

Entry-level biological microscopes for students

### **ECOVISION**

BP-20/400 / BP-20/400Hal / BP-20/600 B-20 / B-20C / B-20R / B-20 Solar / B-50 M-100FL / M-100FL-H / M-100FLed

## **ECOVISION** Series

Entry-level biological microscopes for students



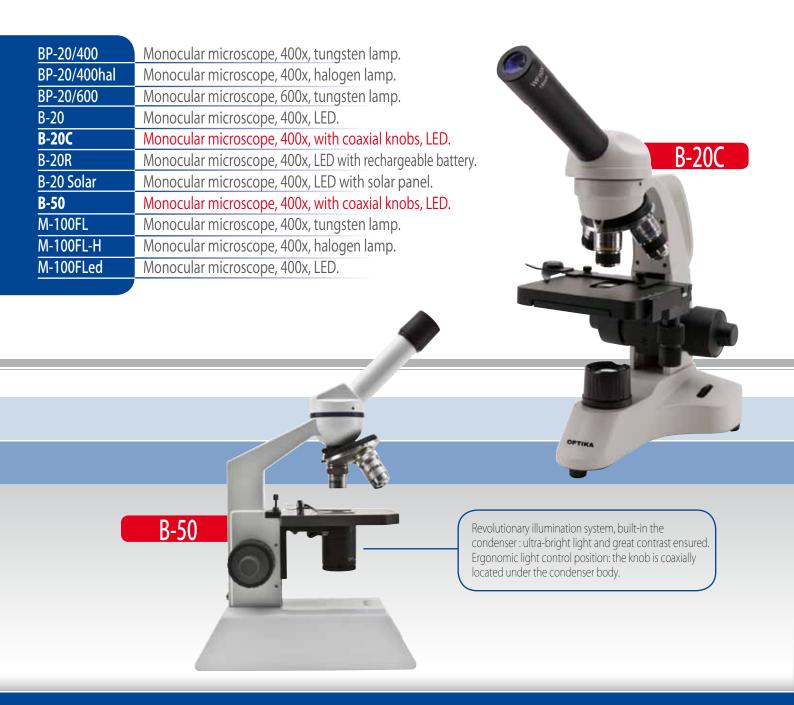


### **ECOVISION** Series

Monocular biological microscopes designed especially for students attending primary and secondary schools.

The metal structure combines sturdiness and ease of use.

The wide selection of available models allows to choose the most suitable microscope according to the application required.





#### **B-50**

This microscope is the perfect choice for students who want an innovative and easy to use product.

### Illumination

Special condenser with built-in illuminator. Light source: high intensity cold white LED, with adjustment knob. Input voltage: 110/230Vac, 50/60Hz. Max required power: 1W

### **Observation modes**

Brightfield.

### **Focusing**

Coaxial coarse and fine focusing mechanism.

### Stage

120 mm x 110 mm stage with sample clips.

### Nosepiece

Three positions revolving nosepiece, rotation on ball bearings.

#### Head

Monocular, 45° inclined and 360° rotatable.

### **Eyepiece**

WF10x/18 widefield eyepiece with field number 18mm.

### **Objectives**

Achromatic objectives with mechanical tube lenght 160 mm, 0,17mm cover glass:

- -) Achromatic 4X
- -) Achromatic 10X
- -) Achromatic 40X

All objectives are treated with an anti-fungus treatment.

### Condenser

N.A. 0,65 pre-centered, with built-in illuminator.

### **Dimensions**

Height: 350 mm Width: 132 mm Depth: 220 mm





### **BP-20/400**

Monocular biological microscope with 400x magnification which can be increased to 960x through an additional 16x eyepiece and a 60x objective. 360° rotating head, with 45° inclined eyepiece tube.

Wide Field 10x/18mm eyepiece.

Triple nosepiece rotating in both directions with objective click locking system.

DIN achromatic objectives: 4x, 10x and telescopic 40x.

Coaxial coarse and fine focusing knobs located on both sides of the stand.

The fine focusing knobs are graduated.

Stage complete with slide clips.

0.65 N.A. condenser with rotating disc diaphragm.

Built-in illuminator with 230V/20W bulb and condensing lens.

### **BP-20/400hal**

The same configuration as BP-20/400, with external power supply and 12V/10W halogen bulb.

### **BP-20/600**

The same configuration as BP-20/400, with 60x objective instead of 40x objective and 600x maximum magnification.







#### **B-20**

Monocular biological microscope with 400x magnification. 360° rotating head, with 45° inclined eyepiece tube.

Wide Field 10x/16mm eyepiece.

Triple nosepiece rotating in both directions with objective click locking system.

Achromatic objectives: 4x, 10x and telescopic 40x.

Separate coarse and fine focusing knobs with different axis, with focus tension adjustment.

Movable round stage, 90 mm diameter, 5 mm moving range, slide clips.

White LED, with brightness control.

### **B-20C**

Monocular biological microscope, with 400x maximum magnification. Achromatic objectives 4x, 10x and 40x, and wide field 10x/18mm eyepiece. Coaxial coarse and fine focus knobs located on both sides of the stand. Double layer mechanical stage, size 105x95mm, with specimen holder. White LED illuminator with rechargeable battery.

### **B-20R**

The same configuration as B-20 with rechargeable battery.









#### M-100FL

Monocular biological microscope with 400x magnification which can be increased to 1600x through an additional 16x eyepiece and an 100x objective. 360° rotating head, with 45° inclined eyepiece tube.

Wide Field 10x/18mm eyepiece.

Triple nosepiece revolver rotating in both directions with objectives click locking system.

DIN achromatic objectives: 4x, 10x and telescopic 40x.

Coarse and fine focusing knobs located on both sides of the stand. The fine focusing knobs are graduated.

Stage complete with slide clips;

0.65 N.A. condenser, iris diaphragm and filter holder.

Built-in illuminator with 230V/20W bulb and condensing lens.

### M-100FL-H

The same configuration as M-100FL, with built-in 12V/10W halogen illuminator with dichroic bulb. External transformer included.

### M-100FLed

Monocular microscope with the same technical specifications as model M-100FL, except for the illumination. Built-in 3-LED illuminator with 3 rechargeable batteries. The illuminator can be used for 24 hours continously without any recharge. Battery charging enabled while using the microscope.

External recharger included.

Battery pack: 3 x AA, 1.2V NiMh, 1000 mAh, replaceable by the user.

Time required for a full recharge: 10 hours.

Battery runtime with LED at maximum power: 12 hours

Battery charging enabled while using the microscope. Performances estimated with batteries at their maximum efficiency.







# **ECOVISION** Series - Technical specifications

Model	Head	Eyepiece	Objectives	Stage	Focusing	Illuminator
BP-20/400	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Coaxial coarse and fine control knobs	20W tungsten
BP-20/400hal	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Coaxial coarse and fine control knobs	10W halogen
BP-20/600	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 60x	120x110 mm with sample clips	Coaxial coarse and fine control knobs	20W tungsten
B-20	Monocular	WF10x/16mm	Achromatic 4x, 10x, 40x	Movable, 360° rotating, 90mm diameter, with sample clips	Separate coarse and fine control knobs	LED
B-20C	Monocular	WF10X/18mm	Achromatic 4x, 10x, 40x	Mechanical stage, 105x95mm with specimen holder	Coaxial coarse and fine control knobs	LED with rechargeable battery
B-20R	Monocular	WF10x/16mm	Achromatic 4x, 10x, 40x	Movable, 360° rotating, diameter 90mm, with sample clips	Separate coarse and fine control knobs	LED with rechargeable battery
B-20 SOLAR	Monocular	WF10x/16mm	Achromatic 4x, 10x, 40x	Movable, 360° rotating, diameter 90mm, with sample clips	Separate coarse and fine control knobs	LED powered by solar panel
B-50	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Coaxial coarse and fine control knobs	Special condenser with built-in 1W LED
M-100FL	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Separate coarse and fine control knobs	20W tungsten
M-100FL-H	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Separate coarse and fine control knobs	10W halogen
M-100FLed	Monocular	WF10x/18mm	Achromatic DIN 4x, 10x, 40x	120x110 mm with sample clips	Separate coarse and fine control knobs	LED with rechargeable battery

### **ECOVISION** Series - Accessories

	BP-20/400 - BP-20/400hal - BP-20/600
M-001	Eyepiece H5x
M-002	Eyepiece WF10x/18mm
M-003	Eyepiece WF16x/12mm
M-004	Eyepiece micrometer WF10x/18mm
M-730	Achromatic objective 4x/0.10
M-731	Achromatic objective 10x/0.25
M-732	Achromatic objective 20x/0.40
M-733	Achromatic objective 40x/0.65
M-734	Achromatic objective 60x/0.80
M-040	Attachable mechanical stage
M-099	Polarising set (filters and rotating table)
M-012	Tungsten bulb 20W/230V
M-970	Plane-concave mirror, with base, type 3
M-015	Dust cover, type 2

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	B-20 - B-20R - B-20 Solar
M-044	Eyepiece WF10x/16mm
M-727	Achromatic objective 4x/0.10
M-728	Achromatic objective 10x/0.25
M-729	Achromatic objective 40x/0.65
M-030	Dust cover, type 1

	M-100FL - M-100FL-H - M-100FLed
M-001	Eyepiece H5x
M-002	Eyepiece WF10x/18mm
M-003	Eyepiece WF16x/12mm
M-004	Eyepiece micrometer WF10x/18mm
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/0.80
M-136	Achromatic objective 100x/1.25 (oil)
M-040	Attachable mechanical stage
M-099	Polarising set (filters and rotating table)
M-012	Tungsten bulb 20W/230V
M-013	Halogen bulb 12V/10 W, with dichroic mirror
M-971	Plane-concave mirror, with base, type 4
M-015	Dust cover, type 2
M-069	Solar battery pack for M-100FLed

	B-50
M-001	Eyepiece H5x
M-002.1	Eyepiece WF10x/18mm
M-003	Eyepiece WF16x/12mm
M-004	Eyepiece micrometer WF10x/18mm
M-131	Achromatic objective 4x/0.10
M-132	Achromatic objective 10x/0.25
M-134	Achromatic objective 40x/0.65
M-040	Attachable mechanical stage
M-099	Polarising set (filters and rotating table)
M-015	Dust cover, type 2
M-069	Solar battery pack

B-20C		
Eyepiece WF10x/18mm		
Achromatic objective 4x/0.10		
Achromatic objective 10x/0.25		
Achromatic objective 40x/0.65		
Dust cover, type 1		
Solar battery pack		



### 15103 - Lens cleaner, 50ml

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



### M-069 - Solar battery pack

Included battery: rechargeable – Lithium-Poly. Capacity: 2500 mAh.

Output voltage: 5,5Vdc. Dimensions: 110x70x15 mm.

Autonomy: 7h at max intensity.

Charging modes: with solar panel (12h) - with included power supply (6h).

### **OPTIKA SRL**

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