

## B-60 Series



**Entry-Level Biological Microscopes For Students**



# Cordless Educational Microscopes, Perfect For First Experiences

## PERFECT FOR STUDENT'S FIRST EXPERIENCES

- » Designed for novice users (students and primary schools especially)
- » Easy to handle, also by the youngest users
- » Longlife LED illumination (providing over 20 years of use)
- » Compact, practical and intuitive to use
- » Sturdy and durable for extended lifetime

## COMFORTABLE, INTUITIVE & RELIABLE SOLUTIONS

- » 18 mm field number for an extended observation area
- » StagErase™ eraseable stage to reduce scratches
- » Arm/wrist rest support to reduce the fatigue during use
- » Cordless use, totally independent from the mains connection
- » External power supply for enhanced safety and convenient servicing





## B-60 Series

A wide range of cordless, modern microscopes ideal for students and mainly primary schools with achromatic lenses, FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, all the models are equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.



### Arm/wrist rest support to reduce the fatigue during use

Students get relaxed and stay relaxed when using the microscope! Effective in preventing fatigue during operation, increasing the ergonomics and the performance as a result.

### StagErase™ erasable stage to remove scratches

Here's something you've never seen before! This new, revolutionary stage is coated with a special painting to reduce accidental scratches to the minimum and facilitate their removal.



### Cordless use, totally independent from the mains connection

All models work with or without the batteries in place and are provided with three NiMH rechargeable batteries for outdoor use (15-hour autonomy, at medium intensity).

### Low voltage, external power supply for enhanced safety and convenient servicing

OPTIKA's safety first approach drives to the use of a multi-plug, external power supply in order to prevent any risk of electric shock and heatflow inside the unit.

### Longlife LED illumination (providing over 20 years of use)

Money & energy saving thanks to LED long lifetime (65.000 hours, 22 years in case of 8 hours/day) which is more than 20 times compared to a standard halogen bulb.



# B-60 Series - Models

## B-61



Cordless, modern monocular microscope ideal for students and mainly primary schools with achromatic lenses (400x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable fixed stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Monocular, 45° inclined; 360° rotating.

**Eyepiece:** WF10x/18 mm, secured by screw.

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment

**Specimen stage:** StagErase™ erasable fixed stage, 120x110 mm, with sample clips.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** N.A. 0.65 with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

## B-62



Cordless, modern monocular microscope ideal for students and mainly primary schools with achromatic lenses (400x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Monocular, 45° inclined; 360° rotating.

**Eyepiece:** WF10x/18 mm, secured by screw.

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

## B-63



Cordless, modern monocular microscope ideal for students and mainly primary schools with achromatic lenses (600x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Monocular, 45° inclined; 360° rotating.

**Eyepiece:** WF10x/18 mm, secured by screw.

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment
- Achromatic 60x/0.85, with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

## B-65



Cordless, modern monocular microscope ideal for students and mainly primary schools with achromatic lenses (1000x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Monocular, 45° inclined; 360° rotating.

**Eyepiece:** WF10x/18 mm, secured by screw.

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment
- Achromatic 100x/1.25 (oil), with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

# B-60 Series - Models

## B-66



Cordless, modern binocular microscope ideal for students and mainly primary schools with achromatic lenses (400x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Binocular, 45° inclined; 360° rotating.

Dioptic adjustment: Left eyepiece.

**Eyepiece:** WF10x/18 mm, secured by screw

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

## B-67



Cordless, modern binocular microscope ideal for students and mainly primary schools with achromatic lenses (600x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Binocular, 45° inclined; 360° rotating.

Dioptic adjustment: Left eyepiece.

**Eyepiece:** WF10x/18 mm, secured by screw

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment
- Achromatic 60x/0.85, with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

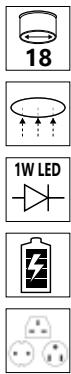
**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

# B-60 Series - Models

## B-69



Cordless, modern binocular microscope ideal for students and mainly primary schools with achromatic lenses (1000x), FN 18, finite optical system, coaxial focusing, StagErase™ erasable mechanical stage and 1 W LED illumination with rechargeable batteries. Slim and easy to carry, it is equipped with arm /wrist rest support to reduce the fatigue during use and long lasting LED illumination to provide over 20 years of use.

**Observation mode:** Brightfield.

**Head:** Binocular, 45° inclined; 360° rotating.  
Dioptric adjustment: Left eyepiece.

**Eyepiece:** WF10x/18 mm, secured by screw

**Nosepiece:** Quadruple ball bearings revolving nosepiece, reversed.

**Objectives:**

- Achromatic 4x/0.10, with anti-fungus treatment
- Achromatic 10x/0.25, with anti-fungus treatment
- Achromatic 40x/0.65, with anti-fungus treatment
- Achromatic 100x/1.25 (oil), with anti-fungus treatment

**Specimen stage:** StagErase™ erasable mechanical stage, 125x125 mm, 62x24 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.

**Condenser:** Abbe N.A. 1.25, pre-centered, focusable, with iris diaphragm.

**Illumination:** 1 W LED built-in in the condenser, with brightness control. Color temperature: 6,300 K. Multi-plug 100-240Vac/5Vdc external power supply.

## B-60 Series - Comparison chart

Model	Head	Eyepiece(s)	Nosepiece	Objectives	Stage	Focusing	Condenser	Illuminator
<b>B-61</b>	Monocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x	Fixed, 120x110 mm	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-62</b>	Monocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x	Fixed, 120x110 mm	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-63</b>	Monocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x, 60x	Fixed, 120x110 mm	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-65</b>	Monocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x, 100x (oil)	Fixed, 120x110 mm	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-66</b>	Binocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x	Mechanical, 125x125 mm with 62x24 mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-67</b>	Binocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x, 60x	Mechanical, 125x125 mm with 62x24 mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control
<b>B-69</b>	Binocular, 360° rotating, 45° inclined	Wide Field 10x/18mm	Quadruple, reversed	Achromatic 4x, 10x, 40x, 100x (oil)	Mechanical, 125x125 mm with 62x24 mm X-Y moving range	Coaxial coarse and fine focusing	N.A. 1.25 Abbe type with iris diaphragm.	1 W LED, brightness control

# B-60 Series - Accessories

## ACCESSORIES FOR B-60 SERIES

M-001	Huygens 5x eyepiece
M-002.2	WF10x/18 eyepiece
M-003.2	WF15x/12 eyepiece
M-004.2	WF10x/18 eyepiece, with micrometric scale (10mm/100um)
M-005	Micrometric slide, 26x76mm, with 2 X scales (1mm/100div. for biological / 10mm/100div. for stereo)
M-008.2	WF10x/18 eyepiece, with pointer
M-131	Achromatic objective 4x/0.10
M-132	Achromatic objective 10x/0.25
M-133	Achromatic objective 20x/0.40
M-134	Achromatic objective 40x/0.65
M-135	Achromatic objective 60x/0.85
M-136	Achromatic objective 100x/1.25 (oil)
M-114	0.5x C-Mount projection lens
M-115	0.35x C-Mount projection lens
M-118	0.75x C-Mount projection lens
M-155.2	Polarising set (filters only)
M-040	Attachable mechanical stage
M-173	Photo adapter for APS-C and Full Frame Reflex cameras
15008	Immersion oil, 10ml
DC-001	Plastic dust cover, small, for B-60, MS/SFX & Ecovision Series 340(l)x400(h) mm

### 15104 - Cleaning kit

It cleans glass quickly and effectively, without leaving residue or odor. Ideal for precision lens or prism cleaning.



#### How to connect the cameras to our microscopes.

Please refer to the Adapter reference list on Digital section.

v 1.3.0 - OPTIKA reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products at any time without notice.

## Headquarters and Manufacturing Facilities

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