

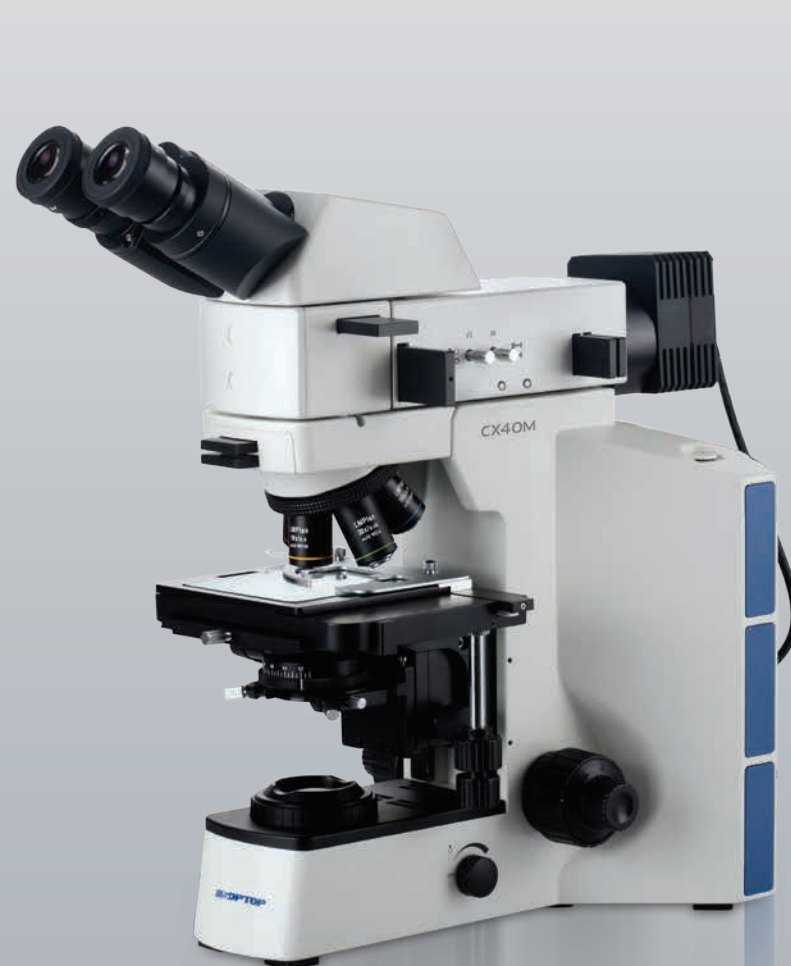
# **Sunny Instruments** **CX40M** Metallurgical Microscope



# CX40M

## Strive for Better Quality

As an upgraded metallurgical microscope, CX40M re-optimized the performance by integrating the advantages of our marketable products 'XYM' & 'MX4R' and the innovations of our new product 'RX50M' with marketing demand. With excellent imaging performance and comfortable operating experience, CX40M provides high cost-effective solution for metallographic analysis and industrial inspection.







Item	Magnification	N.A.	W.D. (mm)	Cover glass (mm)	Parfocal distance (mm)	Conjugate distance (mm)
LMPlan	5X	0.15	10.80	0	45	∞
	10X	0.30	10.00			
	20X	0.45	4.00			
	50X	0.55	7.90			
	100X	0.80	2.10			

- 1 With the most suitable viewing degree, 30° inclined head holds everyone in the best working state, less tension and fatigue. You can adjust the interpupillary distance to optimum according to the scale on viewing head.
- 2 Reflected illuminator with field/aperture diaphragm and oblique light device, as well as slots for polarizing kit and filters, adopts Koehler illumination system.
- 21 Comparing with other LED, single 5W LED with warm white light (3000–3300K) reduces the fatigue on observer's vision at the extreme.
- 22 With pull-rod devices for adjusting the centers of field and aperture diaphragm, stray light can be eliminated by expanding or shrinking the illumination zone.
- 23 Simple polarizing observation is available with pluggable polarizer kit. More ideal images are here with different filters.
- 3 The highest sample can be tested is 28mm with transmitted & reflected frame while 78mm high sample is available with reflected frame, as the stage can be dropped 50mm by loosening the screw in the stage holder.
- 4 M4 wrench for socket head screws places in the frame, making the best of the available space and improving your working efficiency.
- 5 Up-limit device is helpful to avoid the damage caused by impact between sample and objective lens.
- 6 Using the outstanding condenser system of New designed RX50M, much more transmitted light can be through with bigger numerical aperture and stronger intensity.





Bright field, oblique light and simple polarizing are all available with CX40M. Brightfield image with high brightness and high resolution shows original color of samples. And oblique light is used to show 3D relief image.

- 1

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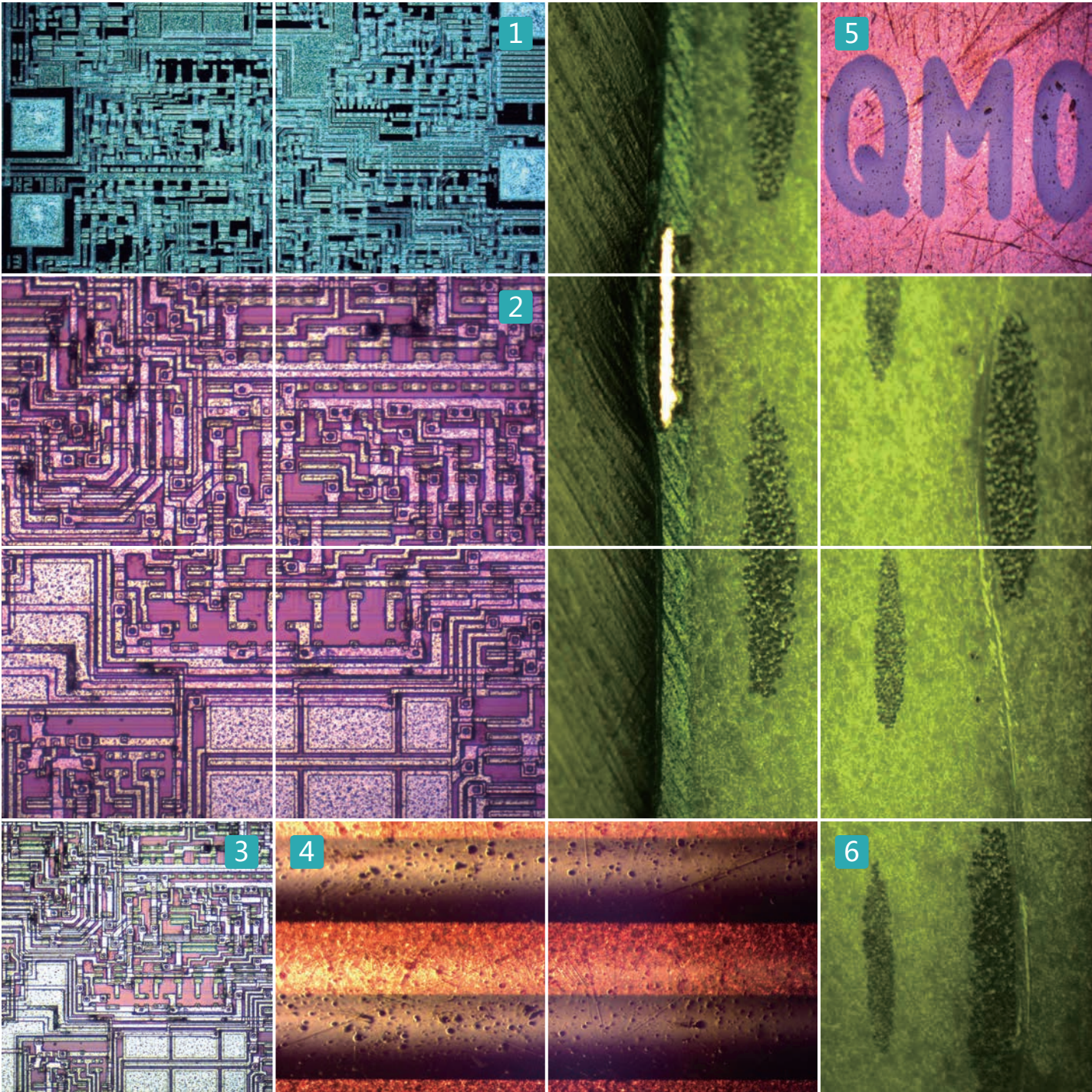
3

Bright field image
- 4

5

Oblique light image
- 6

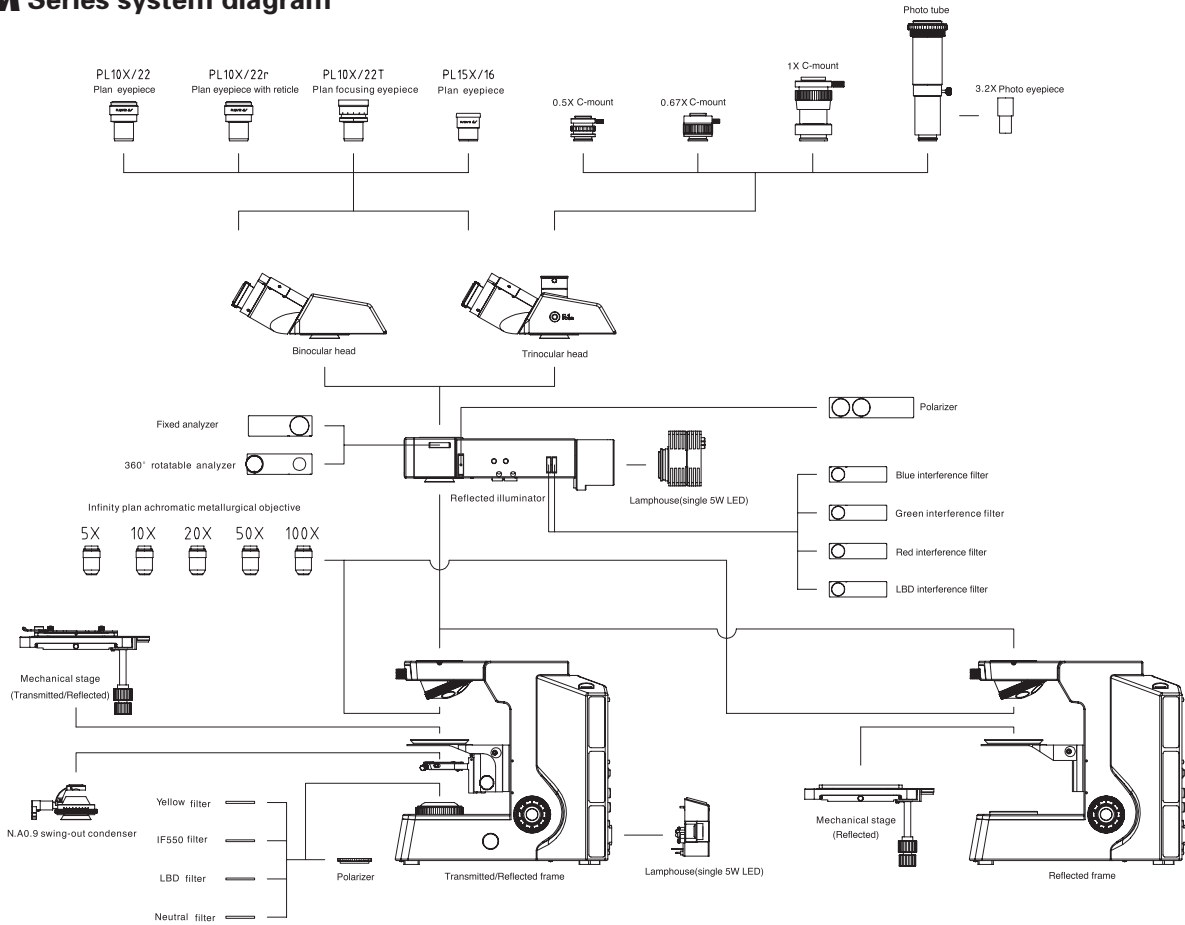
Simple polarizing image



CX40M Specifications

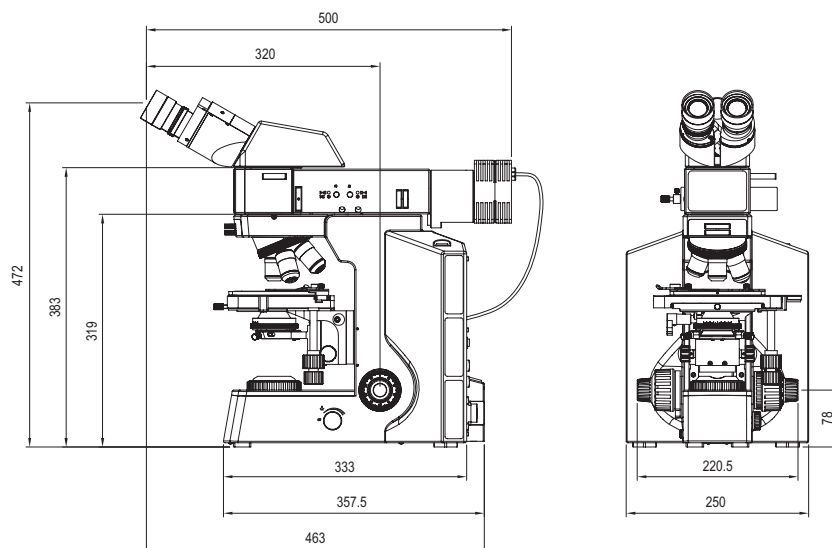
Optical system	Infinity color corrected optical system
Viewing head	30° inclined gemel binocular head, interpupillary distance: 54mm~75mm, left diopter ± 5 adjustable 30° inclined gemel trinocular head, interpupillary distance: 54mm~75mm, diopter ± 5 adjustable, splitting ratio R:T=100:0 or 50:50
Eyeiece	High eye–point wide field plan eyepiece PL10X22mm High eye–point wide field plan eyepiece PL10X22mm, with reticle High eye–point wide field plan focusing eyepiece PL10 × 22mm High eye–point wide field plan eyepiece PL15X16mm
Objective	LWD plan achromatic metallurgical objective 5X / 10X / 20X / 50X / 100X
Nosepiece	Reversed quintuple nosepiece
Focus Adjustment	Transmitted & Reflected frame, coaxial focus system with tension adjustment and up–limited device, coarse range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 28mm high sample is available. Reflected frame, coaxial focus system with tension adjustment and up–limited device, coarse range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 78mm high sample is available.
Stage	Double layer mechanical stage with X/Y coaxial adjustment, size: 175mm × 145mm, moving range: 76mm × 42mm. Metal plate for transmitted frame; glass plate for transmitted & reflected frame.
Reflected illumination	Wide–range voltage 100V–240V_AC50/60Hz, reflected lamp–house with single 5W LED, warm color. Koehler illuminator with oblique light device, center adjustable field and aperture diaphragm
Transmitted illumination	Wide–range voltage 100V–240V_AC50/60Hz, transmitted lamp–house with single 5W LED, warm color.
Condenser	N.A.0.9 swing–out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm.
Other accessories	Yellow/neutral/IF550/LBD filter for transmitted light Digital camera adapter: 1X, 0.67X, 0.5X focusing C–mount, 3.2X photo eyepiece, photo tube with PK or MD mount, relay lens Interference filter for reflected light: Blue filter ≤ 480nm; Green filter 520nm~570nm; Red filter 630~750nm; White balance filter High precision micrometer, scale value 0.01mm

CX40M Series system diagram





## CX40M Dimensions: mm



Design and production  
adheres to ISO14001  
international quality standard



Design and production  
adheres to ISO9001  
international quality standard



Design and production  
adheres to ISO13468  
international quality standard



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No additional notice for changes on the specification  
or appearance



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