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# ECOVISION Series



#### **Entry-Level Biological Microscopes For Students**

# A Range Of Quality Microscopes For Beginners

#### **DESIGNED FOR NOVICE USERS**

- » Reliable microscopes for education
- » Particularly recommended for primary school
- » Get great images and live videos with eyepiece cameras

#### **BIOLOGICAL EDUCATIONAL MICROSCOPES**

- $\ensuremath{\,^{\scriptscriptstyle N}}$  Choose among monocular and binocular heads
- » 18mm field number for a good observation area
- » Achromatic lenses for common applications



Educational

#### HANDY, YET EXTREMELY STABLE

- » Compact, practical and intuitive to use
- » Achromatic optics ensuring good quality images
- » Easy to handle, also by the youngest students

#### EASY TO TAKE CARE OF

- » Sturdy and durable for extended lifetime
- » No maintenance required
- » Dust cover (included) protects from environmental contaminants



## **ECOVISION** Series

OPTIKA ECOVISION Series includes monocular and binocular biological microscopes, designed especially for students attending primary school. Slim and easy to carry solutions, they are equipped with all the basic controls of an optical microscope and all you need to start learning to use a scientific instrument: 18 mm field of view, up to 400x maximum magnification (1000x as optional), several options concerning stages, focusing, condenser and illumination system.

#### **Easy To Carry Solutions**

This series is characterized by extreme compactness and portability as models can be moved easily in the classroom or even outdoors.

The body of the microscope is slim and, according to the model, provided with a useful handle: the teaching activity will be facilitated and more enjoyable.

#### **Extremely Easy And Fast Vision**

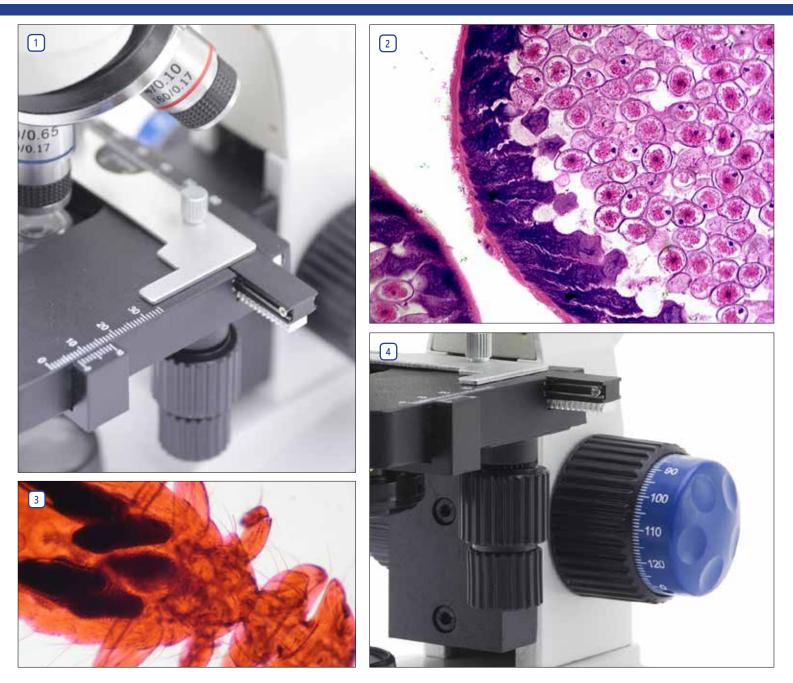
You find here the basic controls of an optical microscope and all you need to start learning to use a scientific instrument. Pre-aligned illumination and condenser simplify the operation and make necessary just the focusing of the specimen by using the dedicated knobs.

#### **LED - Optimized Illumination**

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.



### Entry-Level Biological Microscopes For Students



#### Legend

- 1. Mechanical stage of B-20CR.
- 2. Ascaris female, 10x objective.
- 3. Dust mite, with B-20R and 40x objective.
- 4. Ergonimical coaxial coarse and fine focusing mechanism of B-20CR.

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#### **ECOVISION** Series - B-20 Models 1

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-D+

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### **B-20R**



Cordless simple microscope equipped with efficient LED illumination with rechargeable batteries. Comfortable handle makes this model ideal for the youngest students.

Observation mode: Brightfield.

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

Eyepiece: WF10x/18 mm.

Nosepiece: Triple ball bearings revolving nosepiece.

**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

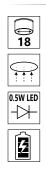
Specimen stage: X-Y moving and 360° rotating, 90 mm diameter, with sample clips.

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

Condenser: Diffusing filter with rotating diaphragm wheel.

Illumination: 0.3 W LED, with light intensity control, rechargeable batteries. Color temperature: 6,300 K. 100-240Vac/5Vdc external power supply.

### **B-20CR**





Same as B-20R but complete of mechanical stage, condenser and coaxial focusing knobs.

#### Observation mode: Brightfield.

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

Eyepiece: WF10x/18 mm, secured by screw.

Nosepiece: Triple ball bearings revolving nosepiece.

#### **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: Double layer, 105x95 mm, moving range 50x15 mm.

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.

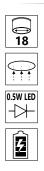
Illumination: 0.5 W LED, with light intensity control, rechargeable batteries. Color temperature: 6,300 K. 100-240Vac/5Vdc external power supply.

### **ECOVISION** Series - M-100 Models





### M-100FLed





#### Classic monocular microscope equipped with ultra-efficient LED illumination, 45° inclined and 360° rotating head.

Observation mode: Brightfield.
Head: Monocular, 45° inclined; 360° rotating.
Eyepiece: WF10x/18 mm, secured by screw.
Nosepiece: Triple ball bearings revolving nosepiece.
<b>Objectives:</b> - 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: Fixed stage, 120x110 mm. With sample clips.
<b>Focusing:</b> Separate coarse and fine focusing mechanism with lim stop to prevent the contact between objective and specimen.
<b>Condenser:</b> N.A. 0.65 with iris diaphragm.

**Illumination:** 1 W LED. Color temperature: 6,300 K. 100-240Vac/12Vdc external power supply.

Classic monocular microscope equipped with efficient LED illumination and internal rechargeable batteries which provides up to 8 hours of outdoor use.

#### Observation mode: Brightfield.

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

Eyepiece: WF10x/18 mm, secured by screw.

Nosepiece: Triple ball bearings revolving nosepiece.

#### **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: Fixed stage, 120x110 mm. With sample clips.

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

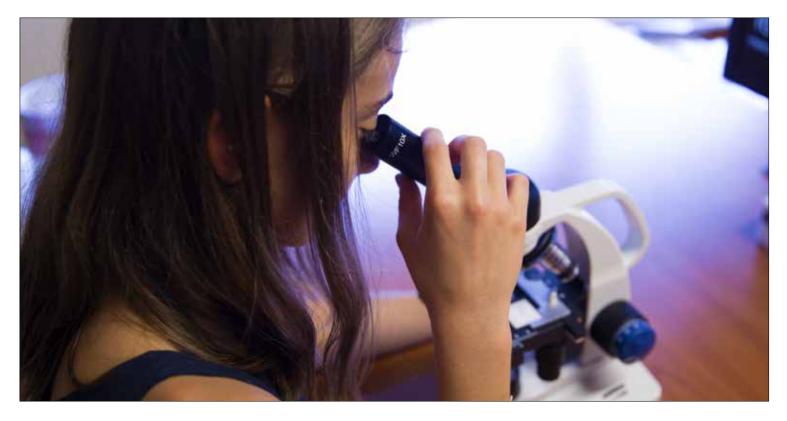
Condenser: N.A. 0.65 with iris diaphragm.

**Illumination:** 0.5 W LED, with light intensity control, rechargeable batteries.Color temperature: 6,300 K. 100-240Vac/12Vdc external power supply.

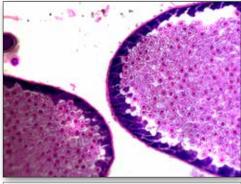
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### **ECOVISION** Series - Comparison chart

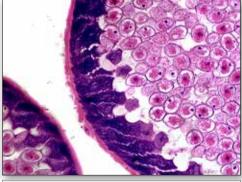
Model	Head	Eyepieces	Nosepiece	Objectives	Stage	Focusing	Condenser	Illumination
B-20R	Monocular, 45° inclined, 360° rotating	WF 10x/18	Triple, reversed	Achromatic 4x, 10x, 40x	X-Y moving, 360° rotating, 90 mm diameter, with sample clips	Separate coarse and fine	Diffusing filter with rotating diaphragm wheel	0.3 W LED, with brightness control, rechargeable batteries
B-20CR	Monocular, 45° inclined, 360° rotating	WF 10x/18	Triple, reversed	Achromatic 4x, 10x, 40x	Double layer, 105x95 mm, moving range 50x15 mm	Coaxial coarse and fine	N.A. 0.65, with iris diaphragm	0.5 W LED, with brightness control, rechargeable batteries
M-100FX	Monocular, 45° inclined, 360° rotating	WF 10x/18	Triple	Achromatic 4x, 10x, 40x	Fixed, 120x110 mm, with sample clips	Separate coarse and fine	N.A. 0.65, with iris diaphragm	1 W LED
M-100FLed	Monocular, 45° inclined, 360° rotating	WF 10x/18	Triple	Achromatic 4x, 10x, 40x	Fixed, 120x110 mm, with sample clips	Separate coarse and fine	N.A. 0.65, with iris diaphragm	0.5 W LED, with brightness control, rechargeable batteries



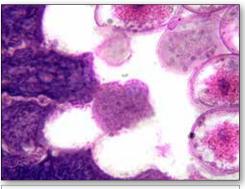
### **ECOVISION** Series - Zoom comparison



Ascaris female - 4x objective



Ascaris female - 10x objective



Ascaris female - 40x objective

### **ECOVISION** Series - Accessories

M-002.1 M-008	ACCESSORIES FOR B-20R / B-20CR WF10x/18 eyepiece, high eyepoint. WF10x/18 eyepiece, with pointer.
M-131 M-132 M-133 M-134 M-135 M-136	Achromatic objective 4x/0.10 (for B-20CR only). Achromatic objective 10x/0.25 (for B-20CR only). Achromatic objective 20x/0.40 (for B-20CR only). Achromatic objective 40x/0.65 (for B-20CR only). Achromatic objective 60x/0.85 (for B-20CR only). Achromatic objective 100x/1.25 (oil) (for B-20CR only).
M-114 M-115 M-118 M-173 M-069 DC-001 15104	0.5x C-Mount projection lens. 0.35x C-Mount projection lens. 0.75x C-Mount projection lens. Photo adapter for APS-C and Full Frame Reflex cameras. Solar charger. Plastic dust cover, small 340(l)x400(h) mm. Cleaning kit.
M-001 M-002.1 M-003 M-004 M-008	ACCESSORIES FOR M-100FX / M-100FLed Huygens 5x eyepiece. WF10x/18 eyepiece, high eyepoint. WF16x/12 eyepiece. WF10x/18 eyepiece, with micrometric scale (10mm/100um). WF10x/18 eyepiece, with pointer.
M-131 M-132 M-133 M-134 M-135 M-136	Achromatic objective 4x/0.10. Achromatic objective 10x/0.25. Achromatic objective 20x/0.40. Achromatic objective 40x/0.65. Achromatic objective 60x/0.85. Achromatic objective 100x/1.25 (oil).

- M-136 Achromatic objective 100x/1.25 (oil).
- M-114 0.5x C-Mount projection lens.
- 0.35x C-Mount projection lens. 0.75x C-Mount projection lens. M-115
- M-118
- Photo adapter for APS-C and Full Frame Reflex cameras. M-173
- M-040
- Attachable mechanical stage. Polarizing set (filters and rotating table). M-099
- M-005
- Micrometric slide, 26x76mm, with 2 X scales (1mm/100div. for biological / 10mm/100div. for stereo).
- M-069 Solar charger.
- DC-001 Plastic dust cover, small 340(l)x400(h) mm.
- 15104 Cleaning kit.
- OPTIKA immersion oil 10ml. 15008

#### M-069 - Solar charger

Included battery: rechargeable – Lithium-Poly. Capacity: 2600 mAh. Output voltage: 5.5Vdc. - Dimensions: 120x73x10 mm. Autonomy: over 6 hours at medium intensity (X-LED<sup>3</sup>). Charging modes: with solar panel (12h), with external USB power supply (not included) or from PC USB port (5h).

#### 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.

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100 Lauman Lane, Suite A, Hicksville, NY 11801 Tel: (877) 877-7274 | Fax: (516) 801-2046 Email: Info@nyscopes.com www.microscopeinternational.com

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#### Headquarters and Manufacturing Facilities

**OPTIKA<sup>®</sup> S.r.I.** 

S.r.I. Via Rigla, 30 - 24010 Ponteranica (BG) - ITALY - Tel.: +39 035.571.392 - info@optikamicroscopes.com

**Optika Sales branches** 

OPTIKA<sup>®</sup> Spain OPTIKA<sup>®</sup> China OPTIKA<sup>®</sup> India spain@optikamicroscopes.com china@optikamicroscopes.com india@optikamicroscopes.com

#### **OPTIKA**<sup>®</sup> USA **OPTIKA**<sup>®</sup> Central America

usa@optikamicroscopes.com camerica@optikamicroscopes.com