

Binocular brightfield Microscope Optika B-192 / B-192 PL



Optika B-192 / PL

Günstiges Schüler-Biologiemikroskop mit Profi-LED Beleuchtung

Microscope biologiques écolier avec éclairage LED/DEL professionnel

Biological microscope for students with high end LED illumination

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Observation Method - Transmitted Light	Brightfield	Yes
	Simple polarized light	As optional

Main Body	Type	Upright
	Construction material	Aluminum die-cast
	Transportation handle	Yes

Head	Type	Binocular (Siedentopf)
	Inclination	30°
	360° rotating	Yes
	Interpupillary distance (mm)	48-75
	Dioptric adjustment	On left tube
	Fixing screw for eyepieces	Yes
	Tube inner diameter (mm)	23

Eyepieces	Field number (mm)	18
	Magnification	10x
	High eyepoint (for glass wearers)	Yes
	Pointer	As optional
	Micrometric scale	As optional
	Diameter of micrometer glass (mm)	20

Nosepiece	Positions	Quadruple
	Reversed	Yes
	Bi-directional	Yes
	Rotation on ball bearings	Yes
	Objective thread	RMS

Objectives	Optical system	160
	Anti-fungus treatment	Yes
	Parfocal distance (mm)	45
	Standard magnifications	40x-1000x
	Type	HC
	Objectives included	4x/0.10, W.D. 18 mm 10x/0.25, W.D. 7 mm 40x/0.65, W.D. 0.53 mm 100x/1.25 (Oil/Water), W.D. 0.13 mm

Stage	Type	Double layer
	Dimensions (mm)	125x115
	Moving mechanism	Rack and pinion
	Moving range (mm)	70x30
	Material	Anti-scratch painting
	Specimen holder	Yes
	Slide number	1
	X-Y movement	Yes
	X-Y Vernier scale	Yes
	Vernier scale accuracy (mm)	0.1

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Condenser - Single Position	Type	Abbe
	Numerical aperture (N.A.)	1.25
	Centrable	Pre-centered
	Focusable	By rotation
Focusing System	Type	Coaxial coarse & fine
	Coarse total travel (mm)	18
	Fine total travel (per single rotation) (mm)	0.4
	Fine graduations	100
	Fine resolution (µm)	4
	Maximum sample height (mm)	No
	Upper stop to prevent contact	Yes
	Adjustable tension	Yes
Transmitted Illumination	Type	X-LED
	X-LED type	X-LED2
	Light source power (W)	3
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Temperature (K)	6,300
	Max. required power (W)	6
Power Supply for Transmitted Illumination	Type	External
	Microscope connector	Jack, 2.1 mm
	Power plug type	Multi-plug (EU, UK, US)
	Input voltage	100/240 Vac, 50/60 Hz
	Output voltage	6 Vdc 2.5 A
Accessories Included	Dust cover	Yes
	Immersion oil (10ml)	Yes
	Tension adjustment tool	Yes
	User Manual	Digital version (downloadable)
Additional Information		External rechargeable battery pack (as optional).
Product Dimensions	Height (mm)	370
	Width (mm)	235
	Depth (mm)	320
Product Weight	(kg)	6.5

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Observation mode: Brightfield.

Head: Binocular, 360° rotating and 30° inclined. Interpupillary distance from 48 to 75 mm; dioptic adjustment on left eyepiece.

Eyepieces: WF 10x/18 mm, secured by screw.

Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

Objectives:

- HC – High Contrast Achromatic 4x/0.10 with anti-fungus treatment.
- HC – High Contrast Achromatic 10x/0.25 with anti-fungus treatment.
- HC – High Contrast Achromatic 40x/0.65 with anti-fungus treatment.
- HC – High Contrast Achromatic 100x/1.25 (Oil/Water) with anti-fungus treat.

Specimen stage: Double layer mechanical sliding stage, 125x115 mm, 70x30 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1mm.

Focusing: Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

Condenser: Abbe N.A. 1.25, pre-centered, adjustable height with iris diaphragm.

Illumination: X-LED² with white 3 W LED and light intensity control.

Color temperature: 6,300 K. Multi-plug 100-240Vac/6Vdc external power supply.



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Easy Transportation

B-192/ RE has a carefully shaped design that gives stability and ease in the transportation. Thanks to the handle on the back, it can be safely moved around the classroom or the laboratory.



Original, Compact And Robust

The original design of B-190 series is based on robustness, yet keeping the extreme portability of the instrument, with a dedicated handle on the back. The built-in LED illuminator and the patented version with Windows tablet improve the reliability of one of the best-sellers of OPTIKA in the educational field.

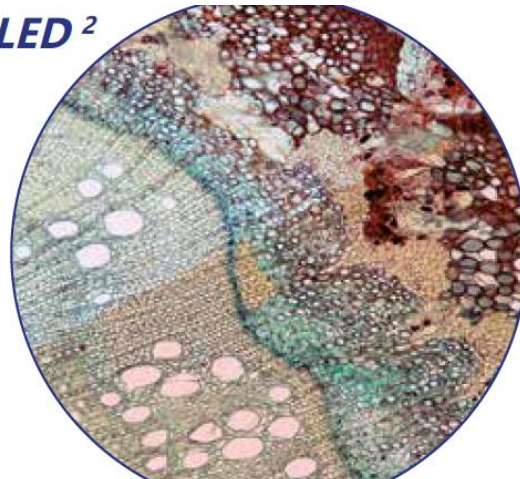
Incorporating The Most Wanted Features In A Student Microscope

Get all the controls and features common to higher level microscopes: mechanical stage, binocular or trinocular head, coaxial focus knob, adjustable condenser, and 1000x maximum magnification (standard). An extremely simple but well equipped solution, in a modern and ergonomic design.

X-LED² Exclusive Lighting Source

A special design of the lens in front of the LED gives a very high light intensity, while ensuring optimal uniformity of illumination on the whole field number. Relevant money & energy saving thanks to the incredibly low energy consumptions allow you to cut the electricity bills by 90%! The electric consumption (3 W only) proves the high efficiency of this system: incredibly high light intensity combined with low consumption.

X-LED²



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Optika B-192 / RE

100x Oil/Water Objective – Only at OPTIKA

SAME OBJECTIVE FOR OIL AND WATER USE

- » Oil represents the best media for high numerical aperture
- » Water combines results with convenience
- » Water is recommended especially for educational purposes

UNPARALLELED TIME & MONEY SAVING

- » Save time by forgetting about tedious cleaning
- » No time-wasting procedures for maintenance
- » No additional expenses due to inappropriate cleaning

Fulfill the Next Generation Learning Challenges

FOR SKILLFUL STUDENTS AND CLASSROOM USE

- » Extremely reliable microscopes for educational purposes
- » Particularly recommended for secondary school
- » Ideal for teaching and learning biology

YOUR FAVOURITE EDUCATIONAL MICROSCOPES

- » Choose among monocular, binocular and trinocular heads
- » 18mm field number
- » Achromatic lenses for standard brightfield applications

POWERFUL AND UNIFORM ILLUMINATION

- » Uncomparable light intensity, exclusive lens and collector design
- » Constant pure-white colour temperature at all intensity levels
- » Unmatched colour fidelity and brightness of your specimen

MONEY & ENERGY SAVING

- » High energy efficiency at a limited cost, only 3 W
- » More efficient brightness than a 30 W halogen lamp
- » LED long lifetime (65.000 hours = 22 years at 8 hours/day usage)

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Technische Daten:



Optik

Beleuchtung	Durchlicht
Lampentyp	LED
Vergrößerung (-fach)	40x, 100x, 400x, (optional 1000x)
Objektivtyp	achromatisch
Abbildungsmaßstab (-fach)	4x, 10x, 40x, 100x
Okular (-fach)	10x (Weitfeld)
Kondensator	Abbe (N.A. 1,25)
Stromversorgung	Ext. Netzteil
Bauart	Binokular B-192 / B-192RE
Einblick	30° Schrägeinblick, 360° drehbar
Fokussierung	Grob- und Feintrieb
Objektisch	Kreuztisch (125mm x 115mm)

Besonderheiten

Irisblende	ja
Filterhalter	ja
Staubschutztasche	ja

Abmessungen

Farbe	blau/weiss
Länge (mm)	320
Breite (mm)	235
Höhe (mm)	370
Gewicht (g)	6500



Spécifications:



Optique

Éclairage	à transmissions
Type de lampe	LED / DEL
Grossissement	40x, 100x, 400x, (option 1000x)
Echelle de l'image	4x, 10x, 40x, 100x
Oculaire	10x
Condenseur	Abbe (N.A. 1,25)
Alimentation	Alimentation électrique ext.
Type de construction	Binoculaire B-192 / B-192RE
Mise au point	Mouvement rapide / fin
Platine porte-objet	Platine / table croisé (125x115mm)

Particularités

Diaphragme	oui
Crochet de filtre	oui
Housse de protection	oui

Dimensions

Longueur (mm)	320
Largeur (mm)	235
Hauteur (mm)	370
Poids (g)	6500
couleur	Bleu/blanc

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Optika / Ryf Ryeco Swiss Warranty / Made in Italy
www.ryfag.ch

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I T A L Y