

Fluorescent Microscope IMF-1500 Series is used to study the absorbing, transportation, chemicals distribution and positioning in cells. It is widely used in disease examination, immune diagnosis and life science areas. 6V/30W Halogen lamp Illumination with consistent color temperature, achromatic objective to ensure high image flatness across the field, single lens and ABBE Condenser with iris diaphragm and backward quadruple revolving nosepiece. The trinocular viewing head has excellent Infinite Plan Achromatic $4 \times, 10 \times, 40 \times 100 \times$, - PLN Plan: $4 X / N A=0.10$ of length $30 \mathrm{~mm}, 10 \mathrm{X} / \mathrm{NA}=0.25$, of length $10.2 \mathrm{~mm}, 20 \mathrm{X} / \mathrm{NA}=0.40$, of length 12 mm , $40 X / N A=0.65$, of length $0.7 \mathrm{~mm}, 100 X(\mathrm{Oil}) / \mathrm{NA}=1.25$, of length 0.2 mm , Plan semi-apochromatic fluorescent $4 \mathrm{X} / 0.13$ (infinity), of length $18.5 \mathrm{~mm} 10 \mathrm{X} / 0.30$ (infinity) of length 10.6 mm , Plan semi-APO phase contrast: $10 \times \mathrm{NA}=0.3$ of length 8.1 mm Cover glass, $1.2 \mathrm{~mm}, 20 \times \mathrm{NA}=0.45$ of length $7.5-8.8 \mathrm{~mm}$ objectives and each eye tube has interpupillary adjustment. Designed with $\mathrm{U}, \mathrm{V}, \mathrm{R}, \mathrm{B} 1$ fluorescent filters. Provide tremendous fluorescent image with high resolution fluorescent objectives including Infinite Plan Achromatic, N-PLN Plan, N-PLN PH Plan Phase Contrast, N-PLFN Plan Semi-apochromatic Fluorescent:, Plan semi-apochromatic fluorescent objective, and backward quintuple, backward sextuple, motorized backward sextuple resolving nosepiece. Designed with Turret with 6 filter block cubes, 100W mercury lamp, epi-fluorescence HBO mercury lamp and B,G,UV fluorescent filters, epi-fluorescence attachment LED lamp with B,G,UV filters. Equipped with excitation filter for incoming light and emitted filters for emitted light and dichroic mirror to reflect the excitation light to the sample and instantaneously transmit only the emitted light from the sample back to the detector.

## Features

Wild field WF10X22 mm, super wide field SW10X25 mm, extra wide field EW12.5X17.5 mm, high eye point wide field plan eyepiece PL10X25 mm, and SW10X25mm,30 mm eyepieces
4) Coaxial coarse and fine adjustment, fine division 0.002 mm , coarse stroke $37.7 \mathrm{~mm} /$ rotation, fine stroke $0.2 /$ rotation, moving range 22 mm
) Double layers mechanical stage and triple layer mechanical stage, movement range $130 \times 85 \mathrm{~mm}$, flexible knob.

- Swing Condenser NA 0.9/0.25 etc.
- Mirror and 12V/20W halogen lamp and 3W S-LED lamp light source
- Different filters including blue filter and green, amber, grey filters as an optional accessories
- Binocular $30^{\circ}$ inclined and a $360^{\circ}$ rotatable head with interpupilary distance 48 to 76 mm , trinocular $30^{\circ}$ inclined and a $360^{\circ}$ rotatable head with interpupilary distance 48 to 76 mm
) Small foot print and light weight
- Easy operating with ergonomic design
- Excellent image quality with infinite optical system
) Optional accessories: photo adapter canon DSLR camera, video adapter, $1 \times \mathrm{c}$-mount, $0.5 \times \mathrm{c}$-mount a etc.
- 12V/100W halogen lamp and LED lamp Kohler Illumination as an optional accessories


## Technical Specifications

| Model | IMF-1520 | IMF-1540 | IMF-1560 | IMF-1580 | IMF-1500 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Fluorescent Microscope |  |  |  |  |
| Viewing Head | Trinocular at $30^{\circ}, 360^{\circ}$ <br> Rotatable, ID: 48-75 mm | Trinocular, $30^{\circ}$, ID: $47 \mathrm{~mm}-78$ mm | Ergo Tilting Trinocular adjustable 0-35 $\operatorname{ID}$ : 4778 mm (op:Trinocular $30^{\circ}$, ID: $47-78 \mathrm{~mm}$ | trinocular (Inverted image), $30^{\circ}$ inclined, ID:: $50-76 \mathrm{~mm}$ | Trinocular head with Bertrand lens, $d$ at $45^{\circ}$, ID: 47-78 mm |
| Magnification | - |  |  |  | internal magnification: $1 \mathrm{x}, 1.5 \mathrm{x}$ |
| Fluorescent |  | Turret with 6 filter block cubes position, with iris field diaphragm and aperture diaphragm, central adjustable; with filter and polarizing slot; fluorescence filters (B,G fluorescent filters), 100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable. |  | 100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable. (75W xenon lamp house for option) | Epi-fluorescence HBO mercury lamp and B,G,UV fluorescent filters, field diaphragm, center adjustable(optional: Epifluorescence attachment LED lamp and B,G,UV filters, field diaphragm |
| Reflected Light Source | Blue : 460-490 excitation, 505 dichroic mirror, 515 barrier filter; Green : 510550 excitation, 570 dichroic mirror, 590 barrier filter | - |  |  |  |
| Optical System | Infinite |  |  |  |  |
| Focusing | Coaxial Coarse and Fine Adjustment, Fine Division 0.001 mm , Coarse Stroke $37.7 \mathrm{~mm} /$ Rotation, Fine Stroke $0.1 \mathrm{~mm} /$ Rotation, Moving Range 24mm | Low-position coaxial coarse and $1 \mu \mathrm{~m}$, Moving | d fine focusing, fine division ange 35 mm | Biological frame (transmitted), low-position coaxial coarse and fine adjustment, coarse adjustment distance Fluorescence frame (transmitted), low-position coaxial coarse and fine adjustment, | Coaxial coarse fine focusing. Movement range 9mm, coarse adjustment $2 \mathrm{~mm} /$ rotation, fine adjustment $0.2 \mathrm{~mm} /$ rotation |
| Eyepiece | WF10×/22mm | SW10X25mm, diopter adjustable |  | PL10X25mm, (optional: PL10X25mm,PL10X26.5mm, | SW10×/25mm,30mm |
|  |  | (optional:SW10X22mm, EW12.5X17.5m, WF15X16mm, WF20X12mm, diopter adjustable |  | PL10X26.5mm, with reticle, diopter) | (optional:SW10X22mm,30mm, EW12.5X17.5mm, 30 mm , WF15X16mm, 30 mm , WF20X12mm, 30mm |
| Nosepiece | Backward Quintuple | Backward Sextuple | Motorized Backward Sextuple | Backward Quintuple(optional: Backward Sextuple) | 6-hole nosepiece with DIC slot |
| Objective | Infinite Plan Achromatic Objective 4×, 10×, 40×, 100× | $\begin{array}{r} \text { N-PLN Plan: } 4 \mathrm{X} / \mathrm{NA}=0.10,30 \mathrm{~m} \\ 20 \mathrm{X} / \mathrm{NA}=0.40,12 \mathrm{~mm}, 4 \\ 100 \times(\mathrm{Oil}) / \mathrm{NA}= \end{array}$ | $\begin{aligned} & \mathrm{m}, 10 \mathrm{X} / \mathrm{NA}=0.25,10.2 \mathrm{~mm}, \\ & 0 \mathrm{X} / \mathrm{NA}=0.65,0.7 \mathrm{~mm}, \\ & 1.25,0.2 \mathrm{~mm} \end{aligned}$ | Plan semi-apochromatic fluorescent 4X/0.13(infinity), <br> $18.5 \mathrm{~mm} 10 \mathrm{X} / 0.30$ (infinity) <br> $10.6 \mathrm{~mm}, 20 \mathrm{X} / 0.50$ (infinity) <br> 2.33mm40X/0.75(infinity) <br> $0.6 \mathrm{~mm}, 100 \mathrm{X} / 1.30$ (infinity), <br> 0.21 mm | Plan semi-APO phase contrast: $10 \times$ NA $=0.38 .1 \mathrm{~mm}$ Cover glass, $1.2 \mathrm{~mm}, 20 \times \mathrm{NA}=0.45,7.5-8.8 \mathrm{~mm}$ Cover glass $0-2 \mathrm{~mm}, 40 \times \mathrm{NA}=0.60$, $3-4.4 \mathrm{~mm}$ Cover glass 02mm(optional: $\quad 4 \times \mathrm{NA}=0.13$, 16.5 mm Cover glass $0-2 \mathrm{~mm}$, $60 \times \mathrm{NA}=0.70 \quad 1.8-2.6 \mathrm{~mm}$. |
|  | Infinite Plan Achromatic $20 x, 60 x \text {, }$ | (opt:50X(Oil)/NA=0.95, WD $=0.19 \mathrm{~mm} 60 \mathrm{X} / \mathrm{NA}=0.80$, WD $=0.3 \mathrm{~mm}$ ); N-PLN PH Plan Phase Contrast: 10X/NA=0.25 $10.2 \mathrm{~mm}, 20 \mathrm{X} / \mathrm{NA}=0.40$, of length 12 mm , 40X/NA $=0.65,0.7 \mathrm{~mm}$; N-PLFN Plan Semi-apochromatic Fluorescent: $4 X / N A=0.13,17.2 \mathrm{~mm}$. |  |  |  |
|  | (optional: Infinite Plan Fluorescent $4 \times, 10 \times, 20 \times, 40 \times$, 100x) |  |  |  |  |


| Stage | Double Layers Mechanical Stage $185 \times 142 / 75 \times 55 \mathrm{~mm}$ | Double layers mechanical stage, size 190mmX152mm; moving range78mmX32mm <br> (Right or left handle); precision: 0.1 mm | Double layers mechanical stage, size $190 \mathrm{mmX152mm}$; moving range $78 \mathrm{mmX54m}$ (double slides holder, Right or left handle); precision: 0.1 mm ; with Sapphire Crystal Glass Insert | Double layers mechanical stage, size: 187mm X168mm; moving range: 80 mm X55mm; precision: 0.1 mm ; two-way linear drive, tension adjustable | Three-layer mechanical stage, movement range $130 \times 85 \mathrm{~mm}$, flexible knob. Different small sizes stage could be attached to main stage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Light Source | 6V/30W Halogen lamp External Kohler illumination, A spherical collector | 3W S-LED lamp, center pre-set, intensity adjustable |  | 12V/100W halogen lamp house for transmitted light, center preset, intensity adjustable | 12V/100W halogen lamp, Kohler illumination(optional: LED illumination |
|  |  | (optional:12V/10 | W halogen lamp) |  | ECO Auto-off function) |
| Condenser | Swing Condenser NA0.9/0.25 | Swing-out type conde | N.A.0.9/0.25(Auto) | Swing-out type achromatic condenser (N.A.O.9) | Long working distance condenser, NA0.55, WD=26mm, with 6-position plate |
|  |  | (optional: Dark-field Condenser (Dry), used for objectives lower than 100X |  |  |  |
|  |  | Turret Phase Contrast Condenser |  |  |  |
|  |  | Dark-field Condenser (Oil), used for 100X) |  |  |  |
| Filter |  | $\mathrm{U}, \mathrm{V}, \mathrm{R}$ fluorescent filters |  |  | V, B1, R fluorescent filters |
| Certification |  |  |  |  |  |
| Accessories | - | Dust Cover, Power Cord, Cedar Oil 5ml |  |  |  |
| Optional Accessories | Photo Adapter Canon DSLR camera, | 10X DIC Objective Lens, 20X DIC Objective Lens |  | Camera adapter:, $0.5 \mathrm{X} / 0.65 \mathrm{X} / 1 \mathrm{X}$ focusing C mount, Cooled CCD camera, SONY 2/3", 1.4MP, ICX285AQ, Color CCD, Centering objective for fluorescence observation, Calibration slide 0.01 mm | Dark field |
|  | Video Adapter | Polarizer for DIC Kit, DIC insert plate(10X/20X), can be inserted into the DIC slot on nosepiece |  | Multi Viewing Attachment for 5 persons, DIC Attachment | Polarizing kit |
|  | $1 \times$ C-mount, $0.5 \times$ C-mount | DIC insert plate(40X/100X) can be inserted into the DIC slot on nosepiece, DIC Turret Condenser |  |  | Phase contrast |
|  | a | U,V,R fluorescent filters, ND6/ND25 Filter |  |  | DIC |
|  |  | 0.5X C-mount Adapter, 1X C-mount Adapter |  |  |  |
| Electrical Requirement |  | 100VAC |  |  |  |
| Catalogue No. | 440110-05-04 | 440110-10-01 | 440110-15-04 | 440110-20-04 | 440110-25-04 |

## Sample Image



