm (with Pointer)	○	○	OBB-A1448	80,–
<b>Infinity E-Plan objectives</b>	4×/0,10 W.D. 12,1 mm	✓	✓	OBB-A1161	90,–
	10×/0,25 W.D. 2,1 mm	✓	✓	OBB-A1159	150,–
	40×/0,65 (spring) W.D. 0,58 mm	✓	✓	OBB-A1160	265,–
	100×/1,25 (oil) (spring) W.D. 0,19 mm	✓	✓	OBB-A1158	335,–
	Plan 20×/0,40 (spring) W.D. 2,41 mm	○	○	OBB-A1250	265,–
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	○	OBB-A1270	360,–
	Plan 100×/1,15 (water) (spring) W.D. 0,18 mm	○	○	OBB-A1437	445,–
<b>Digital tube Trinocular (3MP)</b>	<ul style="list-style-type: none"> <li>• 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Diopter adjustment: One-sided</li> <li>• Light distribution 80:20</li> <li>• Built-in digital 3MP Camera with ½" CMOS</li> <li>• USB port for PC without extra power supply</li> <li>• With multilingual (DE, EN, FR, IT, ES) software</li> <li>• "Microscope VIS" for Windows XP, Vista, 7, 8, 10</li> </ul>	✓		OBB-A1126	
<b>Digital tube Trinocular (5MP)</b>	<ul style="list-style-type: none"> <li>• 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm</li> <li>• Diopter adjustment: One-sided</li> <li>• Light distribution 80:20</li> <li>• Built-in digital 5 MP Camera with ½" CMOS</li> <li>• USB port for PC without extra power supply</li> <li>• With multilingual (DE, EN, FR, IT, ES) software</li> <li>• "Microscope VIS" for Windows XP, Vista, 7, 8, 10</li> </ul>		✓	OBB-A1127	
<b>Object micrometer</b>	For calibrating the software measuring function, 0.01 mm division	✓	✓	OBB-A1224	70,–
<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>• Two slide holder</li> <li>• Coaxial coarse and fine focusing knobs, scale: 2 µm</li> </ul>	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	OBB-A1103	85,–
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	OBB-A1422	230,–
<b>Illumination</b>	6 V/20 W Halogen spare bulb (transmitted)	✓	✓	OBB-A1370	25,–
<b>Polarising unit</b>	Analyser/Polariser	○	○	OBB-A1277	265,–
<b>Phase contrast units</b> (including PH-condenser and PH-slides)	Single unit with ∞ PH-Plan objective 10×	○	○	OBB-A1215	310,–
	Single unit with ∞ PH-Plan objective 20×	○	○	OBB-A1217	350,–
	Single unit with ∞ PH-Plan objective 40×	○	○	OBB-A1219	420,–
	Single unit with ∞ PH-Plan objective 100×	○	○	OBB-A1213	510,–
	If required, there are several magnification levels, please contact our OPTICS product management team				
<b>Colour filters</b> for transmitted illumination	Blue (built-in)	✓	✓		
	Green	○	○	OBB-A1188	19,–
	Yellow	○	○	OBB-A1165	19,–
	Gray	○	○	OBB-A1183	19,–

✓ = Included with delivery

○ = Option



Abbe condenser center-adjustable, also available with swing-out lens



Butterfly Tube (optionally available)

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)
- 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
- 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

- 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					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OBN 132	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/ 10×/ 20×/ 40×/ 100×	6 V/ 20 W Halogen (transmitted)	1370,-
OBN 135	Trinocular	HWF 10×/ø 20 mm	Infinity Plan		3 W LED (transmitted)	1390,-

Price reduction



Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OBN 132	OBN 135		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	✓✓	OBB-A1404	95,–
	WF 16×/ø 13 mm	○○	○○	OBB-A1354	45,–
<b>Infinity Plan achromatic objectives</b>	4×/0,10 W.D. 12,1 mm	✓	✓	OBB-A1263	110,–
	10×/0,25 W.D. 4,64 mm	✓	✓	OBB-A1243	195,–
	20×/0,40 (spring) W.D. 2,41 mm	✓	✓	OBB-A1250	265,–
	40×/0,66 (spring) W.D. 0,65 mm	✓	✓	OBB-A1257	290,–
	100×/1,25 (oil) (spring) W.D. 0,19 mm	✓	✓	OBB-A1240	315,–
	2,5×/0,07 W.D. 8,47 mm	○	○	OBB-A1247	265,–
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	○	OBB-A1270	360,–
	Plan 100×/1,15 (water) (spring) W.D. 0,18 mm	○	○	OBB-A1437	445,–
<b>Trinocular tube</b>	• Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided	✓	✓		
	• Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided	○	○	OBB-A1382	520,–
<b>Mechanical stage</b>	• Stage size W×D 175×145 mm • Travel 78×55 mm • Coaxial coarse and fine focusing knobs • Two slide holder	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	OBB-A1102	85,–
	Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	○	○	OBB-A1104	220,–
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	OBB-A1421	265,–
<b>Koehler illumination</b>	6 V/20 W Halogen spare bulb (transmitted)	✓		OBB-A1370	25,–
	3 W LED illumination system (transmitted) (non-rechargeable)		✓		
<b>Polarising unit</b>	Analyser/Polariser	○	○	OBB-A1283	265,–
<b>Phase contrast units</b>	Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	○	○	OBB-A1237	1570,–
	Single unit with ∞ PH-Plan objective 10×	○	○	OBB-A1214	310,–
	Single unit with ∞ PH-Plan objective 20×	○	○	OBB-A1216	350,–
	Single unit with ∞ PH-Plan objective 40×	○	○	OBB-A1218	420,–
	Single unit with ∞ PH-Plan objective 100×	○	○	OBB-A1212	510,–
	If required, there are several magnification levels, please contact our OPTICS product management team				
<b>C-Mount</b>	1×	○	○	OBB-A1140	100,–
	0,57× (focus adjustable)	○	○	OBB-A1136	160,–
<b>Fluorescence unit</b>	100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective	○	○	OBB-A1155	4340,–
	100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective	○	○	OBB-A1153	3080,–
	3 W LED Epi Fluorescence unit (B/G) including centering objective	○	○	OBB-A1156	3110,–
<b>Colour filters for transmitted illumination</b>	Blue	✓			
	Green	○	○	OBB-A1188	19,–
	Yellow	○	○	OBB-A1165	19,–
	Gray	○	○	OBB-A1183	19,–

✓ = Included with delivery

○ = Option



Mounted phase contrast condenser



Quintuple PH universal rotary condenser with 10×/20×/40×/100× Infinity PH-Plan objectives (complete set)

PROFESSIONAL LINE

The powerful, fully-equipped phase contrast microscope with varied options

Features

- This series stands out through its wide-ranging phase-contrast feature which goes beyond the standard OBN level of quality
- A strong and continuously adjustable 20 W halogen transmitted illumination unit (Philips) ensures the optimum illumination of your samples
- This series has a professional Koehler illumination unit with a special height-adjustable PH universal rotary condenser which can be centred as well as an aperture diaphragm and field 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
- The combination of a professional quintuple condenser wheel, the phase contrast condenser and the Infinity Plan phase contrast objectives makes the KERN OBN 158 a high-quality, fully-equipped microscope for all applications related to contrast procedures
- A wide variety of modular systems, such as, for example, a swing-out condenser, various eyepieces, objectives, colour filters, a darkfield condenser, a simple polarising unit, Butterfly Tube, through to complete fluorescence units are available to you as accessories
- This centring eyepiece for adjusting the phase contrast, 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 extremely translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue) with phase contrast

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					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OBN 158	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	4×/PH 10×/PH 20×/PH 40×/PH 100×	6 V/20 W Halogen (transmitted)	2540,- <div></div>

Price reduction

Model outfit		Model KERN	Order number	Price/piece excl. of VAT ex works €
		OBN 158		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/ø 20 mm	✓✓	OBB-A1404	<b>95,-</b>
	WF 16×/ø 13 mm	○○	OBB-A1354	<b>45,-</b>
<b>Infinity Plan achromatic objectives</b>	4×/0,10 W.D. 12,1 mm	✓	OBB-A1263	<b>110,-</b>
	10×/0,25 W.D. 4,64 mm	○	OBB-A1243	<b>195,-</b>
	20×/0,40 (spring) W.D. 2,41 mm	○	OBB-A1250	<b>265,-</b>
	40×/0,66 (spring) W.D. 0,65 mm	○	OBB-A1257	<b>290,-</b>
	100×/1,25 (oil) (spring) W.D. 0,19 mm	○	OBB-A1240	<b>315,-</b>
	2,5×/0,07 W.D. 8,47 mm	○	OBB-A1247	<b>265,-</b>
	Plan 60×/0,80 (spring) W.D. 0,33 mm	○	OBB-A1270	<b>360,-</b>
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Siedentopf 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>	✓		
	<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>	○	OBB-A1382	<b>520,-</b>
<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>PH condenser</b>	Universal rotary condenser for bright field and phase contrast suitable for 10×/20×/40×/100× PH objectives center-adjustable PH ring units; with aperture diaphragm	✓		
<b>Phase contrast units</b>	Infinity PH-Plan objective 10×	✓	OBB-A1390	<b>170,-</b>
	Infinity PH-Plan objective 20×	✓	OBB-A1391	<b>200,-</b>
	Infinity PH-Plan objective 40×	✓	OBB-A1392	<b>260,-</b>
	Infinity PH-Plan objective 100×	✓	OBB-A1393	<b>345,-</b>
	Centering eyepiece	✓		
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	OBB-A1421	<b>265,-</b>
<b>Koehler illumination</b>	6 V/20 W Halogen spare bulb (transmitted)	✓	OBB-A1370	<b>25,-</b>
<b>Colour filters</b> for transmitted illumination	Blue	○	OBB-A1170	<b>19,-</b>
	Green	✓		
	Yellow	○	OBB-A1165	<b>19,-</b>
	Gray	○	OBB-A1183	<b>19,-</b>
<b>C-Mount</b>	1×	○	OBB-A1140	<b>100,-</b>
	0,57× (focus adjustable)	○	OBB-A1136	<b>160,-</b>
For further optional accessories, please see the list of items for the OBN-13 series on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option





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



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

LAB LINE

The inverted biological laboratory microscope – also with fluorescence

Features

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

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

Scope of application

- Research and breeding of cell cultures and tissue cultures

Applications/Samples

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

Technical data

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

OCM 161

- Overall dimensions W×D×H 304×599×530 mm
- Net weight approx. 13,5 kg

OCM 165

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

STANDARD



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OCM 161	Trinocular	HWF 10×/ø 22 mm	Infinity Plan	LWD10×/LWD20×/ LWD40×/LWD20×PH	6 V/30 W Halogen (transmitted)	3180,- <sup>↓</sup>
OCM 165	Trinocular	HWF 10×/ø 22 mm	Infinity Plan		6 V/30 W Halogen + 100 W Epi Fluorescence (B/G)	7790,- <sup>↓</sup>

<sup>↓</sup> Price reduction

# Inverted microscope KERN OCM-1

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OCM 161	OCM 165		
<b>Eyepieces</b> (30 mm)	HWF 10×/ø 22 mm (adjustable)	✓✓	✓✓	OBB-A1491	90,-
	HWF 10×/ø 20 mm (reticule 0,1 mm) (adjustable)	○	○	OBB-A1523	140,-
<b>Infinity Plan achromatic objectives</b> for long working distance	4×/0,11 W.D. 12,1 mm	○	○	OBB-A1493	135,-
	10×/0,25 W.D. 8,3 mm	✓	✓	OBB-A1494	160,-
	20×/0,40 W.D. 7,2 mm	✓	✓	OBB-A1495	215,-
	40×/0,60 W.D. 3,4 mm	✓	✓	OBB-A1496	280,-
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• 45° inclined</li> <li>• Interpupillary distance 48–76 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 210×241 mm</li> <li>• Travel 128×80 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> <li>• The x/y control knobs can be fitted either left or right</li> <li>• Suitable for attaching a 96-hole microtitre plate</li> </ul>	✓	✓		
	Drop specimen holder (ø 110)	✓	✓	OBB-A1503	30,-
	Specimen holder for 35 mm culture dish	○	○	OBB-A1505	60,-
	Specimen holder for 54 mm culture dish	✓	✓	OBB-A1506	60,-
	Specimen holder for 65 mm culture dish	○	○	OBB-A1507	60,-
<b>Condenser</b>	Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm	✓	✓		
<b>Illumination</b>	6 V/30 W Halogen spare bulb (transmitted)	✓	✓	OBB-A1372	35,-
<b>Phase contrast units</b>	Phase contrast slide (universal)	✓	✓	OBB-A1500	100,-
	Infinity PH-Plan objective 10×	○	○	OBB-A1497	215,-
	Infinity PH-Plan objective 20×	✓	✓	OBB-A1498	280,-
	Infinity PH-Plan objective 40×	○	○	OBB-A1499	330,-
	Centering eyepiece	✓	✓	OBB-A1544	110,-
<b>Fluorescence unit</b>	100 W HBO Epi Fluorescence unit, two-hole slide (B/G)		✓		
<b>Colour filters</b> for transmitted illumination	Blue	✓	✓	OBB-A1510	19,-
	Green	✓	✓	OBB-A1511	19,-
	Yellow	○	○	OBB-A1512	19,-
	Gray	○	○	OBB-A1513	19,-
<b>C-Mount</b>	0,5×	○	○	OBB-A1515	185,-
	1×	○	○	OBB-A1514	120,-

✓ = Included with delivery

○ = Option



Stage plate black



Stage plate white

## EDUCATIONAL LINE

The practical and robust product for schools, training centres, the workshop and laboratory

### Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSF-4G has been specially developed for schools and workshops
- The LED reflected and transmitted illumination included as standard guarantees the very best, continuously dimmable illumination of your sample
- As well as very good optical characteristics, its ergonomic working surface means that it offers the highest level of convenience in this class
- A turnable objective with three predefined magnifications is available to make your working procedures quicker and more effective
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort
- A large selection of eyepieces as well as various additional external illumination units are available as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- Please find detailed information in the following model outfit list

### Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

### Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 230×180×275 mm
- Net weight approx. 2,5 kg

#### STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
<b>KERN</b>							
<b>OSF 438</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/3×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	<b>325,-</b>
<b>OSF 439</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/4×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	<b>325,-</b>

Eyepiece	Specifications – Objectives				
	Magnification	1×	2×	3×	4×
WF 5×	Total magnification	5×	10×	15×	20×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 10×	Total magnification	10×	20×	30×	40×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 15×	Total magnification	15×	30×	45×	60×
	Field of view mm	∅ 15	∅ 7,5	∅ 5	∅ 3,7
WF 20×	Total magnification	20×	40×	60×	80×
	Field of view mm	∅ 10	∅ 6,5	∅ 4,3	∅ 3,2
Working distance		57 mm	57 mm	57 mm	57 mm

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OSF 438	OSF 439		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○○	○○	OZB-A4101	35,–
	WF 10×/∅ 20 mm	✓✓	✓✓	OZB-A4102	30,–
	WF 15×/∅ 15 mm	○○	○○	OZB-A4103	30,–
	WF 20×/∅ 10 mm	○○	○○	OZB-A4104	35,–
Stand	Arm curved, incl. handle, with LED illumination (0,35 W transmitted + 1 W incident)	✓	✓		
Stage plate	Frosted glass/∅ 59,5 mm	✓	✓	OZB-A4815	19,–
	Black-white/∅ 59,5 mm	✓	✓	OZB-A4816	19,–
External illumination	Please find the information about external illumination units on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				

✓ = Included with delivery

○ = Option



OZL 464  
With standard stand



OZL 465  
With ring illumination



OZL 467  
With handle

## LAB LINE

The flexible, affordable all-rounder with zoom function for schools, training companies, inspection authorities and laboratories

### Features

- The products in the KERN OZL-46 series are stereo zoom microscopes, which will impress you with their quality, easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- The highlight of the OZL 465/OZL 466 is the strong, continuously dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- The zoom objective offers you continuous magnification from 7×–45×
- The KERN OZL-46 series is available as a binocular or trinocular version
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- With its integrated handle as well as its stable arm curved stand, the KERN OZL 467/OZL 468 has been specially developed for schools and workshops
- A large selection of eyepieces, external illumination units as well as auxiliary objectives are available 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

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

### Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution 50:50
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 300×240×420 mm
- Net weight approx. 4 kg

#### STANDARD



Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
<b>KERN</b>							
<b>OZL 463</b>	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>500,-</b>
<b>OZL 464</b>	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>570,-</b>
<b>OZL 465</b>	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>550,-</b>
<b>OZL 466</b>	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	<b>620,-</b>
<b>OZL 467</b>	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)	<b>510,-</b>
<b>OZL 468</b>	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)	<b>580,-</b>

New model

Price reduction



Eyepiece	Specifications – Objectives					
	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2,0×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	5,3× – 33,8×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 28,6 – 4,4	∅ 57,1 – 8,9	∅ 38,1 – 5,9	∅ 19 – 3	∅ 14,3 – 2,2
HWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,9× – 50,6×	15,5× – 101,3×	21× – 135×
	Field of view mm	∅ 21,4 – 3,3	∅ 42,9 – 6,7	∅ 28,5 – 4,4	∅ 14,3 – 2,2	∅ 10,7 – 1,7
HSWF 20×	Total magnification	14× – 90×	7× – 45×	10,5× – 67,5×	21× – 135×	28× – 180×
	Field of view mm	∅ 14,3 – 2,2	∅ 28,6 – 4,4	∅ 19,1 – 2,9	∅ 9,5 – 1,5	∅ 7,1 – 1,1
HWF 25×	Total magnification	17,5× – 122,5×	8,8× – 56,3×	13,1× – 91,9×	26,3× – 168,8×	35× – 225×
	Field of view mm	∅ 12,9 – 2,0	∅ 25,7 – 4,0	∅ 17,2 – 2,7	∅ 8,6 – 1,3	∅ 6,4 – 1,0
Working distance		105 mm	177 mm	120 mm	47 mm	26 mm
Maximum sample height		140 mm	35 mm	80 mm	165 mm	185 mm

Model outfit		Model KERN						Order number	Price / piece excl. of VAT ex works €
		OZL 463	OZL 464	OZL 465	OZL 466	OZL 467	OZL 468		
Eyepieces (30,0 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OZB-A4631	40,–
	HSWF 15×/∅ 15 mm	○	○	○	○	○	○	OZB-A4632	50,–
	HWF 20×/∅ 10 mm	○	○	○	○	○	○	OZB-A4633	50,–
	HSWF 25×/∅ 9 mm	○	○	○	○	○	○	OZB-A4634	55,–
Auxiliary objectives	0,5×	○	○	○	○	○	○	OZB-A4641	80,–
	0,75×	○	○	○	○	○	○	OZB-A4644	80,–
	1,5×	○	○	○	○	○	○	OZB-A4642	80,–
	2,0×	○	○	○	○	○	○	OZB-A4643	80,–
C-Mount	1× (focus adjustable)		✓		✓		✓	OZB-A4809	50,–
	0,3× (focus adjustable)		○		○		○	OZB-A4810	85,–
	0,5× (focus adjustable)		○		○		○	OZB-A4811	95,–
Stand	Pillar style, with 3 W-LED illumination (transmitted + incident)	✓	✓						
	Pillar style, with 3 W-LED illumination (transmitted)			✓	✓				
	Arm curved, incl. handle, with 3 W-LED illumination (transmitted + incident)					✓	✓		
Ring illumination	Integrated into the microscope head as incident illumination			✓	✓				
Stage plate	Frosted glass/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4805	19,–
	Black-white/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4806	19,–
External illumination	Please find the information about external illumination units on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>								

✓ = Included with delivery

○ = Option



LAB LINE

First-class optics and strong illumination combined with a high level of flexibility

Features

- The KERN OZM series is a range of excellent stereo zoom microscopes with above-average optical features
- The ergonomic shape allows a simple, effortless working over a period of several hours
- The extraordinarily strong and continuously dimmable 3 W LED reflected and transmitted illumination ensures a flexible and particularly good level of illumination for your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM provides sharp, high-contrast, colour-true images
- The zoom objective gives you continuous magnification from 7,5×–45×
- There is a choice of a binocular model as well as a trinocular model for connecting a camera for documentation purposes and for quality reports
- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures
- A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more are available 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

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

Applications/Samples

- Samples with focus on three-dimensionsal impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution OZM 543/544: 50:50
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×285×440 mm
- Net weight approx. 4,5 kg

STANDARD

OPTION

Model	Standard configuration						Price excl. of VAT ex works €
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
KERN							
OZM 542	Binocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	1070,-
OZM 544	Trinocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	1350,-

Eyepiece	Specifications – Objectives					
	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,7×	1,5×	2×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	4,9× – 31,5×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 32,8 – 5,1	∅ 65,7 – 10,2	∅ 46,9 – 7,3	∅ 21,9 – 3,4	∅ 16,4 – 2,6
SWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,4× – 47,2×	15,8× – 101,3×	21× – 135×
	Field of view mm	∅ 24,3 – 3,8	∅ 48,6 – 7,6	∅ 34,7 – 5,4	∅ 16,2 – 2,5	∅ 12,1 – 1,9
SWF 20×	Total magnification	14× – 90×	7× – 45×	9,8× – 63×	21× – 135×	28× – 180×
	Field of view mm	∅ 20 – 3,1	∅ 40 – 6,2	∅ 28,6 – 4,4	∅ 13,3 – 2,1	∅ 10 – 1,6
SWF 30×	Total magnification	21× – 135×	10,5× – 67,5×	14,7× – 94,5×	31,5× – 202,5×	42× – 270×
	Field of view mm	∅ 12,9 – 2	∅ 25,7 – 4	∅ 18,4 – 2,9	∅ 8,6 – 1,6	∅ 6,4 – 1
Working distance		110 mm	195 mm	145 mm	50 mm	35 mm
Maximum sample height		130 mm	30 mm	65 mm	160 mm	175 mm

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OZM 542	OZM 544		
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	OZB-A5503	60,–
	SWF 15×/∅ 17 mm	○○	○○	OZB-A5504	60,–
	SWF 20×/∅ 14 mm	○○	○○	OZB-A5505	70,–
	SWF 30×/∅ 9 mm	○○	○○	OZB-A5506	85,–
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	OZB-A5512	95,–
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	OZB-A5513	110,–
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	OZB-A5514	110,–
Achromatic auxiliary objectives	0,5×	○	○	OZB-A5612	120,–
	0,7×	○	○	OZB-A5613	120,–
	1,5×	○	○	OZB-A5615	120,–
	2,0×	○	○	OZB-A5616	120,–
	Soldering protection lens	○	○	OZB-A5614	45,–
C-Mount	0,3× (focus adjustable)		○	OZB-A5701	120,–
	0,5× (focus adjustable)		○	OZB-A5702	120,–
	1,0× (focus adjustable)		○	OZB-A5703	95,–
	1,0× (with micrometer) only in combination with OZB-A5703		○	OZB-A5704	255,–
	for SLR cameras (Nikon)		○	OZB-A5706	255,–
	for SLR cameras (Olympus)		○	OZB-A5707	255,–
	for SLR cameras (Canon)		○	OZB-A5708	255,–
Darkfield unit	Darkfield unit	○	○	OZB-A4601	70,–
Object clamp	Object clamp	○	○	OB-B-A6205	35,–
Stand	Pillar style, without illumination				
	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓		
	Please find more stands in the catalogue on page 79 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>				
Stage plate	Frosted glass/∅ 94,5 mm	✓	✓	OZB-A5192	19,–
	Black-white/∅ 94,5 mm	✓	✓	OZB-A5191	19,–
	Glass/∅ 94,5 mm	○	○	OZB-A5190	19,–
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for transmitted and incident illumination	○	○	OZB-A5781	175,–
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	OZB-A5782	240,–
External illumination					

✓ = Included with delivery

○ = Option



OZL 961/963



OZM 912/913



OSE 409



OZM 932/933



OZM 952/953



OZM 982/983

## Predefined stereo microscope sets with universal stand and illumination for your functional workplace

### Features

- Sets which have already been defined (except OSE 409), consisting of a stereo microscope head (p. 74), a universal stand (p. 79), a holder (p. 80) and a ring illumination from our range (p. 83)
- Simple – convenient – affordable
- This saves you spending time on configuration and being spoilt for choice in the combination of different components. In this way you get an expensive and highly-flexible solution for your microscope workplace

### Note

To enable the highest level of flexibility for your special requirements and applications, we also offer you a large selection of stereo microscope heads, universal stands and external illumination units, which are individually and easy to combine

Model KERN	Microscope head		Stand	Holder	Illumination	Price excl. of VAT ex works €
	Tube	Objective Zoom				
<b>OSE 409</b>	Binocular (WF 10×/ ø 20 mm)	1x (WD: 230 mm)	Swivel arm with block pedestal	With coarse focusing knob Adjustable torque of the hand wheels	3W LED goose neck (integrated)	<b>355,-</b> ↓
<b>OZL 961</b>	Binocular (OZL 461)	0,7× – 4,5×	Telescopic arm with plate	With coarse focusing knob Adjustable torque of the hand wheels	4,5 W LED ring light (OBB-A6102)	<b>880,-</b> ↓
<b>OZL 963</b>	Trinocular (OZL 462)	0,7× – 4,5×	Telescopic arm with plate	With coarse focusing knob Adjustable torque of the hand wheels	4,5 W LED ring light (OBB-A6102)	<b>950,-</b> ↓
<b>OZM 912</b>	Binocular (OZM 546)	0,7× – 4,5×	Telescopic arm with plate (OZB-A5201)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>1440,-</b>
<b>OZM 913</b>	Trinocular (OZM 547)	0,7× – 4,5×	Telescopic arm with plate (OZB-A5201)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>1740,-</b>
<b>OZM 932</b>	Binocular (OZM 546)	0,7× – 4,5×	ball-bearing double telescopic arm with plate (OZB-A5203)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>1730,-</b>
<b>OZM 933</b>	Trinocular (OZM 547)	0,7× – 4,5×	ball-bearing double telescopic arm with plate (OZB-A5203)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>2030,-</b>
<b>OZM 952</b>	Binocular (OZM 546)	0,7× – 4,5×	Jointed arm with clamp (OZB-A5212)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>1390,-</b>
<b>OZM 953</b>	Trinocular (OZM 547)	0,7× – 4,5×	Jointed arm with clamp (OZB-A5212)	With coarse focusing knob Adjustable torque of the hand wheels (OZB-A5301)	4,5 W LED ring light (OBB-A6102)	<b>1690,-</b>
<b>OZM 982</b>	Binocular (OZM 546)	0,7× – 4,5×	Spring loaded arm with clamp (OZB-A6302)	With double handle	4,5 W LED ring light (OBB-A6102)	<b>1380,-</b>
<b>OZM 983</b>	Trinocular (OZM 547)	0,7× – 4,5×	Spring loaded arm with clamp (OZB-A6302)	With double handle	4,5 W LED ring light (OBB-A6102)	<b>1680,-</b>

↓ Price reduction

Professional illumination units guarantee outstanding, uniform and strong illumination

Features

- Choose your favourite external illumination here to achieve maximum flexibility and greatest possible ease of use in stereo microscopy
- These professional illumination units provide a quality of light at a high, constant intensity at all times
- Regardless of whether your choice is space-saving ring lights or cold light sources using optical fiber, our range is all you can wish for
- With the OZB-A7101 polarisation ring illumination unit, you also have an excellent component which has been specially optimised for observing shiny surfaces
- Naturally, these external illumination units also fit your standard stereo microscope
- Exception: The ring illumination units cannot be used in combination with the following ranges: OSE-1, OSF-4G, OZL-45R, OZC-5 and OZG-4

NEW



OZB-A7101



OZB-A4571



OZB-A4572



OBB-A6102

Model	Illuminance	Inner ø	Colour temperature	Brightness adjustable	Illumination by segments	Polarising filter	Price excl. of VAT ex works €
KERN		mm	K				
OZB-A4571	3W-LED	60	7000 – 11000	✓			90,-
OZB-A4572	3W-LED	60	6500 – 7000	✓	✓		140,-
OBB-A6102	4,5W-LED	63	ca. 7600	✓			135,-
OZB-A7101 <small>NEW</small>	4,5W-LED	62	6500 – 7000	✓		✓	590,-

NEW New model

✓ = Included with delivery

Fiber illumination KERN OZB-IF



OZB-A4515



OZB-A4512



OZB-A4531



OZB-A4532



OZB-A4533

Model	Description	Length	Illuminance	Colour temperature	Brightness adjustable	Price excl. of VAT ex works €
KERN		mm		K		
OZB-A4515	Dual fiber unit LED	300	6W	5600 – 6300	✓	160,-
OZB-A4512	Cold light source halogen	-	24V/150W	3150 – 3200	✓	290,-
OZB-A4531	Single fiber	490	Usable for OZB-A4512			175,-
OZB-A4532	Dual fiber	490				245,-
OZB-A4533	Ring fiber	900				350,-

✓ = Included with delivery



## C-mount cameras – USB 2.0 KERN ODC-1



ODC 132



ODC 152

STANDARD



### Features

- These USB 2.0 cameras give particular good images in demanding applications, such as, for example, in darkfield, phase contrast and with fluorescence applications through improved light sensitivity of the sensors
- As well as the camera, the delivery includes our multi-lingual camera software Microscope VIS KERN OXM 901, a USB cable (Length: 1,8 m) and an object micrometer to calibrate the software
- Please order the appropriate C-Mount or eyepiece adapter to fit your KERN microscope

Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
<b>KERN</b>								
<b>ODC 132 *</b>	3,1 MP	USB 2.0	5 – 30	CMOS	1/2"	colour	Win XP, Vista, 7, 8, 10	<b>290,-</b>
<b>ODC 152 *</b>	5,1 MP	USB 2.0	3,5 – 30	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	<b>360,-</b>

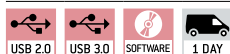
**\* ONLY WHILE STOCKS LAST**

Price reduction

## C-mount cameras – USB 2.0/3.0 KERN ODC-82 · ODC-83



STANDARD



### Features

- Through the proven CMOS technology, in connection with the USB 2.0 or USB 3.0 the images are shown quickly and clearly
- These cameras are also ideal for more demanding applications, such as, for example, darkfield, phase contrast and for fluorescence applications
- As well as the camera, the delivery includes our multi-lingual camera software Microscope VIS KERN OXM 901, a USB cable (Length: 2 m) various eyepiece adapters and an object micrometer to calibrate the software
- Please order the appropriate C-mount adapter to fit your KERN microscope now

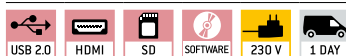
Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
<b>KERN</b>								
<b>ODC 822</b>	1,3 MP	USB 2.0	15 – 48	CMOS	1/3"	colour	Win XP, Vista, 7, 8, 10	<b>280,-</b>
<b>ODC 824</b>	3,1 MP	USB 2.0	11,5 – 45	CMOS	1/2"	colour	Win XP, Vista, 7, 8, 10	<b>370,-</b>
<b>ODC 825</b>	5,1 MP	USB 2.0	6,8 – 55	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	<b>385,-</b>
<b>ODC 831</b>	3,1 MP	USB 3.0	27,3 – 53,3	CMOS	1/3"	colour	Win XP, Vista, 7, 8, 10	<b>500,-</b>
<b>ODC 832</b>	5,1 MP	USB 3.0	14,2 – 101,2	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	<b>530,-</b>

Price reduction

## C-mount camera – HDMI KERN ODC-85



STANDARD



### Features

- The ODC-851 HDMI microscope camera has been specially developed for direct HDMI connection to your HDMI compatible display device. The images can also be stored directly onto the SD card delivered with the device
- As an alternative, a USB 2.0 connection is also still available to connect a laptop or PC
- Power supply is from an external 12 V power unit
- Scope of delivery: Camera, software, USB mouse, USB 2.0 cable (Length: 2 m), HDMI cable (Length: 2 m) and SD card (16 GB)
- Please order the appropriate C-mount adapter to fit your KERN microscope now

Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
<b>KERN</b>								
<b>ODC 851</b>	2 MP	HDMI, USB 2.0, SD	30 – 60	CMOS	1/2,8"	colour	Win XP, Vista, 7, 8, 10	<b>990,-</b>

Price reduction



ODC-87, ODC-88

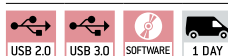


Eyepiece camera fixed into the tube

#### Features

- With the KERN eyepiece cameras you can convert your standard microscope to a digital microscope, by replacing one eyepiece of your non-digital microscope with an eyepiece camera and connect this to your computer via USB
- The universal eyepiece can be connected to the microscope as well as to a laptop or PC using the USB cable (2.0 or 3.0, see table)
- The power supply is through the USB cable, which means that no additional power supply is required
- Your daily work is made significantly easier with the very best synchronisation, a high frame rate as well as stable image performance together with our software
- As well as the camera, the delivery includes a simplified version of our multi-lingual camera software Microscope VIS KERN OXM 901, a USB cable (Length: 1,5 m) and an object micrometer to calibrate the software

#### STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Colour/ Monochrome	Supported operating system	Price excl. of VAT ex works €
<b>KERN</b>								
<b>ODC 872</b>	1,3 MP	USB 2.0	7,5 – 12,5	CMOS	1/3"	colour	Win XP, Vista, 7, 8, 10	<b>185,-</b> ↓
<b>ODC 874</b>	3 MP	USB 2.0	3 – 7,5	CMOS	1/2,7"	colour	Win XP, Vista, 7, 8, 10	<b>220,-</b> ↓
<b>ODC 881</b>	5 MP	USB 3.0	15 – 30	CMOS	1/2,5"	colour	Win XP, Vista, 7, 8, 10	<b>295,-</b> ↓

↓ Price reduction

## USB microscope – USB 2.0 KERN ODC-89



ODC 894



ODC 895

## The digital USB microscope for rapid testing or for hobby use

#### Features

- The USB hand-held microscope is designed for rapid and simple observations. Ideally suited for coins, plants, insects and skin samples for all hobby scientists, children and students
- With the USB microscope you can easily adjust the magnification to suit all conventional samples. The zoom range can be adjusted to a magnification of 10× as well as 200×
- The eight LEDs fitted in the ring shape ensure strong and effective illumination of your sample. Use the adjustment wheel on the cable to control the illumination setting
- As well as the camera, you will also find a simplified version of our multi-lingual camera software Microscope VIS KERN OXM 901 included with delivery
- There are two stands available for you to use as a column
- Cable length: 1,4 m

#### Stand with integrating coaxial focusing:

- Work area: 150×80 mm
- Focus range: 51 mm
- Overall dimensions: 150×80×147 mm

#### Stand with focus wheel:

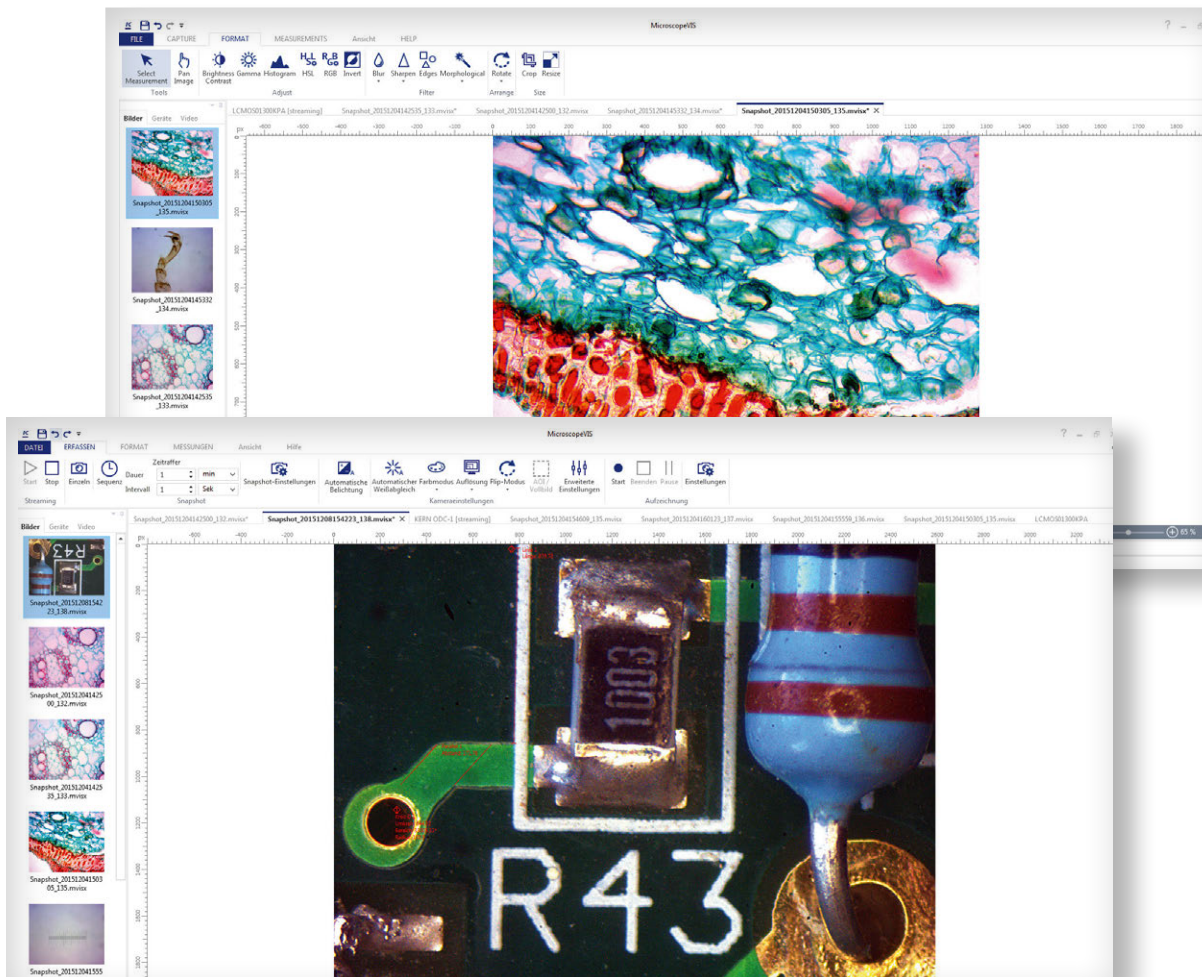
- Work area: 150×80mm
- Focus range: 60 mm
- Overall dimensions: 150×80×135 mm

#### STANDARD



Model	Resolution	Interface	FPS	Sensor	Sensor size	Supported operating system	Magnification levels	Focusing stand	Illumination	Price excl. of VAT ex works €
<b>KERN</b>										
<b>ODC 894</b>	2 MP	USB 2.0	15 – 30	CMOS	1/3,2"	Win XP, Vista, 7, 8, 10	10×, 200×	Coaxial	8× LED	<b>210,-</b> ↓
<b>ODC 895</b>	2 MP	USB 2.0	15 – 30	CMOS	1/3,2"	Win XP, Vista, 7, 8, 10	10×, 200×	Focus wheel	8× LED	<b>230,-</b> ↓

↓ Price reduction



The digital specialist for measurement, counting and archiving – free of charge with all KERN microscope cameras

#### Features

- The camera software microscope VIS KERN OXM 901 is a multi-lingual software, which we have developed specially for all available Kern microscope cameras
- As well as the streaming function for the object to be viewed, the software also offers you an image snapshot function, as well as a video function
- Various measuring functions such as, for example, functions for measuring distance, surfaces and angles and a manual counting function are available. In addition there are extensive image processing and documentation functions available, and of course an exporting function to Microsoft Office applications Word® and Excel®

- With the display settings you can display different measurements, grid sizes, scales and rulers for the very best measuring procedure
- Automatic white balance and automatic contrast adjustment can be performed quickly and easily, which enables efficient working procedures
- As well as the software, a USB cable and an object micrometer are included with all KERN cameras as well as all digital microscopes
- Please refer to the documentation for the software in the download area of our website [www.kern-sohn.com](http://www.kern-sohn.com) for further details

#### Technical data

- Can be used for Microsoft Windows XP, Windows Vista, Windows 7, Windows 8, 8.1 and Windows 10
- Depending on the language setting of your Windows operating system the KERN VIS software will be identified and installed in the current language. This can be changed manually at any time
- The software is available in the following languages: German, English, Spanish, Italian French and Portuguese

NEW





Innovative hand-held microscope for mobile applications with immediate display of the image on a smartphone or tablet


Features


- The digital WLAN hand-held microscope is designed for rapid and simple surface observations. Ideally suited for coins, bank notes, stamps, circuit boards, plants, insects, gems and skin samples for industrial use, for all hobby scientists, children and students
- The KERN ODC 910 WLAN microscope has been specially developed for direct connection to your WLAN-enabled smartphone or tablet with iOS or android
- During the live transfer to your smartphone or tablet you can take photos and videos of the sample you are investigating, and these can also be stored on your device. For larger videos you can also insert a mini SD card directly into the microscope
- With the WLAN microscope you can easily adjust the magnification to suit all conventional samples. The focus can be adjusted to a magnification of 10× as well as 200×
- The six LEDs fitted in a ring shape ensure strong and effective illumination of your sample. Use the adjustment wheel on the microscope to control the illumination setting.
- You can download the app for the ODC 910 WLAN microscope from the Apple App Store or the Android Google Play Store free of charge and this app enables you to directly transfer images and videos from the microscope to your smartphone or tablet through a simple connection
- The scope of delivery includes the WLAN microscope with integrated rechargeable battery pack, a flexible column which is easy to adjust and which has a swan neck so that you can achieve the ideal height setting, as well as a mains adapter


STANDARD

WLAN

SD

RECHARGE

230 V

1 DAY

Model	Resolution	Interface	FPS	Sensor	Sensor size	Supported operating system	Magnification levels	Focusing stand	Illumination	Price excl. of VAT ex works €
KERN										
ODC 910	2 MP	WLAN, SD	15 – 30	CMOS	1/4"	Android, iOS	10×, 200×	Goose neck	6× LED	185,-



## KERN ORF

page 38

only €

**340,-**



## Refractometers









## Refractive index measurement for laboratories and the industry

### Features

- The KERN ORA refractometers are universal, maintenance free analogue handheld refractometers
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- Manually calculated conversions and errors of the user are avoided by multiple selectable scales
- These scales are especially developed, exactly calculated and checked. They are also characterized by their thin and clear lines
- The optical system and the prism cover are made of special material which allows a low-tolerance measuring
- All ORA models are equipped with an eyepiece for easy and smooth setting for many different diopter strengths
- The models marked with "ATC" have an automatic temperature compensation which enables accurate measurement at different ambient temperatures (10 °C/30 °C)
- The following accessory-parts are included:
  - Storage box
  - Calibration liquid
  - Calibration block (if required)
  - Pipette
  - Small screwdriver
  - Cleaning tissue
- Further accessories are available optionally

### Technical data

- Die-cast housing of copper-aluminium alloy, chrome coated
- Measurement temperature without ATC: 20 °C
- Measurement temperature range with ATC: 10 °C/30 °C
- Dimensions of the box: 205×75×55 mm (depending on the model)
- Product length: approx. 130 – 200 mm (depending on the model)
- Net weight approx. 135 – 600 g (depending on the model)

STANDARD	OPTION
	

## Scope of application: Urine

The following models are particularly suitable for the measurement of the specific gravity (sg) in urine, the quantity of serum (serumproteine) in urine (doping control among athletes), and the refractive index.

The main scope of applications is:

- Hospitals
- Doctor's surgeries/Physicians
- Medical training institutions
- Nursing homes
- Sports medicine (doping test)
- Veterinary



Model	Scales	Measuring range	Division	ATC	Price excl. of VAT ex works €
<b>KERN</b>					
<b>ORA 2PB</b>	Serum protein Brix Refractive index	0 – 12 g/dl 1,000 – 1,050 sgU 1,3330 – 1,3600 nD	0,2 g/dl 0,002 sgU 0,0005 nD		<b>80,-</b>
<b>ORA 2PA</b>	Serum protein Brix Refractive index	0 – 12 g/dl 1,000 – 1,050 sgU 1,3330 – 1,3600 nD	0,2 g/dl 0,002 sgU 0,0005 nD	✓	<b>85,-</b>
<b>ORA 5PB</b>	Serum protein Brix Brix	2 – 14 g/dl 1,000 – 1,060 sgU 1,000 – 1,060 sgU	0,1 g/dl 0,001 sgU 0,001 sgU		<b>80,-</b>

## Scope of application: Industry/Automotive

The following models are particularly suitable for the measurement and determination of AdBlue, glycol concentration (ethylene (EG) and propylene (PG)), battery fluid (BF), urea, the freezing point of fountain solution (CW). Furthermore these models are suitable for the measurement of thermal exchange systems.

The main scope of applications is:

- Automotive industry: Car-workshops and producers
- Chemical industry
- Solar industry: Antifreeze monitoring
- Geothermal industry: Brine-concentration-measurement for ground heat
- Forestry/Lumbermen



Model	Scales	Measuring range	Division	ATC	Price excl. of VAT ex works €
<b>KERN</b>					
<b>ORA 4FB</b>	EG (G11/12) PG (G13) CW BF	-50 – 0 °C -50 – 0 °C -40 – 0 °C 1,10 – 1,40 kg/l	1 °C 1 °C 5 °C 0,01 kg/l		<b>80,-</b>
<b>ORA 4FA</b>	EG (G11/12) PG (G13) CW BF	-50 – 0 °C -50 – 0 °C -40 – 0 °C 1,10 – 1,40 kg/l	1 °C 1 °C 5 °C 0,01 kg/l	✓	<b>85,-</b>
<b>ORA 1UB</b>	Urea	0 – 40 %	0,2 %		<b>80,-</b>
<b>ORA 1UA</b>	Urea	0 – 40 %	0,2 %	✓	<b>85,-</b>
<b>ORA 4UB</b>	Urea EG (G11/12) PG (G13) CW BF	30 – 35 % -50 – 0 °C -50 – 0 °C -40 – 0 °C 1,10 – 1,40 kg/l	0,2 % 1 °C 1 °C 5 °C 0,01 kg/l		<b>80,-</b>
<b>ORA 4UA</b>	Urea EG (G11/12) PG (G13) CW BF	30 – 35 % -50 – 0 °C -50 – 0 °C -40 – 0 °C 1,10 – 1,40 kg/l	0,2 % 1 °C 1 °C 5 °C 0,01 kg/l	✓	<b>85,-</b>

### Note

Discover on our website many more refractometers for honey, salt, wine, alcohol and urine

NEW



Transport and storage case



Rear view

## Digital refractive index measurement for laboratories and the industry for multi-application

### Features

- The KERN ORF refractometers are accurate and universal maintenance free digital handheld refractometers
- The large display is easy to read. Mistakes in reading are avoided
- The typical and practical design is suitable for a quick and convenient everyday use and is characterized by its easy-using and robustness
- The KERN ORF range is protected to international IP65 protection class, against dust and water splashes. After use, you can rinse the refractometer under running water
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement
- A large selection of models is available with single or multiple scales. This allows the use in various applications
- The instrument comes with an optimized software that can show a result in different scales
- The integrated automatic temperature compensation (ATC), avoids the manual conversion of the measurement. This allows a quick and efficient usage of the instrument
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample.
- The following accessory-parts are included:
  - Calibration liquid
  - Pipette
  - Storage box
  - 2 × AAA batteries
  - Leather bag
  - Small screwdriver
  - Cleaning tissue

### Technical data

- Measurement temperature: 5 °C – 40 °C
- Overall dimensions W×D×H 133×65×38 mm
- Net weight approx. 200 g
- Power supply: 2 × AAA (1,5 V)
- Lifetime of the battery: approx. 3.750 measurements
- ATC (Automatic Temperature Compensation)
- Minimum sample volume: 2-3 drops
- Automatic energy management (AUTO-OFF after 90 seconds)

STANDARD



**Scope of application: Urine**

The following models are particularly suitable for the measurement of the specific gravity (sg) in urine, the quantity of serum (serumproteine) in urine (doping control among athletes), and the refractive index.

The main scope of applications is:

- Hospitals
- Doctor's surgeries/Physicians
- Medical training institutions
- Nursing homes
- Sports medicine (doping test)

Model	Scales	Measuring range	Accuracy	Division	Price excl. of VAT ex works €
<b>KERN</b>					
<b>ORF 1PM</b>	Serum protein Brix Refractive index	0 – 12 g/dl 1,000 – 1,050 sgU 1,3330 – 1,3900 nD	± 0,1 g/dl ± 0,001 sgU ± 0,0003 nD	0,1 g/dl 0,001 sgU 0,001 nD	<b>340,-</b>

**Scope of application: Industry/Automotive**

The following models are particularly suitable for the measurement and determination of AdBlue, glycol concentration (ethylene (EG) and propylene (PG)), battery fluid (BF), urea, the freezing point of fountain solution (CW). Furthermore these models are suitable for the measurement of thermal exchange systems.

The main scope of applications is:

- Automotive industry: Car-workshops and producers
- Chemical industry
- Solar industry: Antifreeze monitoring
- Geothermal industry: Brine-concentration-measurement for ground heat
- Forestry/Lumbermen

Model	Scales	Measuring range	Accuracy	Division	Price excl. of VAT ex works €
<b>KERN</b>					
<b>ORF 2UM</b>	EG PG BF CW	-50 – 0 °C -50 – 0 °C 1.00 – 1.50 kg/l -40 – 0 °C	± 0,5 °C ± 0,5 °C ± 0,01 kg/l ± 0,5 °C	0,1 °C 0,1 °C 0,01 kg/l 0,1 °C	<b>340,-</b>
<b>ORF 5UM</b>	EG PG Urea CW	-50 – 0 °C -50 – 0 °C 0 – 40 % -40 – 0 °C	± 0,5 °C ± 0,5 °C ± 0,2 % ± 0,5 °C	0,1 °C 0,1 °C 0,1 % 0,1 °C	<b>340,-</b>
<b>ORF 6US <small>NEW</small></b>	Urea Refractive index	0 – 40 % 1,3330 – 1,4100 nD	± 0,2 % ± 0,0003 nD	0,1 % 0,0001 nD	<b>340,-</b>

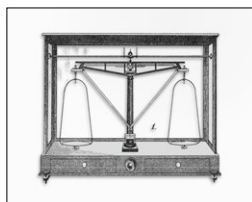
NEW New model

**Note**

Discover on our website many more refractometers for honey, salt, wine, alcohol and urine

# KERN – Tradition and Innovation for over 170 years

An independent family business, KERN since already 8 generations is synonymous with quality and reliability in customer service.



**1844**

KERN is founded – precision balances are produced



**1863**

A proud Gottlieb Kern with his staff



**1880**

Pharmaceutical balance with Aesculap



**1923**

Inflation – KERN wages are paid with self printed currency



**1980**

The electronic balance ousts mechanical devices



**1994**

Accredited DKD laboratory (ISO 17025)



**2000**

New premises in Balingen



**2002**

Existing QM system certification in accordance with DIN EN ISO 9001:2000 standards



**2007**

Approval for the manufacture of medical products (DIN EN 13485 and 93/42/EEC)



**2008**

Authorisation for initial verification by the manufacturer (2009/23/EC)



**2009**

Approval for the manufacture and sale of height rods (DIN EN 13485 and 93/42/EEC)



**2012**

Verification point for non-automatic balances and test weights.

New customer portal [www.kern-sohn.com](http://www.kern-sohn.com) goes live



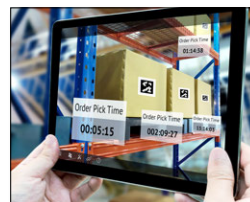
**2014**

Expansion of the product range to include optical instruments (microscopes and refractometers)



**2015**

Inauguration of Ziegelei 2.0 with computer-controlled high-bay warehouse



**2017**

Come with KERN into the digital future: Expansion of the model ranges compatible with Industry 4.0, as well as the related services

## KERN & SOHN GmbH Microscopes and Refractometers

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