

Polarizing Microscope IMP-1400 Series equipped with a high degree of sensitivity and best suited for anisotropic (mineral) specimens such as geology, minerals, metallurgy, university teaching laboratories, and other sectors. Built-in bertrand lens, polarizer and analyzer, $360^{\circ}$ rotatable round stage, filter, condenser, etc. the trinocular viewing head with wild field eyepieces and has excellent infinite strain free plan achromatic: $4 \mathrm{X} / 0.10 / \infty /-17.3 \mathrm{~mm}, 10 \mathrm{X} / 0.25 / \infty / 0.17-10.0 \mathrm{~mm}$, $40 X / 0.65 / \infty / 0.17-0.54 \mathrm{~mm}$ objectives, and each eye tube has interpupillary adjustment. This series is capable of providing strong images with a broad field of view, the multipurpose and perfect for basic studies of samples properties. Come with $12 \mathrm{~V} / 50 \mathrm{~W}$ halogen lights, allowing samples to be illuminated for a more comprehensive field of view. Accomplished with the help of particular devices known as retardation plates and optical compensators. First order retardation plate is used in optical path differences ranging from a fraction of a wavelength up to several wavelengths. This flexible and multipurpose tool is known by different names, comprising a red plate, red-one plate, lambda $(\lambda)$ plate, gypsum plate, selenite plate, sensitive violet, or simply a color tint plate and quartz wedge plate is a simple, semi-quantitative optical compensator used to examine optical path differences in a wide range of samples by the quartz wedge. Built in a crystalline block of quartz provide parallel or perpendicular optical axis to the edge of the birefringent crystal

## Features

- Accomplished with the help of particular devices known as retardation plates and optical compensators.
- Infinite strain free plan achromatic objective, and Backward quintuple nosepiece

〈 Gypsum $\lambda$ Slip, First Class Red, 1/4 $\lambda$ Slip, ( I -IV Class) Quartz Wedge optical compensate system

* High point wild field EW10×/22mm and Plan eyepiece with scale of crosshair, crosshair, gridding eyepieces
- Coaxial Coarse \& Fine Adjustment, Range 24mm, Fine Division 0.002 mm
* Polarizing rotatable stage of length 170 mm , center adjustable, $360^{\circ}$ scale, minimum division $1^{\circ}$, minimum reading vernier scale 6 to $45^{\circ}$ stop knob
- N.A.0.9/0.13 swing out condenser
- $24 \mathrm{~V} / 100 \mathrm{~W}$ Halogen lamp transmitted light source

↔ Trinocular $30^{\circ}$ inclined and a $360^{\circ}$ rotatable head with interpupilary distance 48 to 75 mm and

- Small foot print and light weight
< Easy operating with ergonomic design
- Excellent image quality with infinite optical system
- Optional accessories video adaptor and filters
* Built in a crystalline block of quartz provide parallel or perpendicular optical axis to the edge of the birefringent crystal


## Technical Specifications

| Model | IMP-1401 |
| :---: | :---: |
| Type | Polarizing Microscope |
| Viewing Head | trinocular head, Inclined at $30^{\circ}$, Interpupilary $48-75 \mathrm{~mm}$ |
| Optical System | Infinite |
| Focusing | Coaxial coarse \& fine adjustment, range 32 mm , fine division 0.001 mm , coarse stroke 37.7 mm per rotation, Fine stroke 0.1 mm per rotation |
| Eyepiece | Plan eyepiece EW10X22mm and Plan eyepiece with scale of crosshair, crosshair, gridding |
| Nosepiece | Backward quintuple |
| Objective | Strain-Free Plan Achromatic: $4 \mathrm{X} / 0.10 / \infty /-, 17.3 \mathrm{~mm}, 10 \mathrm{X} / 0.25 / \infty / 0.17,10.0 \mathrm{~mm}$, |
|  | 40X/0.65/ $/ 0.17,0.54 \mathrm{~mm}, 100 \mathrm{X} / 1.25 / \infty / 0.17,0.13 \mathrm{~mm}$ (Optional:20X/0.40/ $/ 0 / 0.17,5.10 \mathrm{~mm}$ ) |
| Stage | Polarizing Rotatable Stage:170mm, center adjustable, $360^{\circ}$ scale, minimum division $1^{\circ}$, minimum reading vernier scale $6^{\prime}, 45^{\circ}$ click stop knob |
| Light Source | 24V/100W Halogen lamp transmitted |
| Polarizing Unit | $360^{\circ}$ Rotatable, $0^{\circ}$ position adjustable |
| Analyzing Unit | $0^{\circ}-360^{\circ}$ rotatable analyzer with gradation, minimum gradation: $0.1^{\circ}$ |
| Optical Compensator | gypsum $\lambda$ plate (first class red), $1 / 4 \lambda$ plate, quartz wedge plate |
| Lens | Bertrand lens |
| Filter | Blue filter(optional:ND6 and ND25 Neutral density) |
| Certification |  |
| Optional Accessories | video adaptor and filters |
| Electrical Requirement |  |
| Catalogue No. | 440230-05-04 |

## Sample Image



