



Illumination unit



Sextuple filter wheel

Professional Line

The fluorescence microscope for the professional user

Features

- The fluorescence microscope in the OBN-14 series is based on the usual high quality and versatility of the OBN series. The outstanding, stable design in combination with high-quality optics set the standard in fluorescence microscopy in this class
- The powerful, dimmable 20 W halogen illumination unit (Philips) and a 100 W 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 3 W-LED transmitted illumination unit and 5 W-LED Epi fluorescence incident illumination unit
- This series has a professional Koehler illumination unit with an adjustable field diaphragm as well as a height-adjustable 1,25 Abbe condenser which can be centred and which has an adjustable aperture diaphragm

- The extremely large mechanical stage with ergonomic, coaxial coarse and fine focusing knob on both sides enables you to adjust and focus your sample rapidly and accurately
- As standard, the filter wheel which has up to 6 fittings is fitted with a B/G fluorescence filter (OBN 141/OBN 147) or B/G/UV/V fluorescence filter (OBN 148)
- A large selection of eyepieces, objectives, colour filters, darkfield condensers as well as a Butterfly Tube, polarising and phase contrast units can easily be integrated thanks to the modular construction system
- The centring objective for adjusting the fluorescence, a protective dust cover, eye cups as well as multi-lingual user instructions are included in the scope of delivery
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list.
- Please find detailed information in the following model outfit list

Scope of application

- Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, sewage treatment plants, oncology, entomology, Veterinary practices, water analysis, breweries

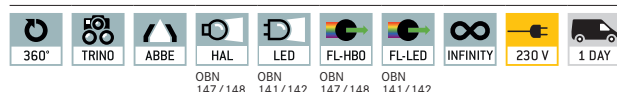
Applications/Samples

- Specially for translucent, thin, low-contrast, challenging samples (e.g. Immunofluorescence, FISH, DAPI staining, etc.)

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment, both-sided
- Overall dimensions W×D×H 530×220×490 mm
- Net weight approx. 13 kg

STANDARD



OPTION



Model

Standard configuration

| KERN | Tube | Eyepiece | Objective quality | Objectives | Illumination |
|----------------|------------|------------------|-------------------|-----------------------------|--|
| OBN 141 | Trinocular | HWF 10 x/Ø 20 mm | Infinity Plan | | LED + 5W LED-Epi Fluorescence (B/G) |
| OBN 142 | Trinocular | HWF 10 x/Ø 20 mm | Infinity Plan | 4× / 10× / 20× / 40× / 100× | LED + 5W LED-Epi Fluorescence (B/G/UV/V) |
| OBN 147 | Trinocular | HWF 10 x/Ø 20 mm | Infinity Plan | | Halogen + 100W Epi Fluorescence (B/G) |
| OBN 148 | Trinocular | HWF 10 x/Ø 20 mm | Infinity Plan | | Halogen + 100W Epi Fluorescence (B/G/UV/V) |

New model

Fluorescence Microscope KERN OBN-14

| Model outfit | | Model KERN | | | | Order number |
|---|---|------------|---------|---------|---------|--------------|
| | | OBN 141 | OBN 142 | OBN 147 | OBN 148 | |
| Eyepieces (23,2 mm) | HWF 10 ×/Ø 20 mm | ✓✓ | ✓✓ | ✓✓ | ✓✓ | OBB-A1404 |
| | WF 10 ×/Ø 20 mm | ○ | ○ | ○ | ○ | OBB-A1351 |
| | WF 16 ×/Ø 13 mm | ○ | ○ | ○ | ○ | OBB-A1354 |
| | WF 10 ×/Ø 20 mm (reticule 0,1 mm) (adjustable) | ○ | ○ | ○ | ○ | OBB-A1352 |
| Infinity Plan achromatic objectives | 4 ×/0,11 W.D. 12,1 mm | ✓ | ✓ | ✓ | ✓ | OBB-A1263 |
| | 10 ×/0,25 W.D. 4,64 mm | ✓ | ✓ | ✓ | ✓ | OBB-A1243 |
| | 20 ×/0,4 (spring-loaded) W.D. 2,41 mm | ✓ | ✓ | ✓ | ✓ | OBB-A1250 |
| | 40 ×/0,66 (spring-loaded) W.D. 0,65 mm | ✓ | ✓ | ✓ | ✓ | OBB-A1257 |
| | 100 ×/1,25 (oil) (spring-loaded) W.D. 0,19 mm | ✓ | ✓ | ✓ | ✓ | OBB-A1240 |
| | Plan 60 ×/0,8 (spring-loaded) W.D. 0,33 mm | ○ | ○ | ○ | ○ | OBB-A1270 |
| Infinity Plan Semi Apochromatic objectives | 10 ×/0,3 W.D. 7,68 mm | ○ | ○ | ○ | ○ | OBB-A1634 |
| | 20 ×/0,5 W.D. 1,96 mm | ○ | ○ | ○ | ○ | OBB-A1635 |
| | 40 ×/0,75 (spring-loaded) W.D. 0,78 mm | ○ | ○ | ○ | ○ | OBB-A1636 |
| | 100 ×/1,3 (oil) (spring-loaded) W.D. 0,15 mm | ○ | ○ | ○ | ○ | OBB-A1637 |
| Trinocular tube | · Butterfly 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm · Light distribution 100:0 · Diopter adjustment: Both-sided | ✓ | ✓ | ✓ | ✓ | |
| Mechanical stage | · Stage size W×D 175×145 mm · Travel 78×55 mm · Coaxial coarse and fine focusing knobs · Two slide holder | ✓ | ✓ | ✓ | ✓ | |
| Condenser | Abbe N.A. 1,25 center-adjustable (aperture diaphragm) | ✓ | ✓ | ✓ | ✓ | OBB-A1102 |
| | Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm) | ○ | ○ | ○ | ○ | OBB-A1104 |
| Darkfield condenser | N.A. 0,85-0,91 (dry, paraboloid) | ○ | ○ | ○ | ○ | OBB-A1421 |
| | N.A. 1,3 (oil, cardioid) | ○ | ○ | ○ | ○ | OBB-A1538 |
| Koehler illumination | 20 W Halogen spare bulb (transmitted) | | | ✓ | ✓ | OBB-A1643 |
| | 3 W LED illumination system (transmitted) (non-rechargeable) | ✓ | ✓ | | | |
| Polarising unit | Analyser/Polariser | ○ | ○ | ○ | ○ | OBB-A1283 |
| Phase contrast units | Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set) | ○ | ○ | ○ | ○ | OBB-A1237 |
| | Single unit with ∞ PH-Plan objective 10× | ○ | ○ | ○ | ○ | OBB-A1214 |
| | Single unit with ∞ PH-Plan objective 20× | ○ | ○ | ○ | ○ | OBB-A1216 |
| | Single unit with ∞ PH-Plan objective 40× | ○ | ○ | ○ | ○ | OBB-A1218 |
| | Single unit with ∞ PH-Plan objective 100× | ○ | ○ | ○ | ○ | OBB-A1212 |
| | If required, there are several magnification levels, please contact our OPTICS-Team | | | | | |
| C-Mount | 1 × | ○ | ○ | ○ | ○ | OBB-A1140 |
| | 0,57 × (focus adjustable) | ○ | ○ | ○ | ○ | OBB-A1136 |
| Fluorescence unit | 100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective | | | | ✓ | |
| | 100 W HBO Epi Fluorescence unit, 6-filter-disc (B/G) including centering objective | | | ✓ | | |
| | 5 W LED Epi Fluorescence unit 6-filter-disc (UV/V/B/G) including centering objective | | ✓ | | | |
| | 5 W LED Epi Fluorescence unit 6-filter-disc (B/G) including centering objective | ✓ | | | | |
| Colour filters for transmitted illumination | Blue | ○ | ○ | ✓ | ✓ | |
| | Green | ○ | ○ | ○ | ○ | OBB-A1188 |
| | Yellow | ○ | ○ | ○ | ○ | OBB-A1165 |
| | Grey | ○ | ○ | ○ | ○ | OBB-A1183 |

✓ = Included with delivery

○ = Option