



OBT 231



Monocular version



Binocular version



LCD display ODC 231

Educational Line

The modern compound microscope for teaching in your class room

Features

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

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

- A large selection of different eyepieces and objectives is also available
- KERN OBT 231: Digital kit with LCD display for viewing samples, USB dual power supply for microscopes and displays, software for measurements as well as a USB interface and micro SD card slot for documenting recordings
- KERN ODC 231: LCD display, can be retrofitted on all models of the OBT range, see model fittings table
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

Scope of application

- Primary school, secondary school, training, hobby

Applications/Samples

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

Technical data

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

STANDARD



OPTION



nicht OBT 101

| Model | Tube | Eyepiece | Objective quality | Objectives | Illumination | Stage |
|-------|------|----------|-------------------|------------|--------------|-------|
|-------|------|----------|-------------------|------------|--------------|-------|

KERN

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

Note: Please request special conditions for a classroom set

Compound Microscope KERN OBT-1 · OBT-2

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

✓ = included with the delivery

○ = Option

Further accessories and spare parts
see *internet*