# XPL-1500/XPL-1503/XPL-1530



XPL-1500

• **XPL-1500** series transmitted and reflected polarization microscopes are utilized polarize light to observe and research the matter which have double refraction features, the user can make single polarizing observation, orthoscopic observation, conescopic observation. They are applied in geology, chemicals, physic and leechdom fields. They are also widely used to observe the crystal of liquid macromolecule polymer, biomedical polymer and liquid crystal. They are the ideal instruments for scientific research and universities teaching demo.

# Features

- ▲ Transmitted, Reflected, transmitted/reflected illumination can be choosn
- ▲ Equipped with strain-free plan objectives(center adjustable) and wide field eyepiece

 $\blacktriangle$  Coaxial coarse/fine focus system with tensional adjustable and up stop, minimum division of fine focusing:  $2\mu m$ 

A Rotatable stage,  $360^{\circ}$  graduated in  $1^{\circ}$  increments, minimum retardation resolution 6' center adjustable and with tightener£¬Stage vertical effective movement up to 30mm





# Observation System

Trinocular, single diopter adjustment, inclined 30°, can send 100% of the image light to top photography port and also can be connected to the camera.

10X wide field plan eyepiece, field  $\Phi$ 18mm, can provide expanse and smooth observation space. The intermediate attachment includes the impellent style of analyzer (360° rotatable with scale and fine nonius) and the impellent style of bertrand lens (center adjustable). It can be added  $\lambda$  compensator,  $\lambda/4$  compensator or quarts wedge compensator.



Objective, strain-free plan achromatic objective (with or without cover glass), centre adjustable, can ensure the centre of objective and the rotatable stage completeness superposition.

### Stage

Rotund rotatable stage,  $\Phi$ 150mm diameter, 360° graduated (in 1° increments), minimum retardation resolution 6', center adjustable and with tightener.





**Transmitted illumination System** Polarizer, 360° rotatable, having 0,90,180, 270 four scale, is set under the aperture diaphragm.

The illumination system with 6V 20W halogen lamp (brightness adjustable) can provide clear and bright image. The system also includes the collector with field diaphragm.

### Reflected illumination System

The impellent style of polarizer can circumrotate 90°.

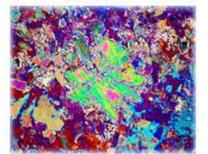
The illumination system with 6V 20W halogen lamp (brightness adjustable) can provide clear and bright image. The system also includes the collector with field diaphragm.





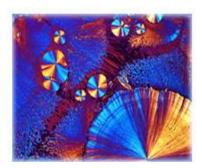
Camera observation unit

# Digital camera photography:



Polarized observe

Polarized observe



Polarized observe

# Specification

• Standard Configuration

Model		XPL-1500 (Transmitted illumination)	XPL-1530 (Transmitted & reflected illumination)	XPL-1503 (Reflected illumination)
Eyepiece		Wide field WF10X (Ф18mm)		
		Division eyepiece 10X ( $\Phi$ 18mm) 0.10mm/div		
Objective (center adjustable)		Strain-free plan achromatic objective (cover glass:0.17mm) PL 4X/0.10	Strain-free plan achromatic objective (no cover glass) PL 5X/0.12	
		Strain-free plan achromatic objective (cover glass:0.17mm)PL 10X/0.25	Strain-free plan achromatic objective (no cover glass) PL L 10X/0.25	
		Strain-free plan achromatic objective(cover glass:0.17mm) PL	Strain-free plan achromatic objective (no cover glass)	
		40X/0.65 (spring)	PL L40X/0.60 (spring)	
		Strain-free plan achromatic objective(cover glass:0.17mm) PL 60X/0.85 (spring)	Strain-free plan achromatic objective (no cover glass) PL L 60X/0.75 (spring)	
Reflected illumination	Polarizer	correction (opring)	Rotatable	
	Illumination		6V 20w, halogen lan brightness	ıp, adjustable

### Function spread

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

Transmitted illumination	Polarizer	360° rotatable, have 0,90,180,270 four scale		
	Collector	For halogen lamp illumination		
	Illumination	6V 20w, halogen lamp, adjustable brightness		
	Abbe condenser	N.A. 1.25 Rack & pinion adjustable		
Eyepieces tube		Trinocular, Inclination of 30°, can send 100% of the image light to top photography port		
Intermediate attachment		Built-in analyzer can switch to normal observe or polarizing observe freely, 90° rotatable with scale, minimum retardation resolution 12'		
		Bertrand lens, impellent style, center adjustable		
		¦Ë compensator		
		¦Ë/4 compensator		
		Quarts wedge compensator		
Nosepiece		Quadruple (Frontward ball bearing inner locating)		
Focus system		Coaxial coarse/fine focus system, with tension adjustable and limit stopper, minimum division of fine focusing: 2µm		
StageRotatable stage, Diameter \µ150mm, 360° graduated (in 1° increments), miretardation resolution 6' center adjustable and with tightener		· ·		

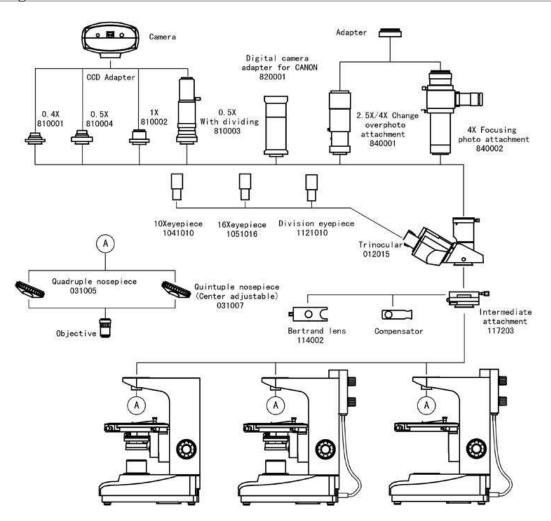
# • Optional accessories

Name	Sort/Technique parameter	NO.
Eyepiece	Wide field WF16X( $\Phi$ 11mm)	1051016
	Strain-free plan achromatic objective(cover glass:0.17mm) PL 20X/0.40	
	Strain-free plan achromatic objective(cover glass:0.17mm) PL 100X/1.25 (Oil ,spring)	2810311
Objective	Strain-free plan achromatic objective(no cover glass) PL L 20X/0.40	2850320
(center adjustable)	Strain-free plan achromatic objective(no cover glass) PL L 50X/0.70	2850350
	Strain-free plan achromatic objective(no cover glass) PL L 80X/0.80	2850380
	Strain-free plan achromatic objective (Dry) (no cover glass) PL L 100X/0.85 (Spring)	2850311
Nosepiece	Quadruple (Frontward ball bearing inner locating)£¬adjust the center of objective	031007
Slide moving holder	Moving range: 30mmX25mm	116202
	0.4X	810001
CCD adaptan	0.5X	810004
CCD adapter	1X	810002
	0.5X with dividing 0.1mm/Div	810003
	DV-1 With USB & video output	800001
Camera	DV-2 With USB output	800003
	DV-3 With video output	800005

	2.5X/4X Change over photograph attachment with 10X viewing eyepiece	840001
Photo unit	4X Focusing photograph attachment	840002
	MD Adapter	840003
	PK Adapter	840004
Digital camera adapter	CANON (A610,A620,A630,A640)	

### Diagram

•



# Dimensions

•

