

EPO800 – Research Grade Professional Compound Microscope

Binocular / Trinocular



Download
Catalogue



EPO series of Biological Microscope is kind advanced, laboratory research grade microscope, most applied in the field of 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.

High eye point, Wide field of view eyepiece, and its diopter is adjustable. Standard 10X eyepieces view-field can be chosen between FOV 20mm, 22mm or 25mm. And high eyepoint eyepiece with the distance up to 21mm view-field can bring you wider vision and more comfortable feeling.

On the body of the microscope, a button for taking digital photos

Trinocular tube with 25mm field of view

Optical Eyepiece/Camera Path Distribution (%): 100/0; 20/80; 0/100

Optics System: Infinity Independent Plan Achromatic Optical System F=200 mm Viewing Head : Siedentopf binocular tube, Interpupillary distance 52~75mm, 30° inclined (, 360° rotatable, diopter adjustable.

EPO800LM is equipped with light manager (each objective is coded and separately can be adjust light intensity)

DIC Module

DIC Slider

DIC Rotational Polarizer

Option:

Efficient Infinity Gemel Trinocular head 30°-60° elevation adjustable

COLO Microscope cameras

Phase contrast with positive or negative objective

Multi-purpose manual universal condenser NA 0.88

Dark field condenser



Upright Microscope

Handle for easy one-handed portability, Infinity color corrected optical system.



Variable Koehler Illumination

with adjustable Koehler field diaphragm



Nosepiece

DIC Revolving and reversed nosepiece for 5/6/7 objectives



Objectives

Infinity Plan Achromatic Objectives
UIS2 Optical system



Light source

Diascopic LED light source with uniform light field and natural color distribution comparable to halogen light. (50000 working hour) or 20/30W tungsten-halogen lamp with adjustable constant intensity light control. Power supply for LED lighting integrated into the microscope body



Ultra Hard Ceramic surface coated stage
double layer XY moving left/right hand

EPO800 Series of Microscopes Is compact, maintenance free, research grade transmitted light microscope

- Building Blocks Design For Combining Multiple Functions, Fluorescence, Phase Contrast, Polarizing, Dark Field Attachments Can Be Assembled On
- Widely Apply To Clinical Diagnosis, Teaching Experiment, Pathological Test And Other Micro-fields.
- Bright field/Dark field, transmitted light
- Integrated Carry Handle
- Mechanical stage with (Substage for Rotatable stage / for Non-rotatable stages), coaxial X-Y axis left or right hand, 0,1mm division with ceramic coating, space for 2 slides
- High quality optical system infinity corrected Standard DIN 210mm
- Microscope full metal body, provide stability of instruments.
- Microscope body with ergonomic design and lever on the height adjustment mechanism microscope stage.
- Slide stand adjustment 3mm upwards and 26mm downwards
- Fine and Coarse Coaxial Focusing Block, Microscope Stage is full made from metal parts (optional ceramic coated) to provide accurate and durable exploitation
- Antimicrobial/Antifungal Coating
- Binocular/Trinocular Head
- Integrated carry handle
- Eyepiece: WF10X20, WF10X22 or WF10/25
- Condenser: Universal Abbe Condenser NA1.25 with Iris Diaphragm 32mm with filter holder (for optional Darkfield, Phase contrast, Slides DIC) high levelling, centering
- Viewing Head: 30° Inclined and 360° rotating (Adjustable head 10° to 60° is optional)
- Diopres Adjustment
- Chemical resistance coating

FOCUSING

- Coaxial coarse and fine adjustments
- Fine focusing knob - 100 graduations, 1µm per graduation, 100µm per rotation,
- Coarse focusing knob - total travel approximately 17.8mm.(most to 25mm)
- Supplied with an adjustable rack stop to prevent damage to sample and objectives.
- Ergonomic height adjustment of the mechanism for fine and coarse focusing
- The coarse adjustments are equipped with friction control and stop line to prevent breakage of the microscope slide, rubberized

ILLUMINATION

- Diascopic LED light beam integrated into the microscope body, as an equivalent for halogen light source, 6000K temp 50000 h life a full intensity or 20/30W tungsten-halogen* lamp, 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.
- Other benefit is the low energy consumption, no heating and a long operating lifetime
- Colour temperature of Tungsten-Halogen lamp is 3.200K

Specifications: ● - Standard Configuration ○ - Optional configuration

Universal Condenser CL/PH 0.90/1.25 OIL

- Condenser type: ABBE condenser
- Condenser mount size: dia 45mm
- Range of objective: 4-100X
- Condenser: Adjustable
- Max. Numerical Aperture: N.A. 1.25



Research Scientific Laboratory Microscope Semi-APO Upgrade BF+DF+PL+PH+ FL+DIC



Research Scientific Laboratory Microscope,
Semi-APO, Upgrade +DF+PL+PH+FL+DIC

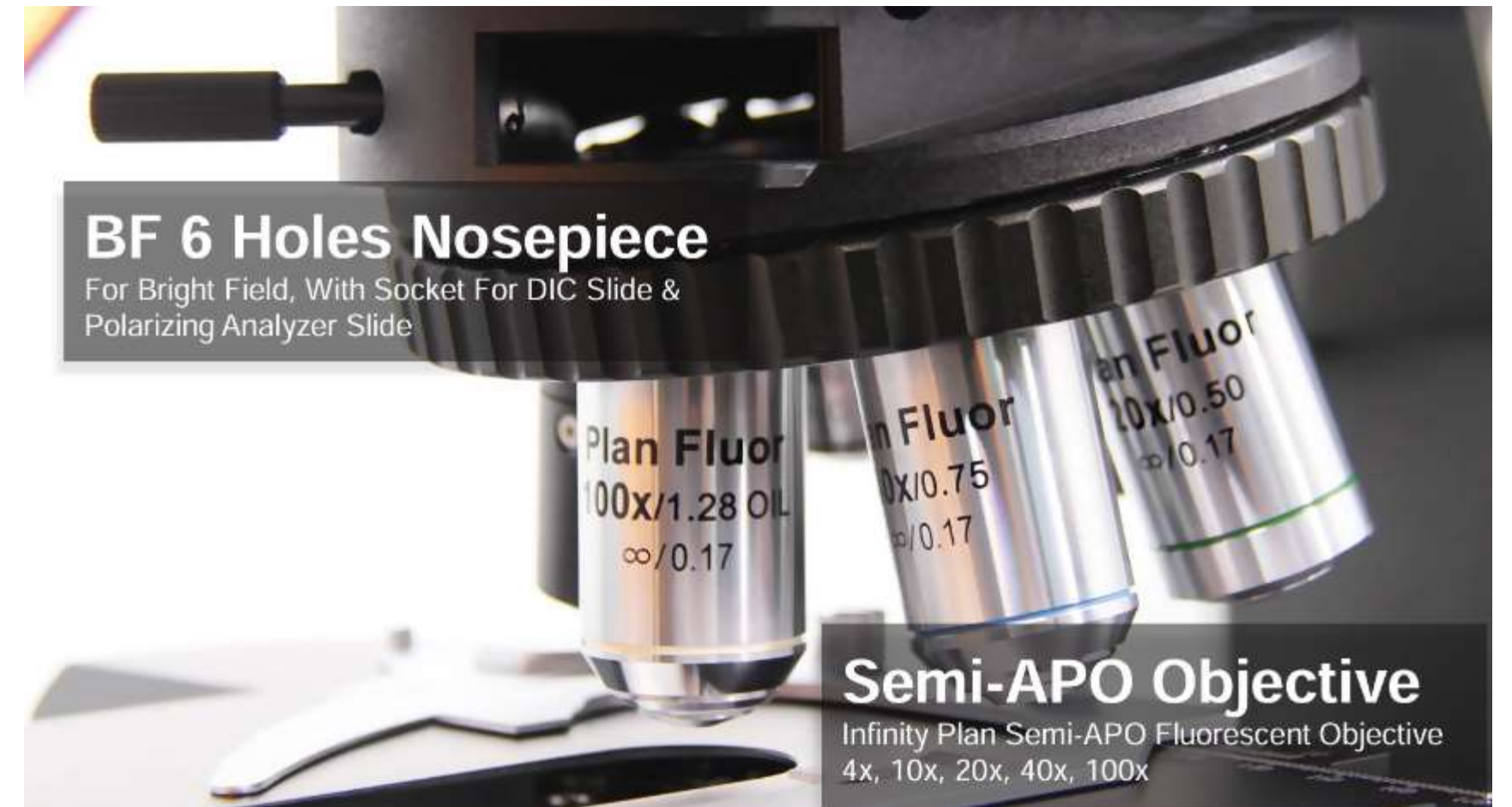


Research Fluorescence Microscope,
Semi-APO, Upgrade
BF+DF+PL+PH+FL+DIC



Upright Metallurgical Microscope,
Semi-APO, BF+DF+PL+DIC

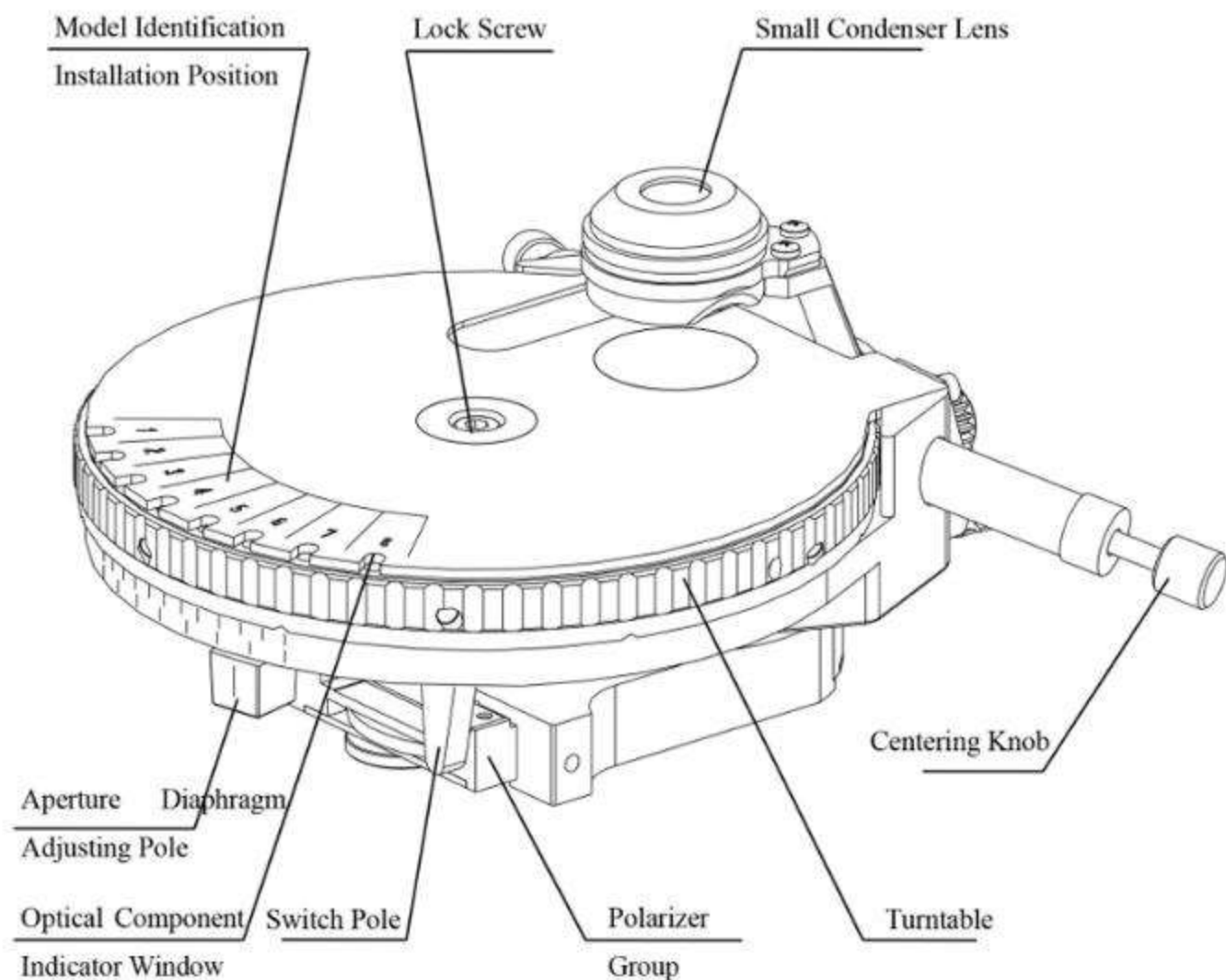
Research Scientific Laboratory



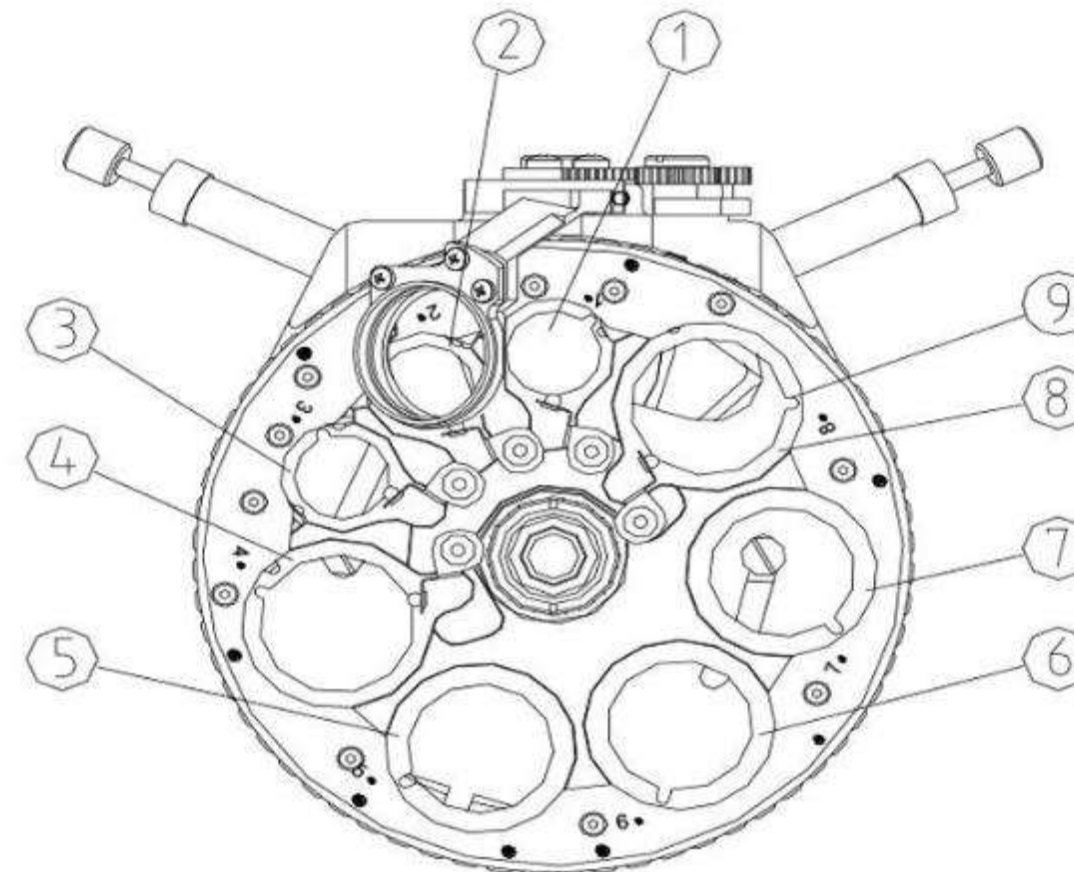
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Universal Condenser For DF,PL,PH,DIC

For Dark Field, Polarizing, Phase Contrast, DIC View, Universal Condenser (Optional) is Necessary



Universal Condenser For DF,PL,PH,DIC



①②③ Phase Contrast Aperture Ring or DIC Ring

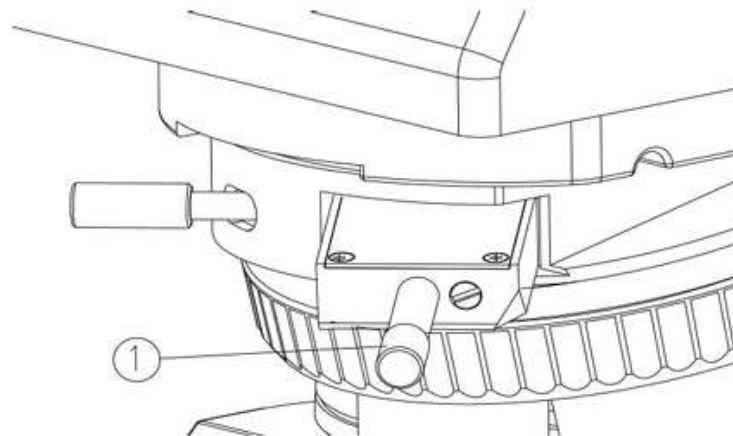
④⑧ Dark Field Ring or Phase Contrast Aperture Ring or DIC Ring

⑤⑥⑦ DIC Ring

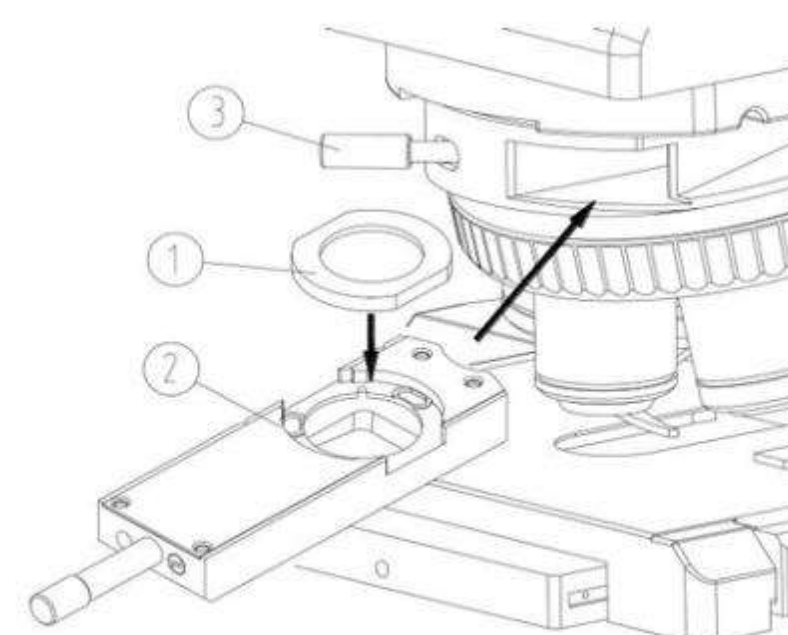
BF,DF,PH,PL,APO,DIC



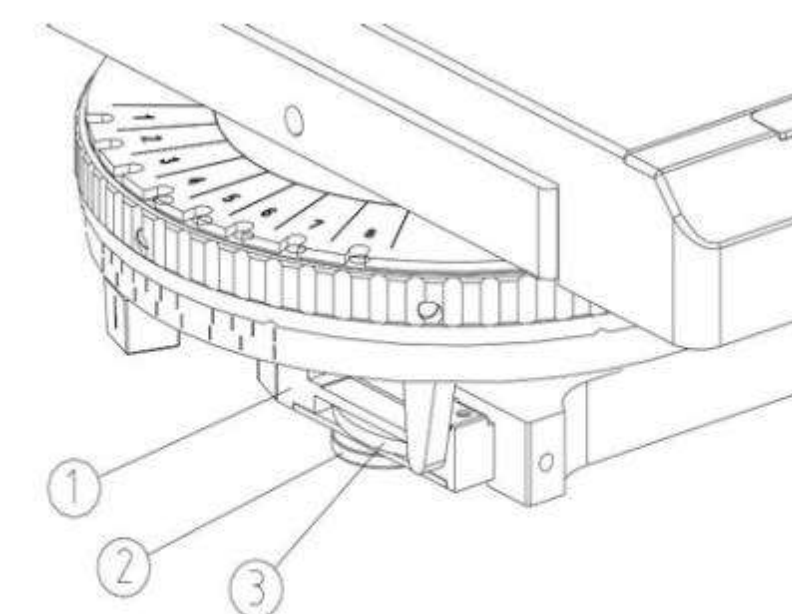
Semi-APO



DIC

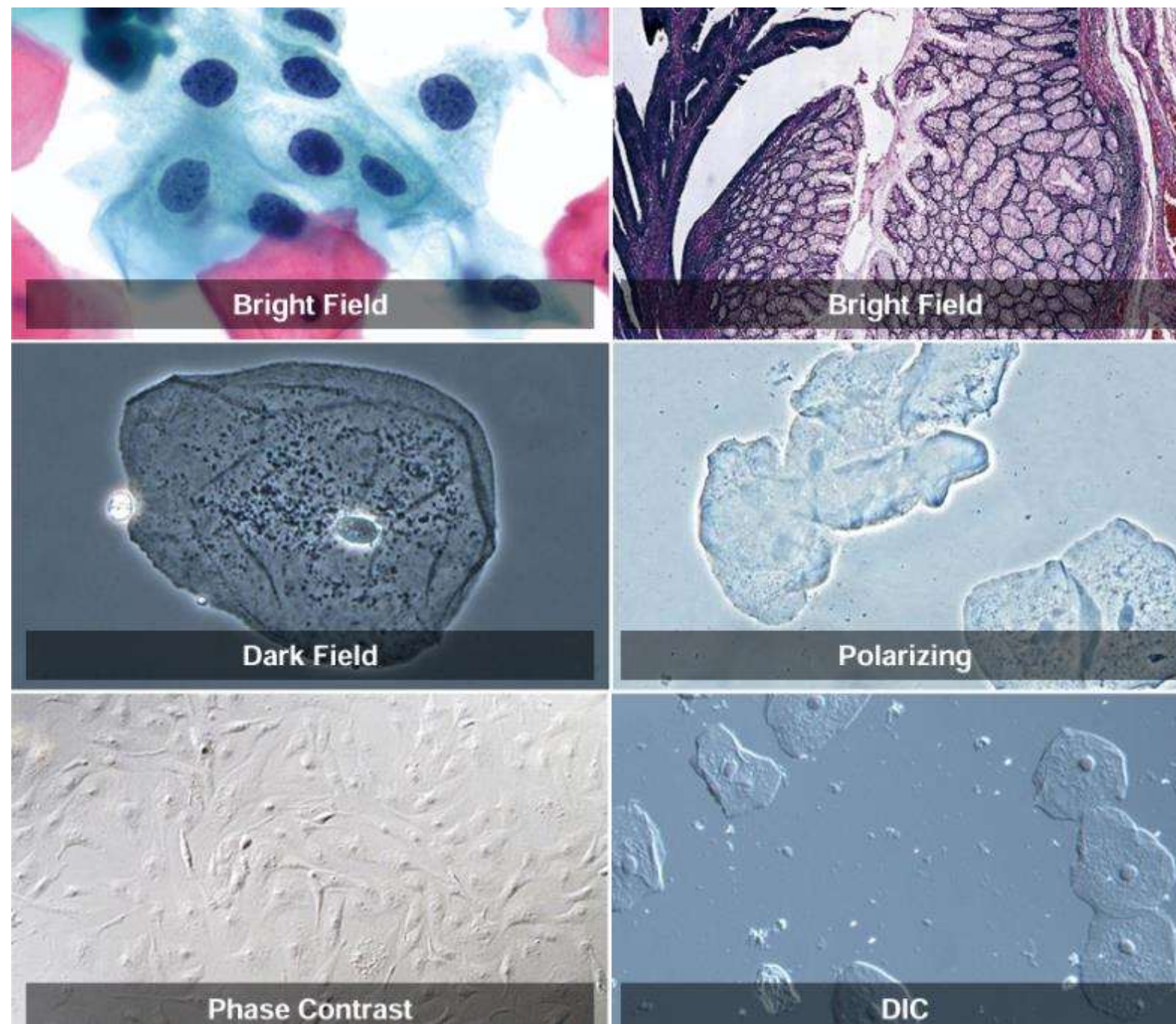


Analyzer Slide



Polarizer Lens

Research Scientific Laboratory



Compound Eye Illumination System, Lighting Ideal Light Path

The diagram shows a light source on the left emitting rays that pass through a series of lenses (a collimating lens, a field lens, and an eyepiece lens) to illuminate a specimen on the right. The text below explains: 'EPO800 Compound Eye Illumination System adopts the compound eye illumination system to improve the contrast rate and effectively improve the illumination uniformity of the specimen surface. Even at the edge of the field of view uniform and bright background brightness can be achieved under any magnification.'

Collimating Lenses in EPO800 are used to convert divergent or convergent light into a parallel beam. This is crucial for ensuring uniform illumination and accurate imaging in microscopy. These lenses are typically made from curved mirrors or glass and are meticulously aligned to maximize light collection from a source. By producing a collimated (parallel) beam of light, these lenses help to minimize parallax errors and improve the clarity and precision of the microscope's imaging system.

Infinity Optical System BF Bright Field, Semi APO – Apochromatic Objective, DF Dark Field, PL Polarizing, PH Phase Contrast, DIC – Difference Interference Contrast

EPO800	EPO800L	EPO800M	EPO800F
MICROSCOPE TYPE	Biological	Metallurgical	Fluorescence
Binocular, Interpupillary distance 50-76mm	●	○	●
Trinocular, Interpupillary distance 50-76mm	○	●	○
High eye-point plan eyepiece WF10X/20	○○	○○	○○
High eye-point plan eyepiece WF10X/22	●●	●●	●●
High eye-point plan eyepiece WF10X/25	○○	○○	○○
Plan eyepiece WF16X/13	○○	○○	○○
High eye-point plan eyepiece WF10X/18 (Pointer)	○	○	○
Reticule Eyepiece, Cross WF10X/18	○	○	○
Infinity Plan Achromatic Objective 4X N.A.0.10 WD 200mm	●	○	●
Infinity Plan Achromatic Objective 10X N.A. 0.25 WD 12mm	●	○	●
Infinity Plan Achromatic Objective 40X(S) N.A.0.65 WD 0,65mm	●	○	●
Infinity Plan Achromatic Objective 100X(S)/(Oil) N.A. 1.25 WD 0,13mm	●	○	●
Infinity Plan Achromatic Objective 2X	○	○	○
Infinity Plan Achromatic Fluor Objective 4X N.A.0.10	○	●	○
Infinity Plan Achromatic Fluor Objective 10X N.A. 0.25	○	●	○
Infinity Plan Achromatic Fluor Objective 20X N.A. 0.40	○	●	○
Infinity Plan Achromatic Fluor Objective 40X (S) N.A. 0.65 W.D. 0.65	○	●	○
Infinity Plan Achromatic Fluor Objective 60X (S) N.A. 0.90 W.D. 0.26	○	○	○
Infinity Plan Achromatic Fluor Objective 100X (S) (OIL) N.A. 1.30 W.D. 0.16	○	●	○
Light manager	○	○	○
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, CL/PH 0.90/1.25 Oil	●	○	○
Plan Dis Phase-contrast Condenser (with 10X /40X dark field function)	○	○	○
COLO Microscope camera with software according customer demand	○	○	○
Mechanical Stage, ceramic, right handed, tension control 150X162mm, movement range 76X52mm with slide holder up to 2 pcs, CW rotated 239°, rubberized	●	○	○
Mechanical Stage, right handed, 156X138mm, movement range 76X54mm with slide holder	○	●	●
Reckless Stage, right handed, 185X177mm, movement range 75X50mm	○	○	○

	EPO800L	EPO800M	EPO800F
DIC Quintuple Nosepiece, inward facing	●	●	●
DIC Sextuple Nosepiece, inward facing Click Stop	○	○	○
DIC Seven places Nosepiece, inward facing Click Stop	○	○	○
Abbe Condenser N.A. 1.10 with slot for contrast slides (dark field, phase contrast, light field, compensator...).	●	●	●
Kohler Illuminator (With field diaphragm)	●	●	●
Kohler Illuminator (No field diaphragm)	○	○	○
6V 20W Tungsten-Halogen Lamps, intensity adjustable	○	●	●
6V 30W Tungsten-Halogen Lamps, intensity adjustable	○	○	○
3W LED Electric Device (with Rechargeable Batteries)	○	○	○
3W LED Pre - Centered, Intensity Adjustable	●	○	○
15W LED, Pre - Centered, Intensity Adjustable	○	○	○
0.5X C-Mount	○	○	○
1X C-Mount	○	●	○
0,65X C-Mount	○	○	○
HDMI	○	○	○
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)	○	○	○
AAdjustable Microscope Binocular head 10 ° to 60 °	○	○	○
250V/3.15A φ5X20 fuse	●●	●●	●●
6V 30W Tungsten-Halogen lamp	○	○	○
6V 20W Tungsten-Halogen lamp	○	○	○
3W Led Lamp	○	○	○
Immersion Oil 10ml	●	●	●
User manual	●	●	●
Dust Cover	●	●	●
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.