Octific

PRODUCT CATALOGUE

BIOLOGICAL MICROSCOPE

Smart 5

Precision. Clarity. Discovery.



One platform. Your view.

Compact biological microscopy for teaching and life-science exploration.



MONOCULAR

BINOCULAR

Compact, rigid and specially designed for students, the lightweight hollow frame remains stable and easy to carry. Its practical appearance combines a pure white body with blue panels on both sides.

Monocular

30° inclined; 360° rotatable; eyepieces secured by screws.

Binocular

50-75 mm interpupillary adjustment; ±5 diopter adjustment.

Trinocular

50-75 mm interpupillary adjustment; ±5 diopter adjustment; R:T = 80:20 splitting ratio.

Choose your view. Fine-tune it.



Viewing head

30° inclined; 360° rotatable. Monocular, binocular or trinocular options. Screws secure the eyepieces. Binocular / trinocular spacing: 50-75 mm; left-tube ±5 diopter adjustment. Trinocular R:T splitting ratio: 80:20.



Choose FN 18 or FN 20

Wide-field plan eyepieces: PL10X/18 mm (FN 18), with or without reticle or pointer; or PL10X/20 (FN 20). Choose the field number to suit your viewing preference.

Adjustable viewing

Binocular tube spacing adjusts from 50 to 75 mm. The left tube includes a focusing device with ±5 diopter adjustment. Screws secure the eyepieces.

Precise focusing

Coaxial coarse and fine adjustment on both sides allows focusing with either hand. Coarse-knob tension is adjustable. Fine-focus precision is 0.002 mm (2 µm), with a 25 mm adjustment range.



The upper-limit design helps prevent contact between objective and slide. A coarse-adjustment stop and stage focus lock (screw type) support controlled operation.

The original design combines reliable quality, practical appearance and easy operation. Clear images encourage students' imagination and interest in microscopy, supporting exploration of life science and the next generation of scientists.

Precision at the specimen.



Mechanical stage

The 132 × 140 mm double-layer mechanical stage has rounded right-hand corners to help avoid injury from accidental impact. Coaxial X/Y adjustment provides easy operation and precise positioning, with 50 × 76 mm travel and a 0.1 mm scale / precision. The specimen holder accommodates one or two slides.



Abbe condenser

The N.A. 1.25 Abbe condenser has an iris diaphragm and filter holder. Its center is factory-preset and the condenser is non-removable, retaining the correct factory setting. Filters / backlights improve contrast; vertical adjustment also controls contrast.

132 × 140
STAGE / MM

50 × 76
TRAVEL / MM

0.1 mm
STAGE PRECISION

Light. Power. Flexibility.

High-performance LED lighting. Separate power and intensity controls.

3 W
LED ILLUMINATION

6000-6500 K
COLOR TEMPERATURE

30,000 h
RATED LED LIFETIME

Energy-efficient LED illumination with environmental-protection characteristics. Center-preset, intensity-adjustable lighting; separate power switch and light dimmer. Supply input: 100-240 V AC, 50/60 Hz.





Rear-label reference shown in the original photograph: INPUT 6 V / 2 A; LAMP 3.3 V, 3 W LED.



Power bank + USB to DC cable

Illustrative accessory setup. Select voltage, polarity and connector to match the ordered configuration.

Optional built-in rechargeable batteries provide 8 hours of continuous field / off-position operation. The health-detection illumination system uses EMC design and an external adapter: 100-240 V AC, 50/60 Hz input; 7.5 V / 2 A output. It accepts power-bank operation. Common illumination systems offer internal or external 100-240 V AC, 50/60 Hz supplies.

All four frame options use coaxial coarse / fine focus, coarse-adjustment stop and tension adjustment, 25 mm focus range and 0.002 mm precision. Each uses center-preset, intensity-adjustable 3 W LED illumination at 6000-6500 K, with a rated lifetime of 30,000 hours.

Option	Power specification
External adapter · 7.5 V	Input: 100-240 V AC, 50/60 Hz. Output: DC 7.5 V, 2 A. Accepts power-bank operation.
External adapter · 6 V	Input: 100-240 V AC, 50/60 Hz. Output: DC 6 V, 2 A. Accepts power-bank operation.
Internal supply	Internal switching supply: 100-240 V AC, 50/60 Hz.
Rechargeable battery	Four internal rechargeable batteries. External wide-voltage charger input: 100-240 V AC, 50/60 Hz. Charger output: DC 6 V, 1 A. Accepts power-bank operation.

Head, objective, eyepiece and power configurations are selectable options. The supplied equipment depends on the ordered configuration.

Choose your optical detail.



Finite color-corrected optical system (160). High-resolution optical glass with anti-fungal treatment. Quadruple inward-tilted nosepiece.

ACHROMATIC · DIN

Magnification	N.A.	W.D. (mm)
4X	0.10	21.30
10X	0.25	8.00
40XS	0.65	0.55
100XS (oil)	1.25	0.15

PLAN ACHROMATIC

Magnification	N.A.	W.D. (mm)
4X	0.10	18.50
10X	0.25	7.00
20X	0.40	2.50
40XS	0.65	0.53
100XS (oil)	1.25	0.13

0.17 mm
COVER GLASS

45 mm
PARFOCAL DISTANCE

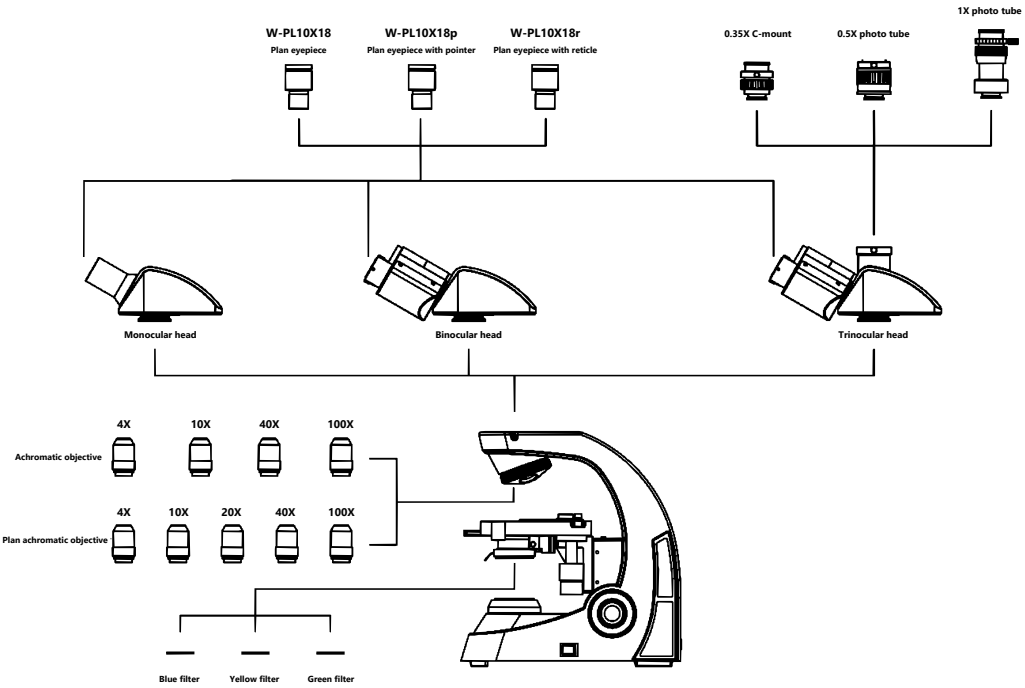
195 mm
CONJUGATE DISTANCE

Shared objective geometry applies to both objective families. XS objectives are listed with their original magnification designations; 100XS is oil immersion.

The complete optical system.

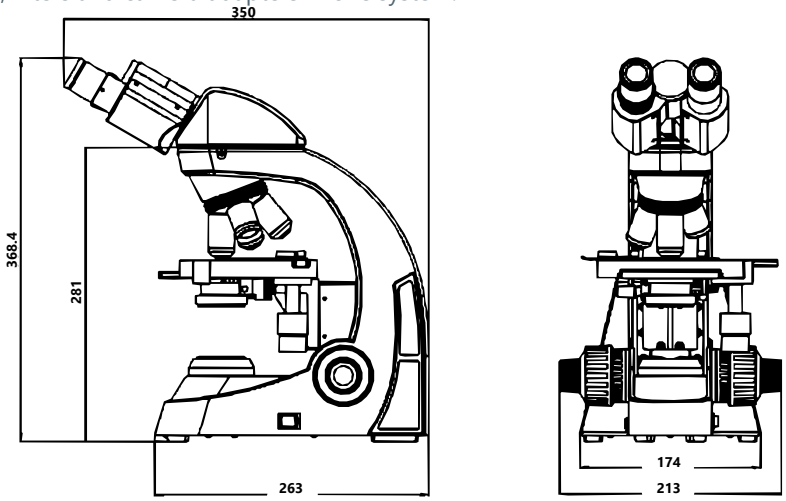
Component	Specification
Optical system	Finite color-corrected optical system (160)
Viewing head	30° inclined; 360° rotatable; screws secure eyepieces
Binocular head	Interpupillary distance 50-75 mm; ±5 diopter adjustment
Trinocular head	Interpupillary distance 50-75 mm; ±5 diopter adjustment; splitting ratio R:T = 80:20
Achromatic objective set	4X, 10X, 40XS, 100XS (oil)
Plan achromatic objective set	4X, 10X, 20X, 40XS, 100XS (oil)
Objective geometry	Cover glass 0.17 mm; parfocal distance 45 mm; conjugate distance 195 mm (both objective families)
Eyepieces	Wide-field plan PL10X/18 mm, with or without reticle or pointer; PL10X/20
Nosepiece	Quadruple, inward tilt
Transmitted-light filters	Blue / yellow / green
Camera accessories	0.35X / 0.5X / 1X focusing C-mount
Stage	132 × 140 mm double-layer mechanical stage; rounded right-hand corners; coaxial X/Y travel 50 × 76 mm; scale / positioning precision 0.1 mm.
Specimen holder	Accommodates one or two slides.
Condenser	N.A. 1.25 Abbe condenser; iris diaphragm and filter holder; factory-preset center, non-removable; vertical adjustment controls contrast.
Illumination	Center-preset, intensity-adjustable 3 W LED; 6000-6500 K; rated lifetime 30,000 hours; separate power switch and light dimmer.
Certificate	CE

Built as one optical system.



3 viewing-head types / 2 objective families / 3 filter colors

Eyepieces, heads, objectives, filters and camera adapters in one system.



Instrument dimensions in millimeters. Overall envelope shown: 350 × 213 × 368.4 mm.

Base length shown: 263 mm. Additional drawing dimensions: 281 mm and 174 mm.