

## Inverted microscope KERN OCM-1



OCM 161



OCM 165-168



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



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

## LAB LINE

## The inverted biological laboratory microscope – also with fluorescence

## Features

- The OCM range stands out through its design which is ergonomic, robust and extremely stable. This design, with its large working distance, is particularly suitable for the monitoring and analysis of cell cultures, for example
- A strong and continuously adjustable 30W halogen illumination unit ensures the optimum illumination in the bright field of your samples. In addition, either an Osram 100 W-HBO- (OCM 165/166) or a 5 W-LED Epi fluorescence incident illumination unit (OCM 167/168) are available to you as a fluorescence microscope for perfect illumination and stimulation of your fluorescence samples
- A special Abbe N.A. 0.3 condenser with aperture diaphragm and large working distance of 72 mm guarantees the very best working practise in the bright field and with fluorescence applications

- As standard, the OCM range is fitted with a trinocular eyepiece tube
- The mechanical stage including specimen holder ( $\varnothing$  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 165-168

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

## STANDARD



| Model                             | Standard configuration |                 |                   |                                   |   |  |
|-----------------------------------|------------------------|-----------------|-------------------|-----------------------------------|---|--|
|                                   | Tube                   | Eyepiece        | Objective quality | Objectives                        | Illumination  |  |
| <b>KERN</b>                       |                        |                 |                   |                                   |   |  |
| <b>OCM 161</b>                    | Trinocular             | HWF 10×/ϕ 22 mm | Infinity Plan     | LWD10×/LWD20×/<br>LWD40×/LWD20×PH | 30 W Halogen (transmitted)                          |  |
| <b>OCM 165</b>                    | Trinocular             | HWF 10×/ϕ 22 mm | Infinity Plan     |                                   | 30 W Halogen +<br>100 W Epi Fluorescence (B/G)      |  |
| <b>OCM 166</b> <small>NEW</small> | Trinocular             | HWF 10×/ϕ 22 mm | Infinity Plan     |                                   | 30 W Halogen +<br>100 W Epi Fluorescence (UV/V/B/G) |  |
| <b>OCM 167</b> <small>NEW</small> | Trinocular             | HWF 10×/ϕ 22 mm | Infinity Plan     |                                   | 5W-LED + 5W Epi Fluorescence (B/G)                  |  |
| <b>OCM 168</b> <small>NEW</small> | Trinocular             | HWF 10×/ϕ 22 mm | Infinity Plan     |                                   | 5W-LED + 5W Epi Fluorescence (UV/V/B/G)             |  |

































## Inverted microscope KERN OCM-1

| Model outfit  |  | Model KERN |         |         |         |         | Order number |  |
|---|--|------------|---------|---------|---------|---------|--------------|--|
|   |  | OCM 161    | OCM 165 | OCM 166 | OCM 167 | OCM 168 |              |  |
| <b>Eyepieces</b><br>(30 mm)   | HWF 10×/ø 22 mm (adjustable)   | ✓✓         | ✓✓      | ✓✓      | ✓✓      | ✓✓      | OBB-A 1491   |  |
|   | HWF 10×/ø 22 mm (reticule 0,1 mm) (adjustable)   | ○          | ○       | ○       | ○       | ○       | OBB-A 1523   |  |
| <b>Infinity Plan achromatic objectives</b><br>for long working distance       | 4×/0,11 W.D. 12,1 mm   | ○          | ○       |         |         |         | OBB-A 1493   |  |
|   | 10×/0,25 W.D. 8,3 mm   | ✓          | ✓       |         |         |         | OBB-A 1494   |  |
|   | 20×/0,40 W.D. 7,2 mm   | ✓          | ✓       |         |         |         | OBB-A 1495   |  |
|   | 40×/0,60 W.D. 3,4 mm   | ✓          | ✓       |         |         |         | OBB-A 1496   |  |
| <b>Infinity Plan achromatic Fluor objectives</b><br>for long working distance | 4×/0,11 W.D. 12,1 mm   |            |         | ○       | ○       | ○       | OBB-A 1600   |  |
|   | 10×/0,25 W.D. 10,3 mm  |            |         | ✓       | ✓       | ✓       | OBB-A 1601   |  |
|   | 20×/0,40 W.D. 5,8 mm   |            |         | ✓       | ✓       | ✓       | OBB-A 1602   |  |
|   | 40×/0,60 W.D. 5,1 mm   |            |         | ✓       | ✓       | ✓       | OBB-A 1603   |  |
| <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>Dioptr 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-A 1503   |  |
|   | Specimen holder for 35 mm culture dish   | ○          | ○       | ○       | ○       | ○       | OBB-A 1505   |  |
|   | Specimen holder for 54 mm culture dish   | ✓          | ✓       | ✓       | ✓       | ✓       | OBB-A 1506   |  |
|   | Specimen holder for 65 mm culture dish   | ○          | ○       | ○       | ○       | ○       | OBB-A 1507   |  |
| <b>Condenser</b>  | Abbe N.A. 0,3 (aperture diaphragm), LWD 72 mm  | ✓          | ✓       | ✓       | ✓       | ✓       |              |  |
| <b>Illumination</b>   | 30 W Halogen spare bulb (transmitted)  | ✓          | ✓       |         |         |         | OBB-A 1372   |  |
|   | 5 W LED spare bulb (transmitted)   |            |         |         | ✓       | ✓       | OBB-A 1589   |  |
| <b>Phase contrast units</b>   | Phase contrast slide 4x  | ○          | ○       | ○       | ○       | ○       | OBB-A 1608   |  |
|   | Phase contrast slide 10x   | ✓          | ✓       | ✓       | ✓       | ✓       | OBB-A 1609   |  |
|   | Phase contrast slide 20x/40x   | ✓          | ✓       | ✓       | ✓       | ✓       | OBB-A 1610   |  |
|   | Infinity PH-Plan objective 10×   | ○          | ○       |         |         |         | OBB-A 1497   |  |
|   | Infinity PH-Plan objective 20×   | ✓          | ✓       |         |         |         | OBB-A 1498   |  |
|   | Infinity PH-Plan objective 40×   | ○          | ○       |         |         |         | OBB-A 1499   |  |
|   | Infinity PH-Plan Fluor objective 4×  |            |         | ○       | ○       | ○       | OBB-A 1604   |  |
|   | Infinity PH-Plan Fluor objective 10x   |            |         | ○       | ○       | ○       | OBB-A 1605   |  |
|   | Infinity PH-Plan Fluor objective 20x   |            |         | ✓       | ✓       | ✓       | OBB-A 1606   |  |
|   | Infinity PH-Plan Fluor objective 40x   |            |         | ○       | ○       | ○       | OBB-A 1607   |  |
|   | Centering eyepiece   | ○          | ○       | ○       | ○       | ○       | OBB-A 1544   |  |
| <b>Fluorescence unit</b>  | 100 W HBO Epi Fluorescence unit, two-hole slide (B/G)  |            | ✓       |         |         |         |              |  |
|   | 100 W HBO Epi Fluorescence unit, four-hole slide (UV/V/B/G)  |            |         | ✓       |         |         |              |  |
|   | 5 W HBO Epi Fluorescence unit, two-hole slide (B/G)  |            |         |         | ✓       |         |              |  |
|   | 5 W HBO Epi Fluorescence unit, four-hole slide (UV/V/B/G)  |            |         |         |         | ✓       |              |  |
| <b>Colour filters</b><br>for transmitted illumination                         | Blue   | ✓          | ✓       | ✓       | ✓       | ✓       | OBB-A 1510   |  |
|   | Green  | ✓          | ✓       | ✓       | ✓       | ✓       | OBB-A 1511   |  |
|   | Yellow   | ○          | ○       | ○       | ○       | ○       | OBB-A 1512   |  |
|   | Grey   | ○          | ○       | ○       | ○       | ○       | OBB-A 1513   |  |
| <b>C-Mount</b>  | 0,5×   | ○          | ○       | ○       | ○       | ○       | OBB-A 1515   |  |
|   | 1×   | ○          | ○       | ○       | ○       | ○       | OBB-A 1514   |  |

✓ = Included with delivery

○ = Option

## Pictograms

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

## Abbreviations

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

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# WolfLabs

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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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