

RESEARCH METALLURGICAL MICROSCOPE IMM-3100 SERIES



Research Metallurgical Microscope IMM-3100 Series is a part of the range of research microscope and stands out through its design which is ergonomic, vigorous and constant and stable. This research microscope is used to view samples that will fit on the microscope stage. This range, with its large working distance infinite LWD plan achromatic metallurgical: 5X/ 0.15/∞/ 0 (BF)-10.80 mm, 10X/ 0.30/∞/ 0 (BF)-10.0 mm-20X/ 0.45/∞/ 0 (BF)-4.00 mm, 50X/ 0.55/∞/ 0 (BF)-7.90 mm, 100X/ 0.80/∞/ 0 (BF)-2.10 mm objective. Adjustable 5W reflected and transmitted LED lamp to ensure the optimum illumination of the materials to be tested. The illuminating system consists of a high-intensity light source, N.A.0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm. The trinocular viewing head with high point wild field PL10X22 mm eyepieces fitted with 54-75 mm interpupillary distance as standard. Yellow/neutral/IF550/LBD filter for transmitted light. Designed with transmitted and reflected frame focusing. Features with backward quintuple revolving nosepiece holds multiple lenses, and found between the eyepiece and the stage allowing the user to turn it to achieve various levels of magnification. Though the exact level of magnification may vary with different models, most microscopes provide a low power lens with about 5X magnification and a high power lens with about 100X magnification. Featured with chromatic condenser Abbe N.A.0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm that are concentrates and controls the light that passes through the specimen prior to entering the objective with modern cameras use a type of adjustable diaphragm known as an iris diaphragm which can reduce the amount light that hits a detector by decreasing the aperture and Filter

Features

- ◆ Infinite LWD Plan Achromatic Metallurgical objective
- ◆ Adjustable reflected frame, coaxial focus system with tension adjustment and up-limited device, moving range: 28 mm, fine precision: 0.002mm
- ◆ Offer stages that are designed to move small sample slides or entire microscopes including Double layer mechanical stage to facilitates sample observations of length 175×145mm, moving range: 76×42mm
- ◆ High point wild field PL10X22mm eyepieces
- ◆ 12V/50W Halogen reflected light source
- ◆ Different filters Blue filter with optional: Green/ Amber/ Grey filters
- ◆ Trinocular 30° inclined and a 360° rotatable head with interpupillary distance 54 to 75 mm
- ◆ Small foot print and light weight
- ◆ Easy operating with ergonomic design
- ◆ Excellent image quality with infinite optical system
- ◆ Optional accessories Yellow/neutral/IF550/LBD filter for transmitted light, Digital camera adapter, C-mount adapter, 3.2X photo eyepiece, Photo tube with PK or MD mount for DSLR camera, Relay lens, Interference filter for reflected light: Blue filter ≤ 480nm; Green filter 520-570 nm; Red filter 630-750 nm; White balance filter, High precision micrometer, scale value 0.01mm

Technical Specifications

Model	IMM-3180	IMM-3190
Type	Research Metallurgical Microscope	
Viewing Head	trinocular viewing head, inclined at 30°, interpupillary distance 54mm-75mm, left diopter ± 5 adjustable(optional: binocular viewing head)	
Optical System	Infinite	
Focusing	Reflected frame, coaxial focus system with tension adjustment and up-limited device, moving range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 78mm	Transmitted and Reflected frame, coaxial focus system with tension adjustment and up-limited device, moving range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 28mm
Eyepiece	High eye-point wide field plan eyepiece PL10X22mm	
	(optional: PL10X22mm, PL10X22mm, PL15X16mm)	
Nosepiece	Backward quintuple	
Objective	Infinite LWD Plan Achromatic Metallurgical: 5X/ 0.15/ ∞ / 0 (BF)-10.80 mm, 10X/ 0.30/ ∞ / 0 (BF)-10.0 mm-20X/ 0.45/ ∞ / 0 (BF)-4.00 mm, 50X/ 0.55/ ∞ / 0 (BF)-7.90 mm, 100X/ 0.80/ ∞ / 0 (BF)-2.10mm	
Stage	Double layer mechanical stage with X-Y coaxial adjustment 175x145mm, moving range: 76x42mm	Metal plate for transmitted frame; glass plate for transmitted & reflected frame
Light Source	5W LED reflected and transmitted Koehler illumination	
Condenser	N.A.0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm	
Filter	optional	
Certification		
Optional Accessories	Yellow/neutral/IF550/LBD filter for transmitted light, Digital camera adapter: 1X, 0.67X, 0.5X focusing C-mount adapter, 3.2X photo eyepiece, Photo tube with PK or MD mount for DSLR camera, Relay lens, Interference filter for reflected light: Blue filter ≤ 480 nm; Green filter 520-570 nm; Red filter 630-750 nm; White balance filter, High precision micrometer, scale value 0.01mm	
Catalogue No.	440290-05-04	440290-10-04