

## **XJL-302/XJL-302BD**



**XJL-302** upright metallurgical microscope is suitable to observe surfaces of the opaque object. It is equipped excellent UIS optical system and modularization function design so that update system expediently and achieved polarization, darkfield observation. Compact and steady main frame body is the embodiment for the shock resistance. The ideal ergonomic design is adopted in this unit and has the easier operation and wider space. This is the ideal optical instrument for micro observation in metallographic structure and surface morphology. It is suitable for research in metallography, mineralogy, precision engineering, etc.

### **Features**

- ▲ With long working distance plan achromatic objectives (no cover glass) and wide-field eyepieces, can get clear pictures and wide view field
- ▲ With large move range mechanical stages, moving range:8"X8"(204mmX204mm)
- ▲ Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 0.8 $\mu$ m
- ▲ 6V 30W halogen lamp, adjustable brightness
- ▲ Trinocular, can switch to normally/polarize observation, brightfield/darkfield observation. can send 100% of light to the binocular eyepieces or to the top port

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### Observation system

The gemel mode trinocular is inclined 30 degree. The operator cervix and shoulder are released from tired in period of time keeping bow or head-u. p. The eyepiece field of view number is  $\Phi 22\text{mm}$  and eyepatch can be added.

### Mechanical Stage

The large-mobile range mechanical stage is adapted to observation big size specimen or quick check.

**size:** 280mmX270mm

**moving range:** 204mmX204mm.



### Epi-illumination system

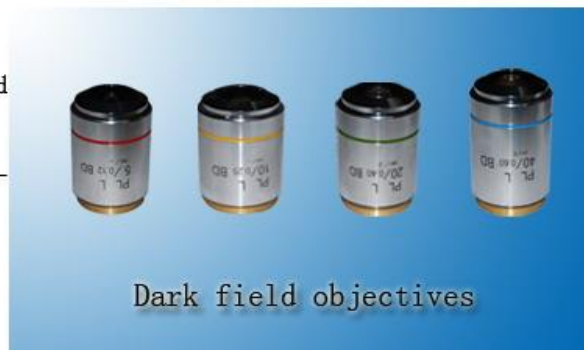
Integrated field diaphragm, aperture diaphragm and (Y, B, G, frosted glass) switching device. Push-pull analyzer and polarizer

XJL-302: 6V30W halogen lamp, brightness adjustable.

XJL-302BD: 12V50W halogen lamp, brightness adjustable.

### Dark Field Observation(for XJL-302BD)

Equip high quality bright and dark field objectives and dark field illumination device. Avoid the stray light of illumination system and improve the image quality in the dark field.



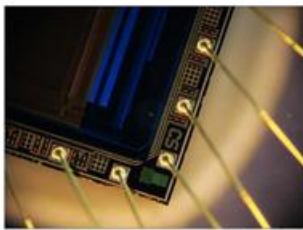
Dark field objectives



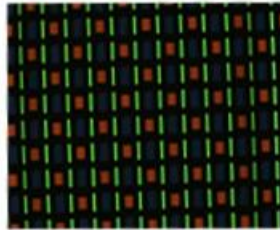
### Photography Unit

By adding the appurtenance such as CCD adapter, digital camera adapter and single-reverse digital camera adapter and etc. It can achieve high clear observation mode of camera and vidicon

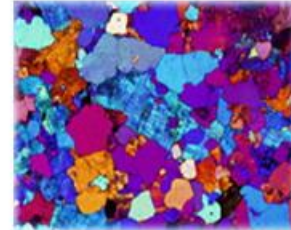
### Digital camera photography:



Dark type observe



Bright type observe



Polarized observe

## Specification

- **Standard Configuration**

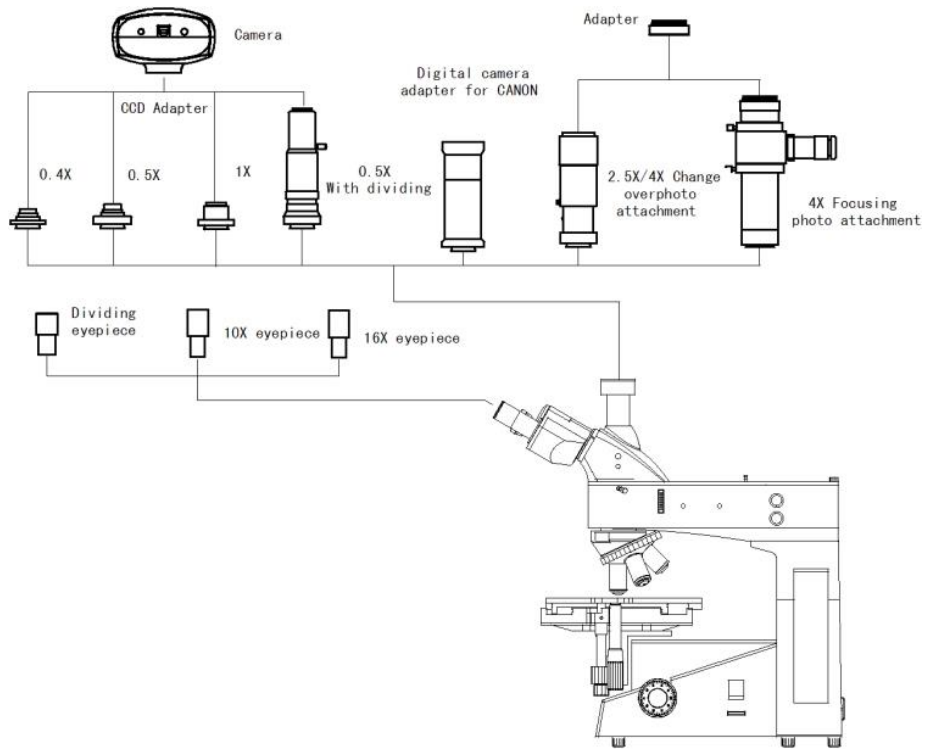
Specification		
Eyepiece	Wide field WF10X(field number: Φ22mm)	
Infinity plan achromatic objective	XJL-302 £ Equipped with bright field objectives£©	PL L5X/0.12 (Work distance) : 26.1 mm
		PL L10X/0.25 (Work distance) : 20.2 mm
		PL L20X/0.40 (Work distance) : 8.80 mm
		PL L50X/0.70 (Work distance) : 3.68 mm
		PL L80X/0.80 (Work distance) : 1.25 mm
	XJL-302BD £ Equipped with bright & darkfield objectives£©	PL L5X/0.12 BD (Work distance) : 8.05mm
		PL L10X/0.25 BD (Work distance) : 7.86mm
		PL L20X/0.40 BD (Work distance) : 7.23mm
		PL L50X/0.70 BD (Work distance) : 1.75mm
		PL L80X/0.80 BD (Work distance) : 1.25 mm
Eyepieces tube	Trinocular inclined 30°, can be shot in 100% light flux.	
Epi-illumination system	XJL-302	6V30W halogen and brightness enable control
	XJL-302BD	12V50W halogen and brightness enable control

	Integrated field diaphragm, aperture diaphragm and (Y,B,G, ground glass) switching device. Push-pull type analyzer and polarizer.
Focus system	Coaxial coarse/fine focus system, with tension adjustable and limit stopper, minimum division of fine focusing: 0.7µm.
Nosepiece	Quintuple (Backward ball bearing inner locating)
Stage	Mechanical stage—overall size : 280mmX270mm—moving range: 204mmX204mm

### Optional accessories

Name	Sort/Technique parameter	NO.	
Objective	Dividing eyepiece(field number:Φ22mm) 0.10mm/Div	1122010	
Objective	PL L40X/0.60 Work distance:3.98mm	Equipped with bright field objectives	2260140
	PL L60X/0.70 Work distance:2.08mm		2260360
	PL L100X/0.85 Work distance:0.4mm		2260111
	PL L40X/0.60 BD Work distance:3.0mm	Equipped with bright & dark field objectives	2120140
	PL L60X/0.70 BD Work distance:1.65mm		2120160
	PL L100X/0.85 BD Work distance:0.4mm		2120111
Stage	Mechanical stage, overall size : 250mmX230mm Move range:154mmX154mm	040018	
CCD Adapter	0.5X	812004	
	1X	812002	
	0.5X with dividing 0.1mm/Div	812003	
Camera	DV-1 Video output—380/520 TV line—© USB output —0.42 M pixel—©	800001	
	DV-2 With USB output —1.3M/3.0M/5.0M/10.0M pixel—©	800003	
	DV-3 With video output—380/520 TV line—©	800005	
Digital camera adapter	CANON(A570,A610,A620,A630,A640,A650,EF) NIKON(F)	820001	

### Diagram



## Dimensions

