

# Polarising Microscopes





from

**GX Microscopes**



The largest range of polarising microscopes in the UK ranging from basic models education and hobbyist to advanced research microscopes. Includes transmitted and incident light, monocular, binocular and trinocular models, all with strain-free objectives and rotating stages.

[www.gxoptical.com](http://www.gxoptical.com)

<b>Components</b>	<b>Range Overview</b>							
	<b>Model:</b>	<b>JPL-135</b>	<b>JPL1350HBG</b>	<b>XPL1500</b>	<b>XPL1503</b>	<b>XPL1530</b>	<b>XPL3200</b>	<b>XPL3230</b>
	<b>Product Code:</b>	GXMJPL135	GXMJPL1350	GXXMPL1500	GXXMPL1503	GXXMPL1530	GXXMPL3200	GXXMPL3230
Eyepieces	10X	• (one )	• (pair)	• (pair)	• (pair)	• (pair)	• (pair)	• (pair)
	10x with reticle		• (one)	• (one)	• (one)	• (one)	• (one)	• (one)
	WF			•	•	•	•	•
Head	Monocular	•						
	Binocular		•					
	Trinocular			•	•	•	•	•
Objective Type	Achromatic	•						
	Strain-free Achromatic		•					
	Strain-free Plan Achromatic coverslip corrected			•				
	Strain-free Plan Achromatic non-coverslip corrected				•	•		
	Infinity Strain-free Plan Achromatic coverslip corrected						•	
	Infinity Strain-free Plan Achromatic non-coverslip corrected							•
No. Objectives		4	4	4	4	4	4 (5 opt)	4 (5 opt)
Centratable on nosepiece				•	•	•	• reversed	• reversed
Polariser Quality		std	std	High	High	High	Top	Top
Frame/Stand Type		Student	Teaching	Routine	Routine	Routine	Research	Research
Condenser		•	•	•		•	•	•
Illumination	Transmitted light	•	•	•		•	•	•
	Incident Light				• Prism (always present)	• Prism (always present)		• Mirror retractable
Polarisers	Type	Retractable in head, rotatable on collector	Retractable in head, rotatable on collector	Retractable in head, rotatable on condenser with click stops	Retractable in head, rotatable on condenser with click stops	Retractable in head, rotatable on condenser with click stops	Retractable in head external rotatable, rotatable on condenser with click stops	Retractable in head external rotatable, rotatable on condenser with click stops
Plates and wedges, scales and filters	1/4 & 1 wavelength retardation plates, quartz wedge, Bertrand lens centre adjustable			•	•	•	•	•
Stage	360° rotatable	•	•	•	•	•	•	•
Focus	Coarse/Fine focus mechanism, limit stopper and tension adjustment	• (no tension adjustment nor limit stopper)	•	•	•	•	•	•
Camera Adapters				•	•	•	• 100/0 switch	• 100/0 switch
Interocular adjustment polarisation compensation				•	•	•	•	•
Frame		Basic Grade	Teaching Grade	Routine Grade	Routine Grade	Routine Grade	Research Grade	Research Grade

# GX Microscopes

## product datasheet

### JPL-135

Monocular Simple  
Polarising Microscope



#### Specifications

Specifications			
Product Code:			GXMJPL135
Eyepiece	Widfield	WF10X (18mm FOV)	STD
		WF16X (11mm FOV)	OPT
Objectives	Achromatic	4X/0.10	STD
		10X/0.25	STD
		40X/0.65 (sprungloaded)	STD
		100X/1.25 Oil (sprungloaded)	STD
Total Magnification		40X – 1000X	STD
Condenser	Abbe condenser	Abbe condenser, rack & pinion adjustable, NA=1.25	STD
Illumination	Transmitted light	6V20W halogen lamp, adjustable brightness	STD
Nosepiece	Quadruple		STD
Eyepiece Tube	Binocular (Compensation inclination of 30°)		STD
Stage	size - 120mm 360° rotatable		STD
Focus	Coarse/Fine focus mechanism with adjustable tension and limit stopper system		STD

The JPL-135 is equipped with a smooth, rotating, graduated stage and a set of polarisers that allow observation of all types of transmitted light polarised specimens such as thin sections of minerals, polymers, crystals and particulates.

This model, is part of GX Microscope's new range of polarising microscopes, it is affordable by amateur microscopists, schools and colleges.

It is equipped with a comfortable viewing, monocular head and a fine set of achromatic objectives giving a magnification range of 40X – 1000X.

The analyser mounted in the head is retractable and the polariser is mounted over the collector near the lamp and is rotatable though 360deg

The microscope is also supplied with a rack and pinion mounted, adjustable condenser with a 20W illumination source and coarse/fine focus knobs with limit stoppers and tension adjustment.

# GX Microscopes

## product datasheet

### JPL-1350HBG

Binocular Simple  
Polarising Microscope



#### Specifications

Model: JPL-1350HBG			
Eyepieces	Widfield	WF10X (18mm FOV)	STD
		WF16X (11mm FOV)	OPT
Objectives	Achromatic	4X/0.10	STD
		10X/0.25	STD
		40X/0.65 (sprungloaded)	STD
		100X/1.25 Oil (sprungloaded)	STD
Total Magnification		40X – 1000X	STD
Condenser	Abbe condenser	Abbe condenser, rack & pinion adjustable, NA=1.25	STD
Illumination	Transmitted light	6V20W halogen lamp, adjustable brightness	STD
Nosepiece	Quadruple		STD
Eyepiece Tube	Binocular (Compensation inclination of 30°)		STD
Stage	size - 120mm 360° rotatable		STD
Focus	Coarse/Fine focus mechanism with adjustable tension and limit stopper system		STD

The JPL-1350HBG is equipped with a smooth, rotating, graduated stage and a set of polarisers that allow observation of all types of transmitted light polarised specimens such as thin sections of minerals, polymers, crystals and particulates.

This model, is part of GX Microscope's new range of polarising microscopes, it is affordable by amateur microscopists, schools and colleges.

It is equipped with a comfortable viewing, adjustable binocular head and a fine set of achromatic objectives giving a magnification range of 40X – 1000X.

The analyser mounted in the head is retractable and the polariser is mounted over the collector near the lamp and is rotatable though 360deg

The microscope is also supplied with a rack and pinion mounted, adjustable condenser with a 20W illumination source and

# GX Microscopes

## XPL1500 series Routine and Research Polarising Microscopes

## product datasheet

Specifications	XPL1500 SERIES			
	Model:	XPL1500	XPL1503	XPL1530
	Product Code:	GXXMPL1500	GXXMPL1503	GXXMPL1530
Widefield Eyepieces	10X pair	STD	STD	STD
	10x with reticle crosshair with 10mm/0.1mm divisions	STD	STD	STD
	16X	OPT	OPT	OPT
Head	Monocular			
	Binocular	OPT		
	Trinocular	STD	STD	STD
Centerable Objectives Plan Achromatic POL Strain-free for optimum quality imaging Non-coverslip corrected (coverslip corrected optional)	X4 PLL	STD	OPT	OPT
	X5 PLL	OPT	STD	STD
	X10 PLL	STD	STD	STD
	X20 PLL	OPT	OPT	OPT
	X40 PLL	STD	STD	STD
	X50 PLL	OPT	OPT	OPT
	X60 PLL	STD	STD	STD
	X80 PLL	OPT	OPT	OPT
	X100 PLL	OPT	OPT	OPT
Total Magnification	40x-600x	STD	STD	STD
Condenser	Adjustable, centerable NA 1.30	STD		STD
Illumination	Transmitted light	STD		
	Incident Light		STD	
	Transmitted and Incident Light			STD
Nosepiece	Quadruple	STD	STD	STD
	Quintuple	OPT	OPT	OPT
Polarisers	Retractable analyser in head 90deg rotatable with scale and rotatable polariser	STD	STD	STD
Plates and wedges, scales and filters	1/4 & 1 wavelength retardation plates, quartz wedge, Bertrand lens centre adjustable	STD	STD	STD
Stage	360° rotatable 30x40mm travel Centerable	STD	STD	STD
Focus	Coarse/Fine focus mechanism, limit stopper and tension adjustment	STD	STD	STD



The XPL1500 series of polarising microscopes are specifically designed for use in routine and university level teaching laboratories. The range includes standard transmitted light models and extends to include an excellent dual illumination model (XPL1530) which has both incident and transmitted illumination.

The XPL1500 series are based on one of GX Microscopes' most popular microscope ranges and feature a highly robust construction and first class optics designed to provide a long life and excellent quality images. This is backed by a 3 year warranty as standard on all models.

Designed with students in mind the number of removable components is minimised and the operation made as simple as possible.

As standard a set of four, very high quality, strain-free, plan achromatic objectives form the heart of the instrument. A set of inserts allow viewing of all standard mineral types.

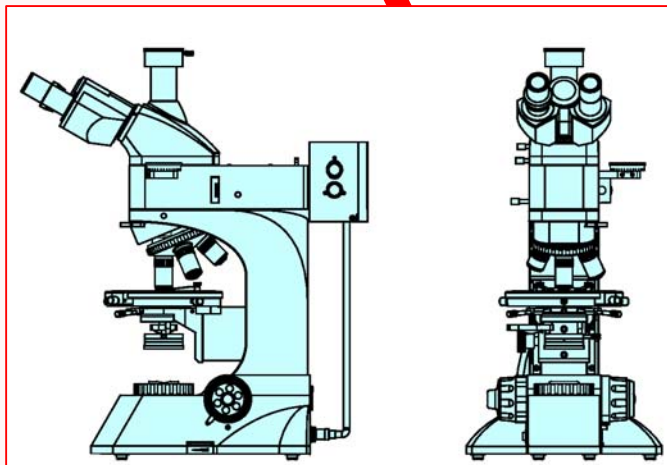
The optics are also fully corrected so that changes in the viewing angle from the prism in the

# GX Microscopes

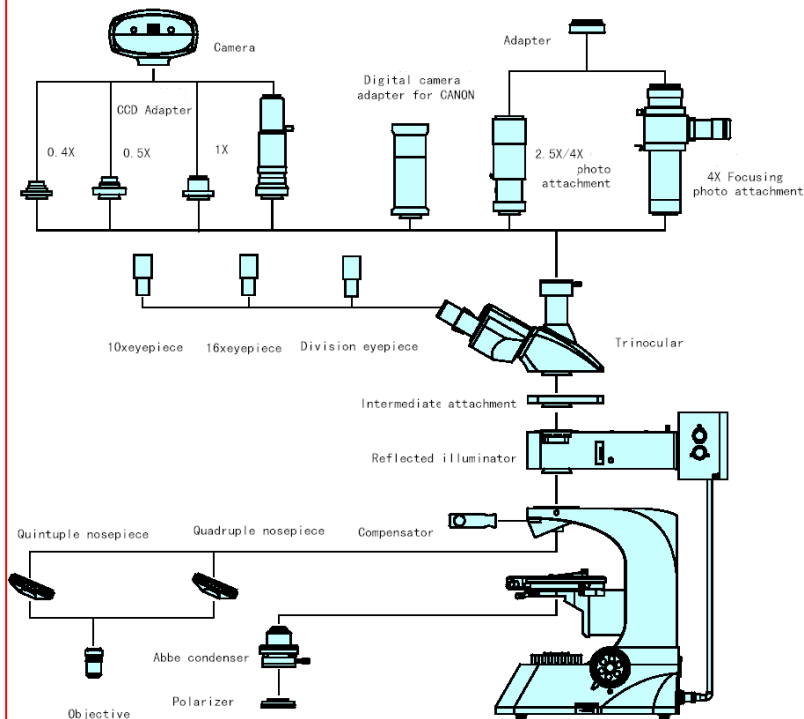
## XPL3200 Series

## product datasheet

Advanced, Research Polarising Microscopes



System Diagram



The XPL3200 series polarising microscopes are professional, research grade instruments equipped with a set of 4 (or 5) superb quality infinity optics, strain-free, plan achromatic objectives to provide very high quality imaging of a wide range of specimens.

These are the very latest models in the GX Microscopes range of polarising microscopes and are of exceptional build quality and delivery superb polarisation images.

Each model in the range equipped with a smooth, rotating, graduated stage with locking screws, a rotating insertable analyser, Bertrand lens and click-stop rotatable polariser below the condenser.

These microscopes are suitable for the observation of all types of transparent and reflective polarised specimens such as polished minerals,



# GX Microscopes

## XPL3200 Series

## product datasheet

Advanced, Research Polarising Microscopes

		Model:	XPL3200	XPL3230
Eyepieces	Widefield	Two WF10X	STD	STD
		WF10X with graduated crosshair scale	STD	STD
Head	Trinocular	0/100% split to camera with lever	STD	STD
Centerable Objectives mounted on a quadruple nosepiece (Quintuple optional)	INFINITY PLL Plan Achromatic POL Strain-free for optimum quality imaging	4X/0.10 coverslip corr.	STD	OPT
		5X/0.10 non-coverslip corr.	OPT	STD
		10X/0.25 coverslip corr.	STD	OPT
		10X/0.25 non-coverslip corr.	OPT	STD
		20X/0.4 coverslip corr.	OPT	OPT
		20X/0.4 non-coverslip corr.	OPT	OPT
		40X/0.65 (spring-loaded) coverslip corr.	STD	OPT
		40X/0.65 (spring-loaded) non-coverslip corr.	OPT	STD
		60X/0.75 (spring-loaded) coverslip corr.	STD	OPT
		60X/0.75 (spring-loaded) non-coverslip corr.	OPT	STD
		80X/0.95 (spring-loaded) coverslip corr.	OPT	OPT
		80X/0.95 (spring-loaded) non-coverslip corr.	OPT	OPT
		100X/1.25 oil (spring-loaded) coverslip corr.	OPT	OPT
		100X/1.20 (spring-loaded) non-coverslip corr.	OPT	OPT
Total Magnification		40X – 600X (1000X OPT)	STD	STD
Condenser	Adjustable, centerable NA 1.30		STD	STD
Illumination	Transmitted light	6V30W halogen lamp, adjustable brightness with spare lamp	STD	STD
	Incident light	6V30W halogen lamp, adjustable brightness with spare lamp		STD
Nosepiece	Reversed quadruple (quintuple optional) centratable		STD	STD
Polarisers	Rotatable external analyser and polariser		STD	STD
Plates and wedges, scales and filters	Mica 1/4 & gypsum 1 wavelength retardation plate, quartz wedge 0.01mm scale, blue filter, transmission adaptor		STD	STD
Stage	360° rotatable 30x40mm travel Centerable			STD
Focus	Coarse/Fine focus mechanism			STD

This range is part of GX Microscope's latest range of polarising microscopes and represents the very best value for money in this demanding area of technology.

The standard model is equipped with infinity optics, trinocular head, a fine set of first class objectives giving a magnification range of 40X-600X (with options of up to 1000X).

One eyepiece is fitted with a measurement reticle with a crosshair for centering and measurement and includes a focussing adjustment.

The grade of polarisers fitted is the highest available giving good extinction with crossed polars.

The optics are also fully corrected so that changes in the viewing angle from the prism in the head during interocular distance adjustments does not cause any colour changes.

The microscope is also supplied with an adjustable condenser with 30W illumination sources, koehler illumination and coarse/fine focus knobs with limit stoppers and tension adjustment.

The incident light path in the XPL3230 model is introduced with a mirror attached to a lever.

The microscope frame is substantial giving high stability and is particularly suitable for photomicrography.

### Supplied to you by:

GT Vision Ltd  
Hazel Stub Depot  
Camps Road  
Haverhill  
Suffolk  
CB9 9AF

Tel: 01440 714737  
Fax: 01440 709421  
eurosales@gt-vision.com

www.gxoptical.com  
www.gt-vision.com  
www.gxmicroscopes.com  
www.looksmall.com

www.gxoptical.com

Due to our policy of continuous development specifications may change without notice

Aug 08