



OPTIC102 – Biological Life Science Microscope

Binocular / Trinocular

Download
Catalogue



OPTIC102 Biological Compound Light Microscope is kind of cost-effective, advanced, laboratory microscope, most applied in the field of Teaching, Medicine, Clinical and Biology research. This type of microscope can be supplied with refocus stage. Equipped with universal infinity independent plan achromatic optical system, chromatic aberrations and curvature of field are both ideally corrected over the field of view. And the COLO objectives own higher NA's producing crisp, clear images with minimal flare.

High eye point, Wide field of view eyepiece diopter is adjustable. Standard 10X eyepieces view-field can be chosen between WF 18mm/20mm/22mm. And high eyepoint eyepiece with the distance up to 21mm view-field can bring you wider vision and more comfortable feeling. High power magnification objective with spring-loaded for protection.

Optics System: Infinity Independent Plan Achromatic Optical System F=200mm TLFL
Viewing Head : Siedentopf binocular tube, Interpupillary distance 48~75mm, 30°inclined, 360° rotatable, diopter adjustable.

Option:

Trinocular tube

Phase contrast with positive or negative objective

Multi-purpose contrast condenser

Dark field condenser



Upright Microscope

Handle for easy one-handed portability



Koehler Illumination



Nosepiece

Revolving and reversed nosepiece for 4 or 5 objectives with grip



Objectives

Infinity Plan Achromatic Objectives



Light source

3 W adjustable LED illumination or 20/30W tungsten-halogen* lamp offer controlled constant light intensity



USB Charging Port, Support To Use External Rechargeable Battery Power Bank Like Cell Phone Outdoor Freely

OPTIC102 Is compact, maintenance free, economical microscope, excellent solution for Educational life science, Clinical Laboratory.

- Bright field/Dark field, transmitted light illumination system
- Integrated Carry Handle
- Due to prevent unauthorised alienation oculars fixed by special screw
- Coaxial X-Y axis right hand mechanical stage, 0,1mm division, frontloading, for 1 or 2 standard microscope slides, easy hold hemacytometer without sleeping.
- High quality optical system infinity corrected Standard DIN F=200mm optical tube lens focal length
- Microscope full metal body (Rigid Base & Die-Cast aluminium stand with stable design) , provide precision, durability and stability of the instrument
- Fine and Coarse Coaxial Focusing Block on both side with self adjusting focus mechanism, full made from metal parts to provide accurate and durable exploitation.
- The rack stop prevents users from moving the objective lenses too close to the slide
- Microscope Stage is full made from metal parts to provide accurate and durable exploitation
- Antimicrobial/Antifungal Coating
- Binocular/Trinocular Microscope
- Integrated carry handle
- Eyepiece: Integrated removable WF10X18 WF10X20 (optional) (Fixed WF10X18/10X20 optional) with foldable eye-guards
- Condenser: Abbe Condenser Fixed, pre-centred, pre-focused NA 0.9/1.25 oil with Iris adjustable Diaphragm, magnification labels, 32mm with filter holder for contrast sliders (phase contrast, darkfield, compensator), high levelling, centering
- Viewing Head: 30° Inclined and 360° rotating (Adjustable head 10° to 45° is optional)
- Diopres Adjustment
- Chemical resistance coating

FOCUSING

- Coaxial coarse and fine adjustments, 100 graduations, 1 µm per graduation, 100 µm per rotation, total travel approximately 14 mm.(most to 25mm)
- Supplied with an adjustable rack stop to prevent damage to sample and objectives.
- The coarse adjustments are equipped with friction control

ILLUMINATION

- 3 W adjustable LED illumination with 27000 working hour at full intensity or 20/30W tungsten-halogen lamp offer controlled light intensity, with 100-240 V power supply (USB-Power Bank is optional)
- The innovative design offer larger apertures, allowing the optical system of the microscope to produce images at higher resolutions very close to the theoretical diffraction limit of the optics.
- COLO LED light benefit is the low energy consumption, no heating and a long operating lifetime more then 27000 working hour in full intensity, 6000 K cool white light without needs for blue filter.
- Colour temperature of Tungsten-Halogen lamp is 3.200K

Specifications: ● - Standard Configuration ○ - Optional configuration

OPTIC102	BL	BHPA	BLPA	THPA	BHPH	THPH	BHUD	THUD	BH	BTPA
Binocular, Interpupillary distance 48-75mm	●	●	●	○	●	○	●	○	●	○
Trinocular, Interpupillary distance 48-75mm (20:80)	○	○	○	●	○	●	○	●	○	●
Trinocular, Interpupillary distance 48-75mm (50:50)	○	○	○	○	○	○	○	○	○	○
High eye-point plan eyepiece WF10X/18	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
High eye-point plan eyepiece WF10X/20	○○	○○	○○	○○	○○	○○	○○	○○	○○	○○
Plan eyepiece WF16X/13	○○	○○	○○	○○	○○	○○	○○	○○	○○	○○
High eye-point plan eyepiece WF10X/18 (Pointer metal needle)	○		○	○	○	○	○	○	○	○
High eye-point plan eyepiece WF10X/20 (Pointer metal needle)	○	○	○	○	○	○	○	○	○	○
Reticule Eyepiece, Cross WF10X/18	○	○	○	○	○	○	○	○	○	○
Infinity Achromatic Objective 4X N.A.0.10	●	○	○	○	●	●	●	●	●	○
Infinity Achromatic Objective 10X N.A. 0.22	●	○	○	○	●	●	●	●	●	○
Infinity Achromatic Objective 40X(S) N.A.0.65	●	○	○	○	●	●	●	●	●	○
Infinity Achromatic Objective 100X(S)/(Oil) N.A. 1.25	●	○	○	○	●	●	●	●	●	○
Infinity Plan Achromatic Objective 2X	○	○	○	○	○	○	○	○	○○	○
Infinity Plan Achromatic Objective 4X/0.10	○	●	●	●	○	○	○	○	○	●
Infinity Plan Achromatic Objective 10X/0.25	○	●	●	●	○	○	○	○	○	●
Infinity Plan Achromatic Objective 40X/0.65 (S)	○	●	●	●	○	○	○	○	○	●
Infinity Plan Achromatic Objective 60X/0.85(S)	○	○	○	○	○	○	○	○	○	○
Infinity Plan Achromatic Objective 100X/1.25 (S) (OIL)	○	●	●	●	○	○	○	○	○	●
Centring Eyepiece	○	○	○	○	●	●	○	○	○	○
Infinity Achromatic Objective 4X N.A.0.13	○		○	○	●	●	○	○	○	○
Infinity Ach. Phase-Contrast Objectives (Positive) 10X	○	○	○	○	●	●	○	○	○	○
Infinity Ach. Phase-Contrast Objectives (Positive) 40X (S)	○	○	○	○	●	●	○	○	○	○
Infinity Ach. Phase-Contrast Objectives (Positive) 100X (S) (Oil)	○	○	○	○	●	●	○	○	○	○
Plan Dis Phase-contrast Condenser	○	○	○	○	●	●	○	○	○	○
Plan Dis Phase-contrast Condenser (with 10X /40X dark field function)	○	○	○	○	○	○	○	○	○	○
Microscope camera with software according customer demand	○	○	○	○	○	○	○	○	○	○
Mechanical Stage, right handed, 142X135mm, movement range 76X52mm with slide holder up to 2 pcs	●	●	●	●	●	●	●	●	●	●
Mechanical Stage, right handed, 156X138mm, movement range 76X54mm with slide holder	○	○	○	○	○	○	○	○	○	○
Reckless Stage, right handed, 185X177mm, movement range 75X50mm	○	○	○	○	○	○	○	○	○	○

Quadruple Nosepiece, inward/rear facing Click Stop, with grip,	●	●	●	●	●	●	●	●	●	●
Quintuple Nosepiece, inward/rear facing Click Stop, with grip,	○	○	○	○	○	○	○	○	○	○
Abbe Condenser 0,9/1,25,	●	●	●	●	●	●	●	●	●	●
Kohler Illuminator (No field diaphragm)	●	●	●	●	●	●	●	●	●	●
Kohler Illuminator (With field diaphragm)	○	○	○	○	○	○	○	○	○	○
6V 20W Tungsten-Halogen Lamps Illumination	○	●	○	●	●	●	●	●	●	●
6V 30W Tungsten-Halogen Lamps Illumination	○	○	○	○	○	○	○	○	○	○
3W LED Lamp Illumination (with Rechargeable Batteries)	○	○	○	○	○	○	○	○	○	○
3W LED Lamp Illumination	●	○	●	○	○	○	○	○	○	○
0.5X C-Mount	○	○	○	○	○	○	○	○	○	○
1X C-Mount	○	○	○	●	○	●	○	●	○	○
0,65X C-Mount	○	○	○	○	○	○	○	○	○	○
USB charging port	○	○	○	○	○	○	○	○	○	○
Adapter for Nikon DSLR	○	○	○	○	○	○	○	○	○	○
Adapter for Cannon DSLR	○	○	○	○	○	○	○	○	○	○
Protection against unauthorized eyepiece and lens disassembly	○○	○○	○○	○○	○○	○○	○○	○○	○○	●●
Blue Filter (φ32)	○	●	○	●	●	●	●	●	●	●
Green Filter (φ32)	○	○	○	○	○	○	○	○	○	○
Yellow Filter (φ32)	○	○	○	○	○	○	○	○	○	○
Ground Glass (φ32)	○	○	○	○	○	○	○	○	○	○
Rubber foldable ocular eye guards	○○	○○	○○	○○	○○	○○	○○	○○	○○	○○
250V/3.15A Φ5X20 fuse	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
6V 30W Tungsten-Halogen lamp (spare parts)	○	○	○	○	○	○	○	○	○	○
6V 20W Tungsten-Halogen lamp (spere parts)	○	○	○	○	○	○	○	○	○	○
3W Led Lamp (spere parts)	○	○	○	○	○	○	○	○	○	○
Immersion Oil 10ml or 20ml or 30ml (acc. customer demand)	●	●	●	●	●	●	●	●	●	●
User manual	●	●	●	●	●	●	●	●	●	●
Dust Cover	●	●	●	●	●	●	●	●	●	●
φ2mm Allen screwdriver	●	●	●	●	●	●	●	●	●	●
Removable Power Cord (EU/US/MK/IEC..) acc. customer demand	●	●	●	●	●	●	●	●	●	●
Optional Accessories	Microscope calibration slide, COLO Digital microscope camera (5MP, 10MP, 16MP,HDMI...)									

Please note

If this Microscope does not match the specific needs of your application, or some options are not listed for sale, please feel free to contact us. Our manufacturing engineers will come up with technical solutions to meet your needs. We reserve the right to change technical specifications at any time.