COMPOUND MICROSCOPES
KERN Pictograms

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

Abbreviations

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

For 175 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 ergonomy 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 2020: die KERN camera software – you will be amazed at how user-friendly and intuitive it is, a high-quality tablet camera as well as a comprehensive range of calibration services for refractometers
- and much more…

Use our practical “Check list for microscopes and refractometers”, which may help you to quickly determine specifications for the future instrument. Together with our KERN product specialist you can choose the right product for you.

If there is no suitable product in the standard range, for example, then we will of course configure an individual microscope for you.

Our aim is to develop a market-driven product solution, so with our microscope and refractometer range, the saying holds true: good quality at a competitive price! This is what we stand for and work towards, every day!

With our current 2020 product range you can benefit from improved quality and a clear reduction in price, which we have been able to achieve through more efficient production methods and increased global sales of our microscopes and refractometers and of course we pass this straight on to you.

Do you have any questions about our range of microscopes and refractometers?

Your KERN customer consultants are available at any time to help you further.

I hope that you enjoy working efficiently with our KERN Optics products.

Albert Sauter, Managing Director

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**Your advantages**

**fast**
- 24 hour dispatch service for products in stock – order today, on its way tomorrow
- Sales & service hotline from 8:00 am to 5:00 pm

**reliable**
- Up to 3 years warranty
- Certified QM system DIN EN ISO 9001

**versatile**
- One-stop shopping: from microscope through to refractometer – everything from one supplier
- Quick as a flash, find the product you want with the “Quick-Finder” at www.kern-sohn.com

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from Monday to Friday from 8:00 am to 5:00 pm

**www.kern-sohn.com**
Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a microscopes and refractometers search engine.
1 Compound microscopes

Compound, Phase contrast, Digital, Fluorescence and Inverted 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 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

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
- Diopeter adjustment: Both-sided (for binocular models)
- Overall dimensions W×D×H 130×300×310 mm
- Net weight approx. 3 kg

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBS 101</td>
<td>Monocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
<tr>
<td>OBS 102</td>
<td>Monocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
<tr>
<td>OBS 103</td>
<td>Monocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
<tr>
<td>OBS 104</td>
<td>Binocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
<tr>
<td>OBS 105</td>
<td>Monocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
<tr>
<td>OBS 106</td>
<td>Binocular</td>
<td>WF 10×/Ø 18 mm Achromatic</td>
</tr>
</tbody>
</table>

Note
Please request special conditions for a classroom set

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## Compound microscope KERN OBS-1

<table>
<thead>
<tr>
<th>Model outfit</th>
<th>Model KERN</th>
<th>Order number</th>
<th>Price/piece excl. of VAT €</th>
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<tbody>
<tr>
<td><strong>Eyepieces</strong> (23.2 mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WF 10×/Ø 18 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WF 16×/Ø 13 mm</td>
<td></td>
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<tr>
<td>WF 20×/Ø 11 mm</td>
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<td>○</td>
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<tr>
<td>WF 10×/Ø 18 mm (with Pointer)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Achromatic objectives</strong></td>
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<td></td>
</tr>
<tr>
<td>4×/0,10 W.D. 18,0 mm</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>10×/0,25 W.D. 7,0 mm</td>
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<td>✓</td>
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</tr>
<tr>
<td>100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm</td>
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<tr>
<td><strong>E-Plan objectives</strong></td>
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<td>4×/0,10 W.D. 14,5 mm</td>
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<td>10×/0,25 W.D. 5,65 mm</td>
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<tr>
<td>40×/0,65 (spring-loaded) W.D. 0,85 mm</td>
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<td>100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm</td>
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<td>100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm</td>
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<tr>
<td>Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm</td>
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<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Monocular tube</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45° inclined/360° rotatable</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Binocular tube</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 30° inclined/360° rotatable</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Inter pupillary distance 55-75 mm</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Diopter adjustment: Both-sided</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Fixed stage</strong></td>
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<td></td>
<td></td>
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<tr>
<td>- Stage size W×D 110×120 mm</td>
<td>✓</td>
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</tr>
<tr>
<td>- Coaxial coarse and fine focusing knobs, scale: 2,5 μm</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Mechanical stage</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Stage size W×D 115×125 mm</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Travel 75×18 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Coaxial coarse and fine focusing knobs, scale: 2,5 μm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Condenser</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple condenser N.A. 0,65</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Abbe N.A. 1,25 (aperture diaphragm)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Illumination</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>0,5 W LED illumination system (transmitted) (rechargeable)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>Colour filters for transmitted illumination</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Green</td>
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<tr>
<td>Yellow</td>
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<td>○</td>
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<tr>
<td>Grey</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

✓ = Included with delivery  ○ = Option
EDUCATIONAL LINE

The modern compound microscope for teaching in your classroom

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 W×D×H 195×147×325 mm.
- Net weight approx. 2.5 kg.
## Model outfit

<table>
<thead>
<tr>
<th>Eyepieces (23.2 mm)</th>
<th>Achromatic objectives</th>
<th>Monocular tube</th>
<th>Binocular tube</th>
<th>Fixed stage</th>
<th>Mechanical stage</th>
<th>Condenser</th>
<th>Illumination</th>
<th>Colour filters for transmitted illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>WF 10×/Ø 18 mm</td>
<td>4×/0,10 W.D. 27 mm</td>
<td>45° inclined/360° rotatable</td>
<td>WF 10×/Ø 18 mm (with Pointer)</td>
<td>10×/0,25 W.D. 7 mm</td>
<td>- Stage size W×D 115×110 mm</td>
<td>Simple condenser N.A. 0,65</td>
<td>1 W LED spare bulb (transmitted)</td>
<td>Blue</td>
</tr>
<tr>
<td>WF 10×/Ø 18 mm</td>
<td>40×/0,65 (spring-loaded) W.D. 0,6 mm</td>
<td></td>
<td></td>
<td>10×/1,25 (oil) (spring-loaded) W.D. 0,2 mm</td>
<td>- Travel 52×20 mm</td>
<td>Abbe N.A. 1,25 (aperture diaphragm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WF 10×/Ø 18 mm (reticule 0,1 mm)</td>
<td>100×/1,25 (oil) (spring-loaded) W.D. 0,4 mm</td>
<td></td>
<td></td>
<td>60×/0,85 (spring-loaded) W.D. 0,4 mm</td>
<td>- One slide holder</td>
<td></td>
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</tr>
</tbody>
</table>
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 focussable 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

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
- Dipter adjustment: One-sided (for binocular and trinocular models)
- Overall dimensions W×D×H 320×180×365 mm
- Net weight approx. 5,5 kg

Model | Tube | Eyepiece | Objective quality | Objectives | Illumination | Price excl. of VAT ex works €
---|---|---|---|---|---|---
OBE 101 | Monocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40× | 3 W LED (transmitted) | 370,–
OBE 102 | Binocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40× | 3 W LED (transmitted) | 480,–
OBE 103 | Binocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40× | 3 W LED (transmitted) (battery incl., rechargeable) | 550,–
OBE 104 | Trinocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40×/100× | 3 W LED (transmitted) | 590,–
OBE 111 | Monocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40× | 3 W LED (transmitted) | 450,–
OBE 112 | Binocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40×/100× | 3 W LED (transmitted) (battery incl., rechargeable) | 540,–
OBE 113 | Binocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40×/100× | 3 W LED (transmitted) (battery incl., rechargeable) | 610,–
OBE 114 | Trinocular | HWF 10×/∅ 18 mm | Achromatic | 4×/10×/40×/100× | 3 W LED (transmitted) | 650,–

Note

Please request special conditions for a classroom set

Price reduction

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<table>
<thead>
<tr>
<th>Model outfit</th>
<th>Model KERN</th>
<th>Order number</th>
<th>Price/piece excl. of VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eyepieces</strong> (23,2 mm)</td>
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<tr>
<td></td>
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<tr>
<td>HWF 10×/Ø 18 mm</td>
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<tr>
<td>WF 16×/Ø 13 mm</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>HWF 10×/Ø 18 mm (with Pointer)</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>HWF 10×/Ø 18 mm (-reticle 0,1 mm) (non-adjustable)</td>
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<tr>
<td><strong>Achromatic objectives</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4×/0,10 W.D. 18,6 mm</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>10×/0,25 W.D. 6,5 mm</td>
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<tr>
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<td>o</td>
<td>o</td>
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<tr>
<td>20×/0,40 (spring-loaded) W.D. 1,75 mm</td>
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<tr>
<td>60×/0,85 (spring-loaded) W.D. 0,1 mm</td>
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<tr>
<td>E-Plan 100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm</td>
<td>o</td>
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<tr>
<td>Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm</td>
<td>o</td>
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<tr>
<td><strong>Monocular tube</strong></td>
<td></td>
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<tr>
<td>30° inclined/360° rotatable</td>
<td>✓</td>
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<tr>
<td><strong>Binocular tube</strong></td>
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<td>- Siedentopf 30° inclined/360° rotatable</td>
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<tr>
<td>- Interpupillary distance 50 – 75 mm</td>
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<tr>
<td>- Diopter adjustment: One-sided</td>
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<tr>
<td><strong>Trinocular tube</strong></td>
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<td>- see binocular tube</td>
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<td>- Light distribution 20:80</td>
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<td><strong>Mechanical stage</strong></td>
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<td>- Stage size W×D 125×115 mm</td>
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<tr>
<td>- Travel 50×70 mm</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Coaxial coarse and fine focusing knobs, scale: 2 μm</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Condenser</strong></td>
<td></td>
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<tr>
<td>Abbe N.A. 1,25 (aperture diaphragm)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Darkfield unit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usable for 4× – 40× objectives</td>
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<tr>
<td><strong>Polarising unit</strong></td>
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<td>Analyser/Polariser</td>
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<tr>
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<td>o</td>
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</tr>
<tr>
<td>Yellow</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Grey</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>C-Mount</td>
<td>o</td>
<td>o</td>
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✓ = Included with delivery  o = Option
## Model outfit

### Eyepieces (23,2 mm)

<table>
<thead>
<tr>
<th>Model KERN</th>
<th>OBE 111</th>
<th>OBE 112</th>
<th>OBE 113</th>
<th>OBE 114</th>
<th>Order number</th>
<th>Price/piece excl. of VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWF 10×/Ø 18 mm</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>OBB-A1403</td>
<td>45,–</td>
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<tr>
<td>WF 16×/Ø 13 mm</td>
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<td>o</td>
<td>o</td>
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<td>45,–</td>
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<tr>
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<td>o</td>
<td>o</td>
<td>o</td>
<td>OBB-A1348</td>
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<tr>
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<td>o</td>
<td>o</td>
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### Achromatic objectives

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<th>OBE 112</th>
<th>OBE 113</th>
<th>OBE 114</th>
<th>Order number</th>
<th>Price/piece excl. of VAT ex works €</th>
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</thead>
<tbody>
<tr>
<td>4×/0,10 W.D. 18,6 mm</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>OBB-A1111</td>
<td>35,–</td>
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<tr>
<td>10×/0,25 W.D. 6,5 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>OBB-A1108</td>
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<tr>
<td>40×/0,65 (spring-loaded) W.D. 0,47 mm</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>OBB-A1112</td>
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<tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>OBB-A1109</td>
<td>105,–</td>
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<tr>
<td>20×/0,40 (spring-loaded) W.D. 1,75 mm</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>OBB-A1110</td>
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<td>o</td>
<td>o</td>
<td>o</td>
<td>OBB-A1113</td>
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<tr>
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<td>o</td>
<td>o</td>
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<tr>
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<td>o</td>
<td>o</td>
<td>o</td>
<td>OBB-A1441</td>
<td>175,–</td>
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</table>

### Monocular tube

30° inclined/360° rotatable | ✓ | OBB-A1227 |

### Binocular tube

- Siedentopf 30° inclined/360° rotatable
- Interpupillary distance 50 – 75 mm
- Dioptr 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 | o | o | o | o | OBB-A1148 | 85,– |

### Polarising unit

Analyser/Polariser | o | o | o | o | OBB-A1276 | 265,– |

### Illumination

3 W LED illumination system (transmitted) (non-rechargeable) | ✓ | ✓ | ✓ |

### Colour filters for transmitted illumination

Blue | o | o | o | o | OBB-A1466 | 19,– |
Green | o | o | o | o | OBB-A1467 | 19,– |
Yellow | o | o | o | o | OBB-A1468 | 19,– |
Grey | o | o | o | o | OBB-A1184 | 19,– |

### C-Mount

0,5× (focus adjustable) | o | OBB-A1137 | 160,– |
1× | o | OBB-A1139 | 100,– |

✓ = Included with delivery  o = Option
Note
Please request special conditions for a classroom set

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 enables 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 tube which is integrated as standard and which enables you to achieve the ideal viewing angle. 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
- 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
- Diopter adjustment: One-sided (for binocular and trinocular models)
- Overall dimensions W×D×H 360×150×320 mm
- Net weight approx. 4.6 kg

<table>
<thead>
<tr>
<th>Model KERN</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBE 121 Monocular</td>
<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40× 3W LED (transmitted)</td>
<td>425,–</td>
</tr>
<tr>
<td>OBE 122 Binocular</td>
<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40× 3W LED (transmitted)</td>
<td>520,–</td>
</tr>
<tr>
<td>OBE 124 Trinocular</td>
<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40×/100× 3W LED (transmitted)</td>
<td>630,–</td>
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<tr>
<td>OBE 131 Monocular</td>
<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40×/100× 3W LED (transmitted)</td>
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<tr>
<td>OBE 132 Binocular</td>
<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40×/100× 3W LED (transmitted)</td>
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<tr>
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<td>HWF 10×/Ø 18 mm Achromatic 4×/10×/40×/100× 3W LED (transmitted)</td>
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<td>Model KERN</td>
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<tr>
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<td>HWF 10×/Ø 18 mm (reticle 0,1 mm) (non-adjustable)</td>
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<tr>
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<tr>
<td>10×/0,25 W.D. 6,5 mm</td>
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<td>✓</td>
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<tr>
<td>40×/0,65 (spring-loaded) W.D. 0,47 mm</td>
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<td>✓</td>
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<tr>
<td>20×/0,40 (spring-loaded) W.D. 1,75 mm</td>
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<td>60×/0,85 (spring-loaded) W.D. 0,1 mm</td>
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<td>Monocular tube</td>
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<td>Binocular tube</td>
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</tr>
<tr>
<td>- Butterfly 30° inclined</td>
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<tr>
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<td>- Diopter adjustment: One-sided</td>
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<tr>
<td>Trinocular tube</td>
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<tr>
<td>- see binocular tube</td>
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<td>- Light distribution 20:80</td>
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<tr>
<td>Mechanical stage</td>
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<tr>
<td>- Stage size W×D 125×115 mm</td>
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<td>✓</td>
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<tr>
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<td>Condenser</td>
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<tr>
<td>Abbe N.A. 1,25 (aperture diaphragm)</td>
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<td>✓</td>
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<tr>
<td>Darkfield unit</td>
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<tr>
<td>Usable for 4× - 40× objectives</td>
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<td>o</td>
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<tr>
<td>Illumination</td>
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<tr>
<td>3 W LED illumination system (transmitted)</td>
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<td>✓</td>
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<tr>
<td>Colour filters for transmitted illumination</td>
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</tr>
<tr>
<td>Blue</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Green</td>
<td>o</td>
<td>o</td>
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<td>Yellow</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Grey</td>
<td>o</td>
<td>o</td>
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<tr>
<td>C-Mount</td>
<td>0,5× (focus adjustable)</td>
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<tr>
<td></td>
<td>1×</td>
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✓ = Included with delivery  
O = Option
Compound microscope KERN OBF-1

**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).
- Quadruplex 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.

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
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<td><strong>KERN</strong></td>
<td><strong>Tube</strong></td>
<td><strong>Eyeiece</strong></td>
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<tr>
<td>OBF 121</td>
<td>Binocular</td>
<td>HWF 10×/Ø 18 mm</td>
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<tr>
<td>OBF 122</td>
<td>Binocular</td>
<td>HWF 10×/Ø 18 mm</td>
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<td>Binocular</td>
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<tr>
<td>OBF 131</td>
<td>Trinocular</td>
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<td>OBF 132</td>
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<tr>
<td>OBF 133</td>
<td>Trinocular</td>
<td>HWF 10×/Ø 18 mm</td>
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## Compound microscope KERN OBF-1

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<th>Model KERN</th>
<th>Order number</th>
<th>Price/piece excl. of VAT ex works</th>
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<tr>
<td><strong>Eyepieces (23,2 mm)</strong></td>
<td>OBF 121</td>
<td>OBF-A1403</td>
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<td><strong>Achromatic objectives</strong></td>
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<tr>
<td>4×/0,10 W.D. 18,6 mm</td>
<td>✓</td>
<td>OBF-A1111</td>
<td>35,—</td>
</tr>
<tr>
<td>10×/0,25 W.D. 6,5 mm</td>
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<td>OBF-A1108</td>
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<td>40×/0,65 (spring-loaded) W.D. 0,47 mm</td>
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<td>100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm</td>
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<td>OBF-A1109</td>
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<td>60×/0,85 (spring-loaded) W.D. 0,07 mm</td>
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<tr>
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<td><strong>Binocular tube</strong></td>
<td>✓ ✓</td>
<td>OBF-A1129</td>
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<tr>
<td>- Siedentopf 30° inclined/360° rotatable</td>
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<tr>
<td>- Interpupillary distance 50–75 mm</td>
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<tr>
<td>- Diopter adjustment: One-sided</td>
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<tr>
<td><strong>Trinocular tube</strong></td>
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<tr>
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<tr>
<td>- Travel 76×52 mm</td>
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<tr>
<td>- Coaxial coarse and fine focusing knobs, scale: 2 µm</td>
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<tr>
<td>- Two slide holder</td>
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</table>

- ✓ = Included with delivery
- O = Option
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.
- 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.
- Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue).

Applications/Samples
- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Dioptr adjustment: One-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 6.7 kg

Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
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<td>HWF 10×/5× 20 mm</td>
<td>Infinity E-Plan</td>
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<td>HWF 10×/5× 20 mm</td>
<td>Infinity E-Plan</td>
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<td>Infinity E-Plan</td>
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<td>OBL 135</td>
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<td>HWF 10×/Ø 20 mm (with Pointer)</td>
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<td><strong>Infinity E-Plan objectives</strong></td>
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<td>Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm</td>
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<td>Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm</td>
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<tr>
<td>Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm</td>
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<tr>
<td><strong>Binocular tube</strong></td>
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<tr>
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<tr>
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<td>✓</td>
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<td>- Two slide holder</td>
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<td></td>
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<tr>
<td><strong>Condenser</strong></td>
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<tr>
<td>Abbe N.A. 1,25 precentered (aperture diaphragm)</td>
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<td>✓</td>
</tr>
<tr>
<td><strong>Darkfield condenser</strong></td>
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<tr>
<td>N.A. 0,85 – 0,91 (dry, paraboloid)</td>
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<td>O</td>
</tr>
<tr>
<td><strong>Illumination</strong></td>
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<td></td>
</tr>
<tr>
<td>20 W Halogen spare bulb (transmitted)</td>
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<td>✓</td>
</tr>
<tr>
<td>3 W LED illumination system (transmitted) (non-rechargeable)</td>
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<tr>
<td><strong>Polarising unit</strong></td>
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<tr>
<td>Analyser/Polariser</td>
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<tr>
<td><strong>Phase contrast units</strong></td>
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<tr>
<td>units (including PH-condenser and PH-slides)</td>
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<td>Single unit with PH-Plan objective 10×</td>
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<td>Single unit with PH-Plan objective 20×</td>
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<td>Single unit with PH-Plan objective 100×</td>
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<tr>
<td>If required, there are several magnification levels, please contact our OPTICS-Team</td>
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<tr>
<td><strong>Fluorescence unit</strong></td>
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<td>3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective</td>
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<td><strong>Colour filters for transmitted illumination</strong></td>
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<tr>
<td>Blue (built-in)</td>
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<td>✓</td>
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<tr>
<td>Green</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Yellow</td>
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<tr>
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<tr>
<td><strong>C-Mount</strong></td>
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<td>1×</td>
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</tbody>
</table>

= Included with delivery  
O = Option
Unit
- 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

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
- A strong and continuously adjustable 20 W halogen illumination unit (Philips) ensures the optimum lighting conditions
- A special fixed, pre-centred phase contrast condenser with aperture diaphragm 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

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

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

LAB LINE

Model Standard configuration
KERN

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
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</thead>
<tbody>
<tr>
<td>OBL 145</td>
<td>Binocular HWF 10×/∅ 20 mm, Infinty E-Plan/Plan, 4×/PH10×/PH40×/100×, 20 W Halogen (transmitted)</td>
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<td>Model KERN</td>
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<td>OBL 145</td>
<td>OBL 155</td>
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<td>WF 16×/Ø 13 mm</td>
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<td>HWF 10×/Ø 20 mm (with Pointer)</td>
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<tr>
<td><strong>Infinity E-Plan objectives</strong></td>
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<td></td>
</tr>
<tr>
<td>4×/0,10 W.D. 12,1 mm</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>10×/0,25 W.D. 2,1 mm</td>
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<tr>
<td>40×/0,65 (spring-loaded) W.D. 0,58 mm</td>
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<tr>
<td>100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm</td>
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<td>✓</td>
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<tr>
<td>Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm</td>
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<tr>
<td>Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm</td>
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<tr>
<td>Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm</td>
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<tr>
<td><strong>Binocular tube</strong></td>
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<tr>
<td>- Siedentopf 30° inclined/360° rotatable</td>
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<td>○</td>
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<tr>
<td>- Interpupillary distance 50 – 75 mm (for infinity system)</td>
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<td>- Diopter adjustment: One-sided</td>
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<td><strong>Trinocular tube</strong></td>
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<td>- Interpupillary distance 50 – 75 mm (for infinity system)</td>
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<td>- Light distribution 20:80 (for infinity system)</td>
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<td>- Diopter adjustment: One-sided</td>
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<tr>
<td><strong>Mechanical stage</strong></td>
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<tr>
<td>- Stage size W×D 145×130 mm</td>
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<td>✓</td>
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<tr>
<td>- Travel 76×52 mm</td>
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<td>- Coaxial coarse and fine focusing knobs, scale: 2 µm</td>
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<tr>
<td>- Two slide holder</td>
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<tr>
<td><strong>PH condenser</strong></td>
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<tr>
<td>Abbe N.A. 1,25 precentered, for bright field and phase contrast</td>
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<td>✓</td>
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<td><strong>Phase contrast units</strong></td>
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<td>- Infinity PH-Plan objective 10×</td>
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<td>- Infinity PH-Plan objective 20×</td>
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<td><strong>Darkfield condenser</strong></td>
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<tr>
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<td><strong>Colour filters for transmitted illumination</strong></td>
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<td>✓</td>
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<tr>
<td>- Blue (built-in)</td>
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<tr>
<td>- Green</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Yellow</td>
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<td>- Grey</td>
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<tr>
<td><strong>C-Mount</strong></td>
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<tr>
<td>0,5× (focus adjustable)</td>
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<td>○</td>
</tr>
<tr>
<td>1×</td>
<td>○</td>
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</table>

For further optional accessories, please see the list of items for the OBL-12 and OBL-13 series from page 21

✓ = Included with delivery  ○ = Option
**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
- Dioptr adjustment: One-sided
- Overall dimensions W×D×H 395×200×430 mm
- Net weight approx. 7 kg

---

**Model**

<table>
<thead>
<tr>
<th>KERN</th>
<th>Standard configuration</th>
<th>Price excl. VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBD 127</strong></td>
<td>Binocular/3MP digital/USB 2.0</td>
<td>Binocular/3MP digital/USB 2.0</td>
</tr>
<tr>
<td><strong>OBD 128</strong></td>
<td>Binocular/3MP digital/USB 2.0</td>
<td>Binocular/3MP digital/USB 2.0</td>
</tr>
</tbody>
</table>

**Option**

- USB 2.0
- 3MP
- 5MP
- POLAR
- INFINTITY
- 230 V
- SWING
- 360°
- DF

---

The digital all-round talent for your applications, documentation and live transmissions through an integrated camera.
<table>
<thead>
<tr>
<th>Model outfit</th>
<th>Model KERN</th>
<th>Order number</th>
<th>Price/piece excl. of VAT €</th>
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<tbody>
<tr>
<td></td>
<td>OBD 127</td>
<td>OBD 128</td>
<td></td>
</tr>
<tr>
<td><strong>Eyes</strong> (23.2 mm)</td>
<td>HWF 10×/0. 20 mm</td>
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</tr>
<tr>
<td></td>
<td>WF 16×/0.13 mm</td>
<td>○</td>
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<tr>
<td></td>
<td>HWF 10×/0. 20 mm (with Pointer)</td>
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<td>○</td>
</tr>
<tr>
<td><strong>Infinity E-Plan objectives</strong></td>
<td>4×/0.10 W.D. 12, 1 mm</td>
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<tr>
<td></td>
<td>10×/0.25 W.D. 2, 1 mm</td>
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<tr>
<td></td>
<td>40×/0.65 (spring-loaded) W.D. 0.58 mm</td>
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<td>100×/1.25 (oil) (spring-loaded) W.D. 0.19 mm</td>
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<td>Plan 20×/0.40 (spring-loaded) W.D. 2.41 mm</td>
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<tr>
<td></td>
<td>Plan 60×/0.80 (spring-loaded) W.D. 0.33 mm</td>
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<tr>
<td></td>
<td>Plan 100×/1.15 (water) (spring-loaded) W.D. 0.18 mm</td>
<td>○</td>
<td>○</td>
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<tr>
<td><strong>Digital tube Trinocular (3MP)</strong></td>
<td>- 30° inclined/360° rotatable</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>- Interpupillary distance 50 – 75 mm</td>
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</tr>
<tr>
<td></td>
<td>- Diopter adjustment: One-sided</td>
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</tr>
<tr>
<td></td>
<td>- Light distribution 80:20</td>
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<tr>
<td></td>
<td>- Built-in digital 3 MP Camera with 1/2” CMOS</td>
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<tr>
<td></td>
<td>- USB port for PC without extra power supply</td>
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<tr>
<td></td>
<td>- With multilingual (DE, EN, FR, IT, ES) software</td>
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<tr>
<td></td>
<td>&quot;Microscope VIS” for Windows XP, Vista, 7, 8, 10</td>
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<tr>
<td><strong>Digital tube Trinocular (5MP)</strong></td>
<td>- 30° inclined/360° rotatable</td>
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<td></td>
<td>- Interpupillary distance 50 – 75 mm</td>
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<td></td>
<td>- Diopter adjustment: One-sided</td>
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</tr>
<tr>
<td></td>
<td>- Light distribution 80:20</td>
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<tr>
<td></td>
<td>- Built-in digital 5 MP Camera with 1/2” CMOS</td>
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<td></td>
<td>- With multilingual (DE, EN, FR, IT, ES) software</td>
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<tr>
<td></td>
<td>&quot;Microscope VIS” for Windows XP, Vista, 7, 8, 10</td>
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<tr>
<td><strong>Object micrometer</strong></td>
<td>For calibrating the software measuring function, 0.01 mm division</td>
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<tr>
<td><strong>Mechanical stage</strong></td>
<td>- Stage size W×D 145×130 mm</td>
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<td></td>
<td>- Travel 76×52 mm</td>
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<tr>
<td></td>
<td>- Two slide holder</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>- Coaxial coarse and fine focusing knobs, scale: 2 μm</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>Condenser</strong></td>
<td>Abbe N.A. 1,25 precentered (aperture diaphragm)</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>Darkfield condenser</strong></td>
<td>N.A. 0.85 – 0.91 (dry, paraboloid)</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Illumination</strong></td>
<td>20 W Halogen spare bulb (transmitted)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Polarising unit</strong></td>
<td>Analyser/Polariser</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Phase contrast units</strong> (including PH-condenser and PH-slides)**</td>
<td>Single unit with = PH-Plan objective 10×</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>Single unit with = PH-Plan objective 20×</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>Single unit with = PH-Plan objective 40×</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>Single unit with = PH-Plan objective 100×</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>If required, there are several magnification levels, please contact our OPTICS-Team</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Colour filters for transmitted illumination</strong></td>
<td>Blue (built-in)</td>
<td>✓</td>
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<tr>
<td></td>
<td>Green</td>
<td>○</td>
<td>○</td>
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<tr>
<td></td>
<td>Yellow</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>

= Included with delivery  ○ = Option
**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 halogen variant 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 this contrasting method.
- 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.
- This centring eyepiece for adjusting the phase contrast (OBN 158), 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.

---

**Model**

<table>
<thead>
<tr>
<th>KERN</th>
<th>Tube</th>
<th>Eyepiece</th>
<th>Objective quality</th>
<th>Objectives</th>
<th>Illumination</th>
<th>Price excl. of VAT</th>
<th>Option Price excl. of VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBN 132</td>
<td>Trinocular</td>
<td>HWF 10×/Ø 20 mm</td>
<td>Infinity Plan</td>
<td>4×/10×/20×/40×/100×</td>
<td>20 W Halogen (transmitted)</td>
<td>€1370,-</td>
<td>€1370,-</td>
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<tr>
<td>OBN 135</td>
<td>Trinocular</td>
<td>HWF 10×/Ø 20 mm</td>
<td>Infinity Plan</td>
<td>4×/10×/20×/40×/100×</td>
<td>3 W LED (transmitted)</td>
<td>€1390,-</td>
<td>€1390,-</td>
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<tr>
<td>OBN 158</td>
<td>Trinocular</td>
<td>HWF 10×/Ø 20 mm</td>
<td>Infinity Plan</td>
<td>4×/PH10×/PH20×/PH40×/PH100×</td>
<td>20 W Halogen (transmitted)</td>
<td>€2540,-</td>
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<td>OBN 132</td>
<td>OBN 135</td>
<td>OBN 158</td>
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<tr>
<td>Eyepieces (23,2 mm)</td>
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<td>✓</td>
<td>OBB-A1404</td>
<td>95,–</td>
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<td>WF 16×/∅ 13 mm</td>
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<td>OBB-A1354</td>
<td>45,–</td>
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<tr>
<td>Infinity Plan achromatic objectives</td>
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<tr>
<td>4×/0,10 W.D. 12,1 mm</td>
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<td>✓</td>
<td>✓</td>
<td>OBB-A1263</td>
<td>110,–</td>
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<tr>
<td>10×/0,25 W.D. 4,64 mm</td>
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<td>✓</td>
<td>○</td>
<td>OBB-A1243</td>
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<td>20×/0,40 (spring-loaded) W.D. 2,41 mm</td>
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<td>OBB-A1250</td>
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<td>40×/0,66 (spring-loaded) W.D. 0,65 mm</td>
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<td>✓</td>
<td>○</td>
<td>OBB-A1257</td>
<td>290,–</td>
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<td>100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm</td>
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<td>OBB-A1240</td>
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<td>2,5×/0,07 W.D. 8,47 mm</td>
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<td>OBB-A1247</td>
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<td>Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1270</td>
<td>360,–</td>
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<tr>
<td>Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1437</td>
<td>445,–</td>
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<tr>
<td>Trinocular tube</td>
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<tr>
<td>· Siedentopf 30° inclined/360° rotatable</td>
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<td>✓</td>
<td>OBB-A1382</td>
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<tr>
<td>· Light distribution 100:0</td>
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<td>✓</td>
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<tr>
<td>· Diopter adjustment: Both-sided</td>
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<td>· Light distribution 100:0</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>· Diopter adjustment: Both-sided</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Mechanical stage</td>
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<tr>
<td>· Stage size W×D 175×145 mm</td>
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<td>OBB-A1102</td>
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<td>· Travel 78×55 mm</td>
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<tr>
<td>· Coaxial coarse and fine focusing knobs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>· Two slide holder</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Condenser</td>
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<tr>
<td>Abbe N.A. 1,25 center-adjustable (aperture diaphragm)</td>
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<td>○</td>
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<td>Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1104</td>
<td>220,–</td>
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<tr>
<td>Darkfield condenser</td>
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<tr>
<td>N.A. 0,85 – 0,91 (dry, paraboloid)</td>
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<tr>
<td>20 W Halogen spare bulb (transmitted)</td>
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<td>✓</td>
<td>○</td>
<td>OBB-A1370</td>
<td>25,–</td>
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<tr>
<td>3 W LED illumination system (transmitted) (non-rechargeable)</td>
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<td>✓</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polarising unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyser/Polariser</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1283</td>
<td>265,–</td>
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<tr>
<td>Phase contrast units</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)</td>
<td>○</td>
<td>○</td>
<td>✓</td>
<td>OBB-A1237</td>
<td>1570,–</td>
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<td></td>
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<tr>
<td>Single unit with = PH-Plan objective 10×</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1214</td>
<td>310,–</td>
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<td>Single unit with = PH-Plan objective 20×</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1216</td>
<td>350,–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single unit with = PH-Plan objective 40×</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1218</td>
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<tr>
<td>Single unit with = PH-Plan objective 100×</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1212</td>
<td>510,–</td>
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</tr>
<tr>
<td>Centering eyepiece</td>
<td>○</td>
<td>○</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>C-Mount</td>
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<td></td>
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</tr>
<tr>
<td>1×</td>
<td>○</td>
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<td>○</td>
<td>OBB-A1140</td>
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<tr>
<td>0,57× (focus adjustable)</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1136</td>
<td>160,–</td>
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<tr>
<td>Fluorescence unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1155</td>
<td>4340,–</td>
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<tr>
<td>100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>OBB-A1153</td>
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<td>3 W LED Epi Fluorescence unit (B/G) including centering objective</td>
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<td>○</td>
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<td>OBB-A1156</td>
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<td>Colour filters for transmitted illumination</td>
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<tr>
<td>Blue</td>
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<td>✓</td>
<td>✓</td>
<td>OBB-A1188</td>
<td>19,–</td>
<td></td>
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<tr>
<td>Green</td>
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<td>✓</td>
<td>OBB-A1165</td>
<td>19,–</td>
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<tr>
<td>Yellow</td>
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<td>○</td>
<td>○</td>
<td>OBB-A1183</td>
<td>19,–</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

= Included with delivery  ○ = Option
Fluorescence microscope KERN OBN-14

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.

• With the OBN 147/OBN 148 halogen variant you have a filter wheel which has up to 6 fittings. As standard this is fitted with a B/G or B/G/UV/V fluorescence filter. The OBN 141 LED variant is fitted with a B/G fluorescence filter with a changeover slider as standard. The changeover slider and the filter wheel mean that you can change the stimulation filter quickly.

• 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.

Scope of application

• Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, Sewage treatment plants, Oncology, entomology, vets, water analysis and breweries.

Applications/Samples

• Especially 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. 23 kg

PROFESSIONAL LINE
The fluorescence microscope for the professional user
## Fluorescence microscope KERN OBN-14

<table>
<thead>
<tr>
<th>Model outfit</th>
<th>Model KERN</th>
<th>Order number</th>
<th>Price / piece excl. of VAT €</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OBN 141</td>
<td>OBN 147</td>
<td>OBN 148</td>
</tr>
<tr>
<td><strong>Eyepieces (23,2 mm)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HWF 10×/⌀ 20 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WF 10×/⌀ 20 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WF 16×/⌀ 13 mm</td>
<td>O O</td>
<td>O O</td>
<td>O O</td>
</tr>
<tr>
<td>WF 10×/⌀ 20 mm (reticle 0,1 mm) (adjustable)</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td><strong>Infinity Plan achromatic objectives</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4×/0,10 W.D. 12,1 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10×/0,25 W.D. 4,6 mm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>20×/0,40 (spring-loaded) W.D. 2,41 mm</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>40×/0,66 (spring-loaded) W.D. 0,65 mm</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm</td>
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<td>✓</td>
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<tr>
<td>2,5×/0,07 W.D. 8,47 mm</td>
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<tr>
<td>Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm</td>
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<td>O</td>
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<tr>
<td><strong>Trinocular tube</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Siedentopf 30° inclined/360° rotatable</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Interpupillary distance 50 – 75 mm</td>
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</tr>
<tr>
<td>- Light distribution 100:0</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Diopter adjustment: Both-sided</td>
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<tr>
<td>- Butterfly 30° inclined/360° rotatable</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>- Interpupillary distance 50 – 75 mm</td>
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<td></td>
</tr>
<tr>
<td>- Light distribution 100:0</td>
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</tr>
<tr>
<td>- Diopter adjustment: Both-sided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical stage</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Stage size WxD 175×145 mm</td>
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<tr>
<td>- Travel 78×55 mm</td>
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<tr>
<td>- Coaxial coarse and fine focusing knobs</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Two slide holder</td>
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<tr>
<td><strong>Condenser</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Abbe N.A. 1,25 center-adjustable (aperture diaphragm)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)</td>
<td>O</td>
<td>O</td>
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<tr>
<td><strong>Darkfield condenser</strong></td>
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</tr>
<tr>
<td>N.A. 0,85 – 0,91 (dry, paraboloid)</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>N.A. 1,3 (oil, cardioid)</td>
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<td>O</td>
<td>O</td>
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<tr>
<td><strong>Koehler illumination</strong></td>
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</tr>
<tr>
<td>20 W Halogen spare bulb (transmitted)</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Polarising unit</strong></td>
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<tr>
<td>Analyser/Polariser</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td><strong>Phase contrast units</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Quintuple hole turret with 10×/20×/40×/100× Infinity-Ph-Plan objectives (complete set)</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Single unit with = PH-Plan objective 10×</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Single unit with = PH-Plan objective 20×</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Single unit with = PH-Plan objective 40×</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Single unit with = PH-Plan objective 100×</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>If required, there are several magnification levels, please contact our OPTICS-Team</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>C-Mount</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1×</td>
<td>O</td>
<td>O</td>
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</tr>
<tr>
<td>0,57× (focus adjustable)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td><strong>Fluorescence unit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3 W LED Epi Fluorescence unit (B/G) including centering objective</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td><strong>Colour filters for transmitted illumination</strong></td>
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</tr>
<tr>
<td>Blue</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Green</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Yellow</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

= Included with delivery  
= Option
**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.

**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

**Scope of application**

- Research and breeding of cell cultures and tissue cultures

**Model**

<table>
<thead>
<tr>
<th>KERN</th>
<th>Standard configuration</th>
<th>Price excl. of VAT ex works €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OCM 161</strong></td>
<td>Trinocular</td>
<td><strong>HWF 10×/Ø 22 mm</strong></td>
</tr>
<tr>
<td><strong>OCM 165</strong></td>
<td>Trinocular</td>
<td><strong>HWF 10×/Ø 22 mm</strong></td>
</tr>
</tbody>
</table>

**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

**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.).
## Inverted microscope KERN OCM-1

<table>
<thead>
<tr>
<th>Model outfit</th>
<th>Model KERN</th>
<th>Order number</th>
<th>Price/piece excl. of VAT €</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eyepieces</strong> (30 mm)</td>
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<td></td>
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</tr>
<tr>
<td>HWF 10×/Ø 22 mm (adjustable)</td>
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<td>OBB-A1491</td>
<td>90,–</td>
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<tr>
<td>HWF 10×/Ø 20 mm (reticle 0,1 mm) (adjustable)</td>
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<td>OBB-A1523</td>
<td>140,–</td>
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<tr>
<td><strong>Infinity Plan achromatic objectives for long working distance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4×/0,11 W.D. 12,1 mm</td>
<td>○ ○</td>
<td>OBB-A1493</td>
<td>135,–</td>
</tr>
<tr>
<td>10×/0,25 W.D. 8,3 mm</td>
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<td>OBB-A1494</td>
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<td>20×/0,40 W.D. 7,2 mm</td>
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<td>OBB-A1495</td>
<td>215,–</td>
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<tr>
<td>40×/0,60 W.D. 3,4 mm</td>
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<td>OBB-A1496</td>
<td>280,–</td>
</tr>
<tr>
<td><strong>Trinocular tube</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 45° inclined</td>
<td>✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interpupillary distance 48–76 mm</td>
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<td></td>
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</tr>
<tr>
<td>- Light distribution 100:0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Diopter adjustment: Both-sided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical stage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Stage size W×D 210×241 mm</td>
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<td>- Travel128×80 mm</td>
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<tr>
<td>- Coaxial coarse and fine focusing knobs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The x/y control knobs can be fitted either left or right</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Suitable for attaching a 96-hole microtitre plate</td>
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</tr>
<tr>
<td>Drop specimen holder (Ø 110)</td>
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<td>OBB-A1503</td>
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<tr>
<td>Specimen holder for 35 mm culture dish</td>
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<td>OBB-A1505</td>
<td>60,–</td>
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<tr>
<td>Specimen holder for 54 mm culture dish</td>
<td>✓ ✓</td>
<td>OBB-A1506</td>
<td>60,–</td>
</tr>
<tr>
<td>Specimen holder for 65 mm culture dish</td>
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<td>OBB-A1507</td>
<td>60,–</td>
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<tr>
<td><strong>Condenser</strong></td>
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<td></td>
</tr>
<tr>
<td>Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm</td>
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<td>OBB-A1372</td>
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<tr>
<td><strong>Illumination</strong></td>
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<td></td>
</tr>
<tr>
<td>30 W Halogen spare bulb (transmitted)</td>
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<td>OBB-A1372</td>
<td>35,–</td>
</tr>
<tr>
<td><strong>Phase contrast units</strong></td>
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</tr>
<tr>
<td>Phase contrast slide (universal)</td>
<td>✓ ✓</td>
<td>OBB-A1500</td>
<td>100,–</td>
</tr>
<tr>
<td>Infinity PH-Plan objective 10×</td>
<td>○ ○</td>
<td>OBB-A1497</td>
<td>215,–</td>
</tr>
<tr>
<td>Infinity PH-Plan objective 20×</td>
<td>✓ ✓</td>
<td>OBB-A1498</td>
<td>280,–</td>
</tr>
<tr>
<td>Infinity PH-Plan objective 40×</td>
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<td>OBB-A1499</td>
<td>330,–</td>
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<tr>
<td>Centering eyepiece</td>
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<td>OBB-A1544</td>
<td>110,–</td>
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<tr>
<td><strong>Fluorescence unit</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>100 W HBO Epi Fluorescence unit, two-hole slide (B/G)</td>
<td>✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Colour filters for transmitted illumination</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>✓ ✓</td>
<td>OBB-A1510</td>
<td>19,–</td>
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<td>Green</td>
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<td>Yellow</td>
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<td>○ ○</td>
<td>OBB-A1513</td>
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<td>C-Mount</td>
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<td></td>
</tr>
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</table>

✓ = Included with delivery ○ = Option
#1 Pure competence in balances

“KERN offers you a complete, carefully-designed range of laboratory balances, analytical balances, moisture analysers, industrial scales and test weights. And all this at an extremely attractive price with the same high level of quality.

Browse and find products in the KERN 2020 catalogue for Balances & Test service.”

Stephan Ade, Head of Sales
Balances and test service

TIPS FROM THE EXPERTS

In addition to our range of microscopes and refractometers, we also offer you a comprehensive range of professional measuring and testing technology as well as a comprehensive range of medical scales.

We will offer you reliable quality at fair prices and with the shortest delivery times. Our product specialists will give you professional advice, will work with you to find the right product and will provide comprehensive support after the purchase too.

This ensures a high level of investment security and a good feeling – KERN, the nice balance manufacturer from the wilds of Southern Germany.

For all details on our ranges, please see www.kern-sohn.com or request your own personal catalogues right now:
Telephone +49 7433 9933-0
KERN & SOHN GmbH
Balances, Test weights, Microscopes,
DAkkS calibration laboratory
Ziegelei 1
72336 Balingen
Germany

Tel.  +49 7433 9933-0
Fax   +49 7433 9933-146

info@kern-sohn.com
www.kern-sohn.com

1769
Ancestor Johann Jakob Sauter built the Hahn inclination scale out of iron, a foundation stone for weighing for the balance industry in Southern Germany

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 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

2019
Significant anniversary year! 25 years of accredited DKD laboratory
175 years of KERN & SOHN
250 years of balance manufacture in the Sauter family-owned company

2020
Construction of Ziegelei 3.0, extension of administration building