



OPTIC900 – Professional Research Grade Biological Microscope

Binocular / Trinocular

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Catalogue



OPTIC900 Biological Microscope is kind of cost-effective, advanced, laboratory microscope, most applied the field of medicine, clinical and biology research. This type of microscope can be supplied with refocused 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, and its diopter are adjustable. Standard 10X eyepieces view-field can choose between 20mm and 22mm. And high eye point eyepiece with the distance up to 21mm view-field can bring you wider vision and more comfortable feeling.

Optics System: Infinity Independent Plan Achromatic Optical System F=200mm
Viewing Head : Siedentopf binocular tube, Interpupillary distance 48~75mm,
30°inclined, 360° rotatable, diopter adjustable ± 5 .

Option:

Trinocular tube

Phase contrast with positive or negative objective

Multi-purpose contrast condenser

Dark field condenser



Upright Microscope



Koehler Illumination



Nosepiece

Revolving and reversed nosepiece for 5 objectives



Objectives

Infinity Plan Achromatic Objectives



LED Light source

3 W adjustable LED illumination or 20/30W tungsten-halogen* lamp

integrated carry handle



OPTIC900 Biological microscope is compact, maintenance free, professional microscope.

- Bright field/Dark field, transmitted light
- Integrated Carry Handle
- Optical system infinity corrected
- Microscope full metal body, provide stability of instruments. Fine and Coarse Coaxial Focusing Block, macrometric and micrometric coaxial knobs on both sides (0,001mm). Upper limit excursion adjustment. Torque adjustment on coarse focus knob.
- Microscope Stage is full made from metal parts to provide accurate and durable exploitation
- Antimicrobial/Antifungal Coating
- Binocular/Trinocular Microscope
- Integrated carry handle
- Eyepiece: WF10X22
- Condenser: Abbe Condenser NA1.25 with Iris Diaphragm Equipped with diaphragm and filter seat. Height and centering are adjustable
- Viewing Head: 30° Inclined
- Diopter Adjustment ± 5
- Maximum magnification of the microscope is 1000x

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 or adjustable 20/30W tungsten-halogen* lamp, with 100-240 V power supply (battery is optional)
- Light intensity is adjustable
- 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.
- Other benefit is the low energy consumption, no heating and a long operating lifetime

PACKAGING

- Supplied with power cord, dust cover, a spare fuse, user manual and 4 ml immersion oil for models with S100x objective.
- Colour temperature of Tungsten-Halogen lamp is 3.200K

OPTIC900BH – Binocular Head, Halogen light source

OPTIC900BL – Binocular Head, LED light source

OPTIC900TH – Trinocular Head, Halogen light source

OPTIC900TL – Trinocular Head, LED Light source

OPTIC900BLPH – Binocular Head, LED Light source, Phase Contrast

OPTIC900TLPH – Trinocular Head, LED Light Source Phase Contrast

OPTIC900BUD – Binocular Head, Dark Field

OPTIC900TUD – Trinocular Head, Dark Field

OPTIC900TPHDF – Trinocular Head, Phase Contrast, Dark Field

Specifications: ● - Standard Configuration ○ - Optional configuration

OPTIC900	BH	BL	TH	TL	BLPH	TLPH	BUD	TUD	TPHDF
Binocular head, Interpupillary distance 48-75mm	●	●	○	○	●	○	●	○	○
Microscope camera	○	○	●	○	○	○	○	○	○
Trinocular head, Interpupillary distance 48-75mm (20:80)	○	○	●	●	○	●	○	●	●
Trinocular head, Interpupillary distance 48-75mm (50:50)	○	○	○	○	○	○	○	○	○
Trinocular head, Interpupillary distance 48-75mm (100)	○	○	○	○	○	○	○	○	○
High eye-point plan eyepiece WF10X/20	●●	●●	●●	●●	●●	●●	●●	●●	●●
High eye-point plan eyepiece WF10X/22	○○	○○	○○	○○	○○	○○	○○	○○	○○
Plan eyepiece WF16X/13	○○	○○	○○	○○	○○	○○	○○	○○	○○
High eye-point plan eyepiece WF10X/20 (Pointer)	○	○	○	○	○	○	○	○	○
High eye-point plan eyepiece WF10X/22 (Pointer)	○	○	○	○	○	○	○	○	○
Reticule Eyepiece, Cross WF10X/20	○	○	○	○	○	○	○	○	○
Centring Eyepiece - telescope	○	○	○	○	●	●	○	○	●
Infinity Achromatic Objective 4X N.A.0.10	○	○	○	○	○	○	○	○	○
Infinity Achromatic Objective 10X N.A. 0.25	○	○	○	○	○	○	○	○	○
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 N.A.0.10	●	●	●	●	●	●	●	●	●
Infinity Plan Achromatic Objective 10X N.A. 0.25	●	●	●	●	○	○	●	●	●
Infinity Plan Achromatic Objective 20X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Achromatic Objective 40X (S) N.A.0.65	●	●	●	●	○	○	●	●	●
Infinity Plan Achromatic Objective 60X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Achromatic Objective 100X (S) (OIL) N.A. 1.25	●	●	●	●	○	○	●	●	●
Infinity Plan Ach. Phase-Contrast Objectives (Positive) 10X	○	○	○	○	●	●	○	○	●
Infinity Plan Ach. Phase-Contrast Objectives (Positive) 20X (S)	○	○	○	○	○	○	○	○	●
Infinity Plan Ach. Phase-Contrast Objectives (Positive) 40X (S)	○	○	○	○	●	●	○	○	●
Infinity Plan Ach. Phase-Contrast Objectives (Positive) 60X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Ach. Phase-Contrast Objectives (Positive) 100X (S) (Oil)	○	○	○	○	●	●	○	○	●
Infinity Plan Ach. Phase-Contrast Objectives (Negative) 10X	○	○	○	○	○	○	○	○	○
Infinity Plan Ach. Phase-Contrast Objectives (Negative) 20X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Ach. Phase-Contrast Objectives (Negative) 40X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Ach. Phase-Contrast Objectives (Negative) 60X (S)	○	○	○	○	○	○	○	○	○
Infinity Plan Ach. Phase-Contrast Objectives (Negative) 100X (S) (Oil)	○	○	○	○	○	○	○	○	○

Mechanical Stage, right handed, 156X138mm, movement range XY 76X54mm with slide holder up to 2 pcs specimen	●	●	●	●	●	●	●	●	●
Motorized Microscope stage	○	○	○	○	○	○	○	○	○
Heating Microscope stage	○	○	○	○	○	○	○	○	○
Reckless Stage, right handed, 193X155mm, movement range XY 75X50mm (division 0,1mm)	○	○	○	○	○	○	○	○	○
Quadruple Nosepiece, inward facing	●	●	●	●	●	●	●	●	●
Quintuple Nosepiece, inward facing	○	○	○	○	○	○	○	○	○
Abbe Condenser 0,9/1,25	●	●	●	●	○	○	●	●	○
Turret Phase-contrast Condenser	○	○	○	○	●	●	○	○	●
Turret Phase-contrast Condenser (with 10X /40X Darkfield function)	○	○	○	○	○	○	○	○	○
Phase-Contrast Slide (For Plan Objectives) 10X	○	○	○	○	○	○	○	○	○
Phase-Contrast Slide (For Plan Objectives) 20X	○	○	○	○	○	○	○	○	○
Phase-Contrast Slide (For Plan Objectives) 40X/60X/100X	○	○	○	○	○	○	○	○	○
Dark field condenser oil	○	○	○	○	○	○	○	○	○
Dark field condenser dry	○	○	○	○	○	○	●	●	●
Dark field slide	○	○	○	○	○	○	○	○	○
Kohler Illuminator (With field diaphragm)	●	●	●	●	●	●	●	●	●
6V 20W Tungsten-Halogen lamp	●	○	●	○	○	○	●	●	●
6V 30W Tungsten-Halogen lamp	○	○	○	○	○	○	○	○	○
3W Led Lamp	○	●	○	●	●	●	○	○	○
3W LED Lamp (with Rechargeable Batteries)	○	○	○	○	○	○	○	○	○
0.5X C-Mount	○	○	○	○	○	○	○	○	○
1X C-Mount	○	○	●	●	○	●	○	●	●
0,65X C-Mount	○	○	○	○	○	○	○	○	○
Adapter for Nikon DSLR	○	○	○	○	○	○	○	○	○
Adapter for Cannon DSLR	○	○	○	○	○	○	○	○	○
Protection against unauthorized eyepiece and lens disassembly	○○	○○	○○	○○	○○	○○	○○	○○	○○
Blue Filter (φ38)	○	●	○	●	●	●	●	●	●
Green Filter (φ38)	○	○	○	○	○	○	○	○	○
Yellow Filter (φ38)	○	○	○	○	○	○	○	○	○
Ground Glass (φ38)	○	○	○	○	○	○	○	○	○
250V/3.15A Φ5X20 fuse	●●	●●	●●	●●	●●	●●	●●	●●	●●
Immersion Oil	●	●	●	●	●	●	●	●	●
Dust Cover	●	●	●	●	●	●	●	●	●
Spare light bulb	●	○	●	○	●	●	○	○	○
φ2mm Allen screwdriver	●	●	●	●	●	●	●	●	●
Power Cord	●	●	●	●	●	●	●	●	●

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.

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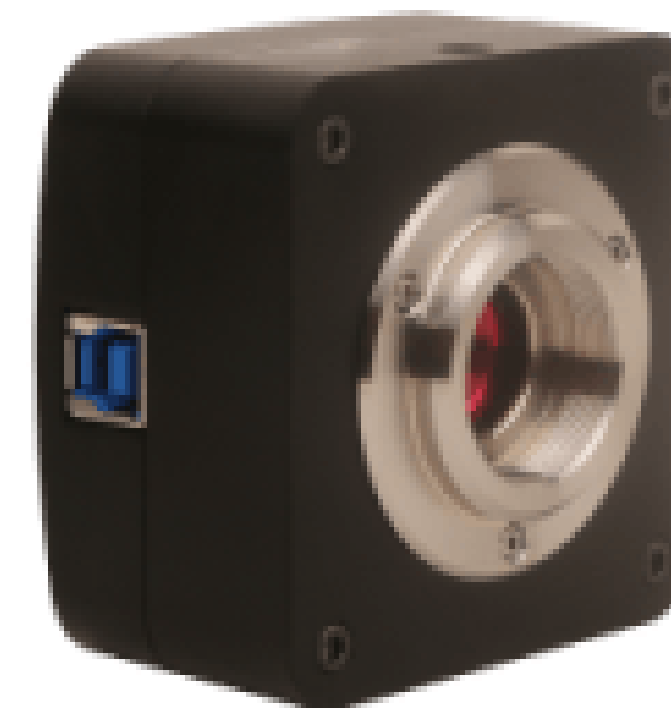
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Optional E-plan Objectives



Optional PLAN APO NIR Objectives



Microscope Color Camera 12MP

Standard Microscope color camera specification:

- Microscopic camera with Color Sony Sensor
- Measurement functions, photography, video recording data storage
- Software: COLO smart cell image processing. Software equipped with advanced capabilities for processing, editing, stitching, and EDF. Software allows for making notes, shapes, precise measurements, and watermark.
- High-quality software with user-friendly menu
- Compatible with Windows 7/8/10/11 pro, Linux, Mac OSX
- Sensor Size 1/1.7"
- 12 MP resolution
- 8-bit Color Depth
- Pixel size 1.85 x 1.85 μm
- Optical port: C-mount
- Speed: 25 fps min res 4000 x 3000, 50 fps min res 2048 x 1080
- Exposure time: 0.1 ms – 15 s
- Auto-exposure: Automatic/ Advanced Manual
- Operating condition: -10°C - 50°C Temperature Range and 30% - 80% Humidity Range non cond.
- 5V power supply via USB port
- Dimensions: 68 x 68 x 46.4 mm
- Connection with standard USB 3.0 for easy connection to computer
- USB 3.0 Data interface (5Gbit/sec.)
- USB Cable as a standard
- Includes camera ring adapters Ø30 and Ø30.5 mm, optional adapters for different eyepiece diameters

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