



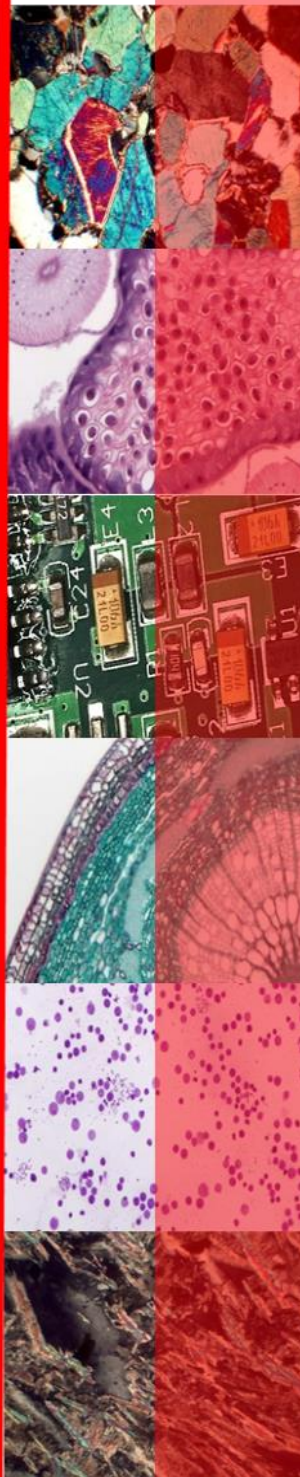
MICROSCOPES



IMAGING



MAGNIFIERS &
ACCESSORIES



GT Vision

Europe's favourite microscope supplier



GT Vision is one of Europe's largest and most innovative optics companies. Based in Suffolk we are the largest independent optical microscope company in the UK providing sales, service, installation and training with the broadest range of allied accessories such as specialist microscope cameras, automation and measurement systems and analysis software.



We strive always to offer lowest prices, the highest quality, all major brands and numerous unique products, all backed by unbeatable warranties and technical support.

GT Vision's staff are experts in their field and are highly regarded for their technical ability and fast, reliable customer support.

GT Vision's products are available on-line and can also be seen at our retail outlets 'The One Stop Nature Shop'. We also attend numerous scientific and industrial exhibitions and conferences and we have our own dedicated specialist salesforce.

To ensure the very best support to our customers we have invested in our technical department which manages our ever expanding service organisation and R&D where we design and manufacture new products for OEM customers.



Lifetime Warranty

GX Microscopes products used in the UK qualify for Lifetime Warranty cover.

For conditions see our website or ask for details

GT Vision and our associated

companies have developed our own brands of high quality scientific products including:

GXM MICROSCOPES

GX MICROSCOPES is our popular brand of microscopes with over 200 models supplied to almost every university and research establishment and all major industries in the UK. We also have a large number of users worldwide

GXCAM

GXCAM is our own high quality, well supported range of microscope imaging cameras

OS Science

OS Science range of high quality scientific equipment including microtomes

GX value

Look out for our GX Value Range of microscopes, representing outstanding value for money. These microscopes are available at especially low on-line prices.

In this catalogue

Here you will find details of many of our most popular, own-brand products, these are only a small part of our full range.

To see all our products and up-to-date prices with special offers please visit our website **www.gtvision.co.uk**. On our website you will also see hundreds of additional products from other famous brands including Olympus, Leica, Meiji, Mitutoyo, Cambridge Optics, Motic, DinoLite, Opticron, Otsuka and over 30 more. In this catalogue we are showing the following categories of products with colour coded pages:

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FLUORESCENCE MICROSCOPES P.10

INVERTED MICROSCOPES P.12

PORTABLE MICROSCOPES P.12

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www.gtvision.co.uk

BIOLOGICAL MICROSCOPES



Upright Microscopes

Upright Biological Compound Microscopes are used for observing thin, transparent, slide mounted specimens under magnifications typically ranging from 40X to 1000X.

R-X50 Advanced Research Series

GXM MICROSCOPES

Research Grade

Infinity Optics

SPlan APOchromatic

Koehler Illumination

Super Widefield Eyepieces

Advanced Design

2X Option

Sextuple Objective Turret

Substantial Stable Stand

Advanced Stage Design

DIC Option



new

After years of research and development the GXM R-X50B biological microscope is designed to allow users to enjoy safe, comfortable and superb quality observations of their specimens. This microscope has a well-designed stand, high-definition optics and is simple to operate making it suitable for all levels of research and routine use in laboratories.

- Trinocular head with interpupillary adjustment and diopter adjustment
- The camera port accepts c-mount and DSLR adapters
- Pair 10X super-widefield FN25 eyepieces
- Reversed sextuple nosepiece, infinity corrected optics, 4X, 10X, 20X, 40X, 100X Oil, wide barrel SPlan APO objectives
- DIC slot
- Research size mechanical stage, ergonomic coaxial coarse/fine focus, Abbe condenser on rack & pinion, large research grade stand
- Very bright white LED adjustable light, Koehler illumination
- Large range of accessories including DIC, darkfield condensers, phase kits, polariser kits, camera adapters, cameras and fluorescence attachments



MODELS IN THIS RANGE:
ID0848 R-X50B

ERGOMED Ergonomic Series

GXM MICROSCOPES

Clinical Grade

Ergonomic Tilting Head

Infinity Optics

Plan Achromatic

Koehler

Widefield Eyepieces

Advanced Design



new

A top quality, modern and stylish microscope. Designed for prolonged, comfortable use this is a top quality, adjustable angle ergonomic head, research grade, biological upright compound microscope. This microscope is very popular in clinical and research environments.

- A choice of tilting binocular with or without a camera port with interpupillary adjustment and diopter adjustment
- The camera port accepts c-mount and DSLR adapters
- Pair 10X widefield FN20 eyepieces
- Reversed quintuple nosepiece, infinity corrected optics, 4X, 10X, 40X, 100X Oil, wide barrel plan achromatic objectives
- Large mechanical stage, ergonomic coaxial coarse/fine focus, Abbe condenser on rack & pinion. Substantial research grade stand
- Very bright white LED adjustable light, Koehler illumination
- Large range of accessories including darkfield condensers, phase kits, polariser kits, camera adapters, cameras and fluorescence attachments



MODELS IN THIS RANGE:
ID0656 ERGOMED-T Trinocular Tilting Head
ID0655 ERGOMED-B Binocular Tilting Head

For friendly, expert advice or to order call : (+44) (0)1284 789697 E-Mail: sales@gtvision.co.uk
or visit our on-line store www.gtvision.co.uk

BIOLOGICAL MICROSCOPES

L2800 Research Series

GXMICROSCOPES

Research Grade

Infinity Optics

Plan Achromatic

Koehler Illumination

Super Widefield Eyepieces

Advanced Design

2.5X Option



new

The all new GXM-L2800 microscope is GX Microscopes' latest popular, economically priced, infinity optics, advanced modular, research grade biological upright microscope. Providing excellent quality images to the super widefield FN22mm eyepieces and any attached camera system through its infinity corrected optical system. Includes options for phase contrast and magnifications as low as 2.5X. This microscope has the very latest design stand and can have up to five infinity plan achromatic objectives and a polariser.

- Trinocular head (optional binocular) with interpupillary adjustment and diopter adjustment
- The camera port accepts c-mount and DSLR camera adapters
- Pair 10X super-widefield FN22 eyepieces
- All objectives are infinity corrected plan achromatic
- Reversed quintuple or quadruple nosepiece, infinity corrected optics a choice of 2.5X, 4X, 10X, 20X, 40X, 100X Oil, wide barrel plan achromatic objectives
- Large mechanical stage rackless design, ergonomic coaxial coarse/fine focus, Abbe condenser on rack & pinion, large stable stand
- Bright white 3W LED adjustable light, Koehler illumination
- Large range of accessories including darkfield condensers, phase kits, polariser kits, camera adapters, cameras and fluorescence attachments
- Modern ergonomic stand including integrated carry handle
- 2.5X objective option
- STANDARD models have 4 plan achromatic infinity objectives on a quadruple reversed nosepiece
- PREMIUM models have 5 plan achromatic infinity objectives on a quintuple reversed nosepiece

ID0726 Premium Trinocular GXM L2800



Advanced design stage



Convenient carry handle

MODELS IN THIS RANGE:

ID0726 Premium Trinocular
ID0779 Premium Phase Trinocular
ID0778 Standard Trinocular
ID0784 Standard Phase Trinocular
ID0777 Standard Binocular
ID0783 Standard Phase Binocular
ID0785 Premium Trinocular 'Barebones'
ID0782 Standard Trinocular 'Barebones'
ID0786 Standard Binocular 'Barebones'



PREMIUM Models – 5 Objectives
STANDARD Models – 4 Objectives

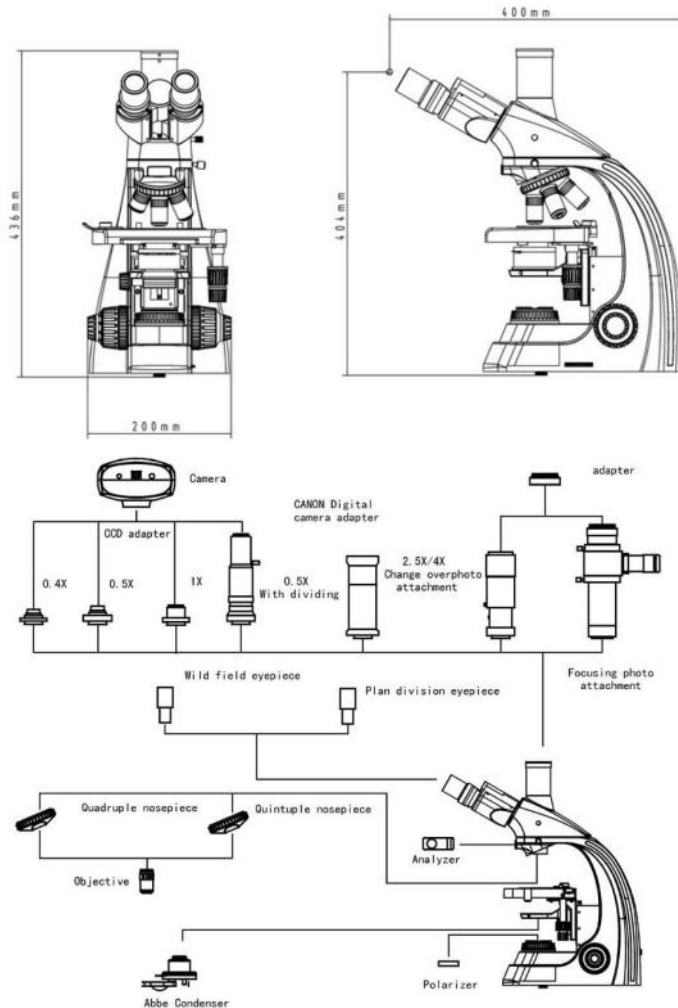


Huge Range of Accessories – Cameras, Camera Adapters, Condensers, Phase Kits, Polarisers and Objectives (including 2.5X)



BIOLOGICAL MICROSCOPES

L2800 Research Series



Optional phase contrast



Optional cameras and camera and adapters



Optional polarising kit

L2800 Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Choice of Binocular or Trinocular	Substantial, stable, robust, research grade stand	Modern, infinity corrected optics through-out	Bright White 3W LED, Adjustable intensity	Modern Design with non-extending rack
Pair Super Widefield 10X Eyepieces (Field Number 22mm) Comfortable prolonged use <i>Optional 15X</i>	Ergonomic, stylish, modern design Carry handle	Plan Achromatic Objectives for reduced fringing and flat field 4X, 10X, 20X, 40X, 100X Oil Immersion (20X on premium model) Optional 20X, 60X and 80X	Koehler Illumination with an Iris in the collector lens for optimum optical performance	Spring-loaded slide holder, detachable, can hold two slides
Eyepiece Tube Inclination: 30 degrees for maximum comfort & quality viewing	Insert slot for polariser option	Optional 2.5X Objective	220V/240V std. Optional 110V	180mm x 150mm 75mm x 50mm movement range
Rotatable Head through 360 degrees Interpupillary Distance Adjustment to suit different users Diopter Adjustment for perfect viewing	Quintuple (premium) or Quadruple (standard) reversed objective nosepiece/turret	Abbe Condenser with Iris NA 1.25 mounted on its own rack and pinion Optional Darkfield Condenser Optional Polariser Kit Optional Fluorescence Unit		
Camera : Eyepiece Split on Trinocular Head: 100%:0% via lever for optimum imaging performance. Exceptional picture quality to camera port on the trinocular models Optional 0.5X & 1X C-mount camera adapters	Coaxial Coarse and Fine Focus Knobs ergonomically positioned & graduated in microns	Optional phase contrast kits comprising of: Phase Condenser (5 position turret on Premium phase models, 2 position insert on Standard phase models) Phase centering telescope (for turret phase) Set of phase Objectives (4 on Premium phase models, 2 on Standard phase models) Additional phase objectives and inserts are available		

BIOLOGICAL MICROSCOPES

SMART Routine & Teaching Series

GXMICROSCOPES

Teaching Grade

Infinity Optics

Semi Plan Achromatic

Widefield Eyepieces

Robust Compact Stand

Carry Handle & Cord Winder



The new GXM-SMART microscope is GX Microscopes' latest modern design, economically priced, infinity optics, routine & university teaching grade biological upright microscope. Providing excellent quality images to the widefield eyepieces (fn20) and any attached camera system through its infinity corrected optical system. Includes options for phase contrast, darkfield and magnifications ranging from 40x –1600X with the 16x eyepieces option. This microscope has a modern design stand and can have up to four infinity semi-plan (SP) achromatic objectives.

- Trinocular head (optional binocular) with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR camera adapters.
- Pair 10X widefield FN20 Eyepieces
- All objectives are Infinity Corrected Semi-Plan (SP) Achromatic
- Reversed quadruple nosepiece, infinity corrected optics with 4X, 10X, 40X, 100X Oil, wide barrel plan achromatic objectives (20X optional)
- Mechanical stage, coaxial coarse/fine focus knobs, Abbe condenser on rack & pinion, stable stand
- Bright white LED adjustable light
- Large range of accessories including darkfield condensers, phase kits, camera adapters and cameras
- Compact , extremely robust, modern ,ergonomic stand including integrated carry handle and cord winder, specifically designed for university and college teaching laboratories

ID0726 Premium Trinocular GXM L2800



Convenient carry handle & cord winder



ID0807 Polariser Kit



ID0808 Phase Contrast Kit

MODELS IN THIS RANGE:

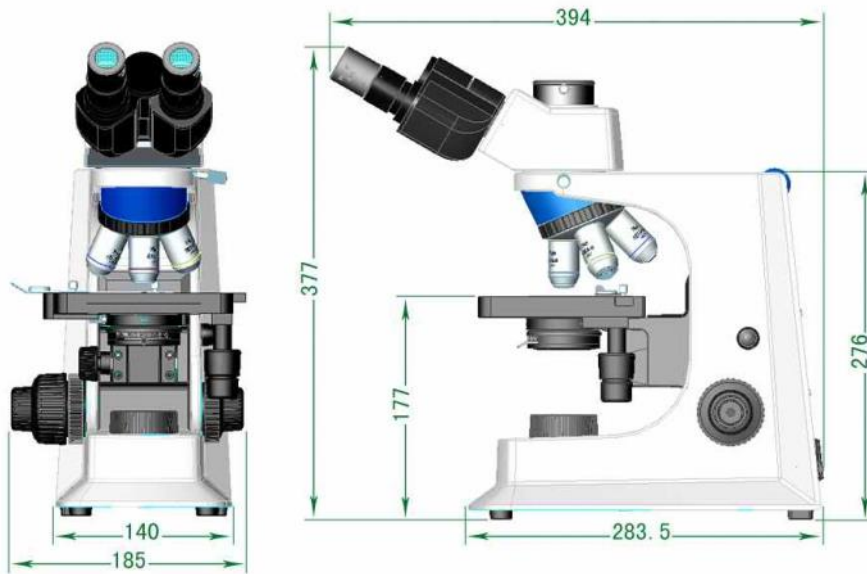
ID0756 Trinocular

ID0776 Binocular

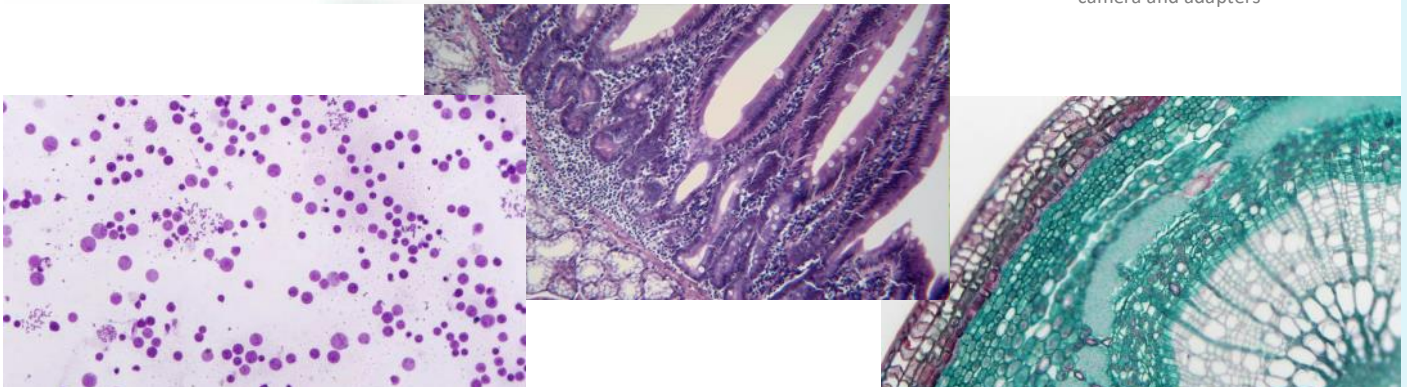
BIOLOGICAL MICROSCOPES

SMART Routine & Teaching Series

GXMICROSCOPES



Optional WiFi, HDMI and USB cameras and camera and adapters



SMART Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Choice of Binocular or Trinocular	Compact, stable, robust, routine grade stand	Modern, infinity corrected optics throughout	Bright White 3W LED, Adjustable intensity	Mechanical XY Stage with scales
Pair Widefield 10X Eyepieces (Field Number 20mm) Comfortable prolonged use <i>Optional 16X</i>	Ergonomic, stylish, modern design Carry handle and cord winder	Semi Plan Achromatic Objectives 4X, 10X, 40X, 100Xoil Immersion <i>Optional 20X and 60X</i>	Optional rechargeable, portable, battery version 0.3W LED	Spring-loaded slide holder, can hold two slides
Eyepiece Tube Inclination: 30 degrees for maximum comfort & quality viewing	Quadruple reversed objective nosepiece/ turret	Abbe Condenser with Iris NA 1.25 mounted on its own rack and pinion	220V/240V std. <i>Optional 110V</i>	145mm x 140mm 76mm x 52mm movement range
Rotatable Head through 360 degrees Interpupillary Distance Adjustment to suit different users 50-75mm Diopter Adjustment for perfect viewing	Coaxial Coarse and Fine Focus Knobs ergonomically positioned & graduated in microns	Optional phase contrast kit comprising of: Insert Phase Condenser Phase Objectives and Inserts		
Camera : Eyepiece Split on Trinocular Head: 80%:20% for dual viewing Good picture quality to camera port on the trinocular models <i>Optional 0.47X & 1x c-mount camera adapters</i>		Optional Darkfield Condenser Optional Polariser Kit Optional Fluorescence Unit		

BIOLOGICAL MICROSCOPES

F2000 GX Value Series

GXMICROSCOPES

Student Grade

Quality Optics

Achromatic

Widefield Eyepieces

Lightweight Compact Stand

Portable Battery Version



The GXM F2000 series are GX Microscopes' best value for money binocular biological microscopes and part of our 'GX Value Range'. They are enormously popular in education and among hobbyists giving outstanding image quality. This microscope is supplied with four, good quality, achromatic glass objectives in RMS threaded steel barrels giving a maximum magnification of 2000x and a magnification range of 40X-2000X. A rechargeable battery version for ultimate portability is also available

- **Binocular head with interpupillary adjustment and diopter adjustment**
- **Pair 10X Widefield FN18 and a pair of 20X Eyepieces (20x with ID0710 only)**
- **Quadruple nosepiece, 4X, 10X, 40X, 100X oil achromatic objectives**
- **Mechanical stage, coaxial coarse/fine focus, Abbe condenser on rack & pinion**
- **White LED adjustable light**
- **Range of accessories including eyepiece camera adapters, cameras & storage case**

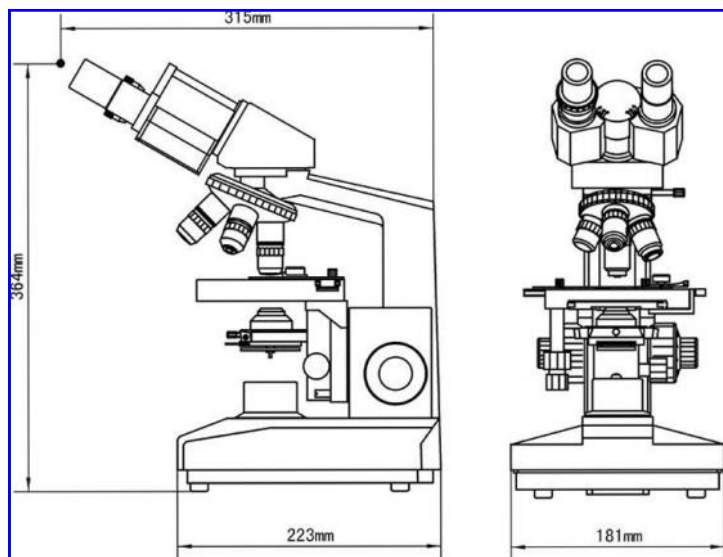


F2000 Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Binocular	Compact, lightweight, robust, student grade stand	Achromatic Objectives 4X, 10x, 40X, 100X oil Immersion	Bright White LED	Mechanical XY Stage with scales
Pair Widefield 10X Eyepieces (Field Number 18mm) (& Pair 20X Eyepieces included on ID0710)	Quadruple objective nosepiece/turret	Abbe Condenser with Iris NA 1.25 mounted on its own rack and pinion	Optional rechargeable, portable, battery version LED (ID0282)	Spring-loaded slide holder
Eyepiece Tube Inclination: 30 degrees for maximum comfort & quality viewing	Coaxial Coarse and Fine Focus Knobs		220V/240V std. Optional 110V	110mm x 110mm 60mm x 30mm movement range
Rotatable Head through 360 degrees Interpupillary Distance Adjustment to suit different users 55-75mm Diopter Adjustment for perfect viewing				



Eyepiece Camera Attached



MODELS IN THIS RANGE:

ID0710 F2000 Binocular Achromatic

ID0282 F6DRECH Binocular Achromatic Portable

BIOLOGICAL MICROSCOPES

L1000 & L500 Monocular Series

GXM MICROSCOPES

Student Grade

Quality Optics

Achromatic

Widefield Eyepieces

Lightweight Compact Stand

Monocular



Ideal for schools, colleges and the home this economic range of simple monocular microscopes are highly robust with a metal stand and fitted with high quality glass optics.

The L1000 has four objectives giving magnifications to 1000X and it also has a mechanical stage. L500 has 3 objectives to 400X and a simple clip stage. Cameras can easily be attached as shown.

- Monocular with a 10X widefield FN18 eyepiece (optional 16X)
- L1000: Quadruple nosepiece, 4X, 10X, 40X, 100X oil, achromatic objectives
- L500: Triple nosepiece, 4X, 10X, 40X, achromatic objectives
- L1000: Mechanical stage, separate coarse/fine focus knobs, Abbe condenser on a rack & pinion
- L500: Clip stage, coaxial coarse/fine focus knobs, fixed condenser
- White LED light with optional portable rechargeable battery version
- Range of accessories including camera adapters, cameras and storage cases



L1000 & L500 Series SPECIFICATIONS

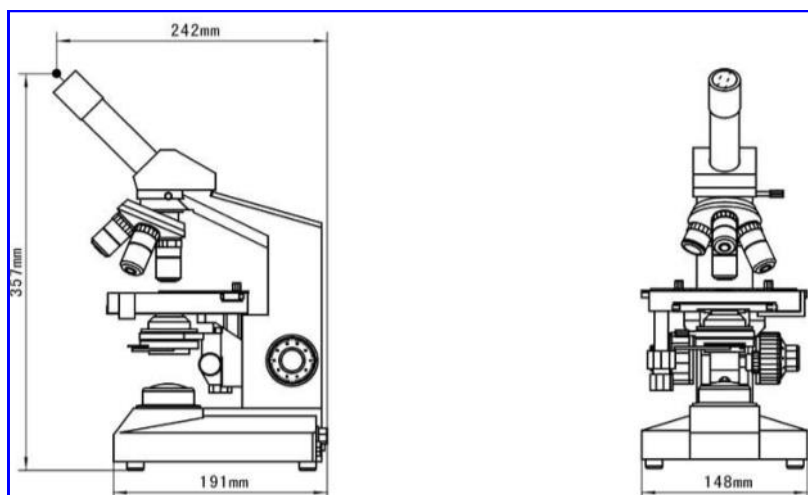
HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Monocular	Compact, lightweight, robust, student grade stand	Achromatic Objectives 4X, 10x, 40X, 100X oil Immersion (L1000) 4X, 10x, 40X (L500)	White LED	Mechanical XY Stage (L1000) Slide Clips (L500)
Widefield 10X Eyepiece (Field Number 18mm) Eyepiece Tube Inclination: 45 degrees for maximum comfort & quality viewing	Quadruple objective nosepiece/turret	Abbe Condenser with Iris NA 1.25 (L1000) Simple Condenser (L500)	220V/240V std. Optional 110V	Spring-loaded slide holder (L1000 only)
Rotatable Head through 360 degrees	Coaxial Coarse & Fine Focus Knobs (L500) Separate Coarse & Fine Focus (L1000)			Stage Size: 125mm x 115mm 70mm x 30mm movement range (L1000)



ID4727 L500



ID0217 L1000



MODELS IN THIS RANGE:

ID0217 L1000 4 Objectives & Mechanical Stage

ID4727 L500 3 Objectives & Clip stage

ID0358 L1000 Portable Version

ID0428 L500 Portable Version

For friendly, expert advice or to order call : (+44) (0)1284 789697 E-Mail: sales@gtvision.co.uk
or visit our on-line store www.gtvision.co.uk

FLUORESCENCE MICROSCOPES



Fluorescence Microscopes

Most fluorescence microscopes are specialist microscopes that emit light at particular bands of wavelengths (excitation) onto the specimen and the view the emission wavelengths coming from the specimens. The wavelengths are usually controlled by special dichroic filters and the light source is specially selected to emit light at the wavelengths required. Most fluorescence microscopes are equipped with a specialist digital imaging camera and software. The majority of applications for fluorescence microscopy are in biological research fields but there are some industrial applications such as non-destructive testing where dyes in cracks (for instance) can be observed.

Upright Microscope Series

GXM MICROSCOPES



Representing *amazing value for money* this top of the range L3201LED infinity optics trinocular LED fluorescence microscope is designed for use in laboratories undertaking routine and research fluorescence microscopy such as hospitals and universities.

The outfit includes 4 Filter Cubes Blue, Green, V, UV (more available) mounted on a rotating selector and incorporates the world's first lamphouse containing 4 ultra-bright waveband specific LEDs for fluorescence.

The superb quality optics give a bright, crisp image of your specimens and the image delivered to any camera that is attached are of equal high quality.

- Trinocular head with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR adapters.
- Pair 10X super-widefield FN22 eyepieces
- Reversed quadruple nosepiece (quintuple optional), infinity corrected optics, 4X, 10X, (20X optional), 40XFL, 100XFL Oil, wide barrel plan achromatic objectives
- Large mechanical stage, ergonomic coaxial coarse/fine focus, Abbe condenser on rack & pinion, large stable stand
- 4 filter cubes: blue, green, V, UV included (more available) mounted on a rotating selector. 4 ultra-bright, waveband specific LEDs for fluorescence epi-illumination
- Bright white LED adjustable transmitted light, Koehler illumination
- Large range of accessories including darkfield condensers, phase kits, polariser kits, camera adapters, cameras and fluorescence attachments



MODELS IN THIS RANGE:

ID8880 L3201 with 4 Cubes Epi-FL LED lights.

Inverted Microscope Series

GXM MICROSCOPES



XDY-2LED inverted fluorescence microscope with phase contrast or polarisation contrast and CoolLED advanced LED fluorescence illumination

Fitted with CoolLED full spectrum fluorescence illuminator this microscope is totally safe to use, no mercury vapour lamps to align and frequently change and is instantly ready for use.

Features:

- High-intensity LED illumination for transmitted light
- Objectives from 4x-40x and with two dedicated sets to optimise either the fluorescence imaging and phase/polarisation contrast
- Fluorescence filters for common fluorochromes such as DAPI, FITC/GFP, Rhodamine/mCherry
- Large, FN 22mm eyepieces field of view, compact stand, mechanical stage

MODELS IN THIS RANGE:

ID9096CoolLED XDY-2LED BF, PH and FLUO LED
ID9096 Std LED Fluorescence

FLUORESCENCE MICROSCOPES

Stereo Microscope Series



new



Quadruple Fluorescence Stereomicroscope System

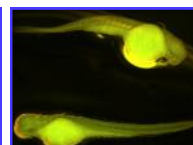
Based around the new Plan Apochromatic high-resolution microscope, the quad fluorescence attachment fits seamlessly into the microscope body.

Up to 4 fluorescence filters can be used (one being DAPI to retain a brightfield position)

Illumination is via a powerful 200W metal halide system

Single Channel Fluorescence Stereomicroscope System

The new Plan Apochromatic series stereomicroscopes provide the perfect platform for the single channel fluorescence system, excellent for routine scanning for labelled gene expression, tagged proteins and pre-confocal tests.



MODELS IN THIS RANGE:

IDHUV-FLUO-K4

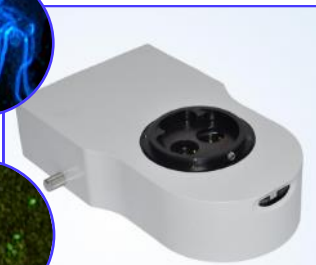
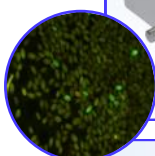
IDHUV-FLUO-K1

Fluorescence Upgrades

GXMICROSCOPES



new



GT Vision Ltd offer a range of upgrade options for your existing microscopes. The solutions we offer are based on LED and fibre optic light guide systems. We draw on our world class expertise in fluorescence microscopy, engineering and opto-electronics. The result is an array of extraordinarily good value for money upgrades that deliver:

- Lower running costs
- Improved imaging
- Improved performance
- Increased safety
- Easier and quicker to use
- Longer lasting — to 50,000 hrs!

Our Upgrades are compatible with these upright/compound microscope models eg:

- Olympus CX22, CX31, CX41, BX43, etc
- Nikon E100, E200, etc
- Leica DM500, DM700
- Zeiss PrimoStar
- Motic BA Series

Our Upgrades are compatible with these stereo microscope models:

- Most current Olympus models
- Most current Leica models

Our Upgrades are compatible with these inverted microscope models:

- Olympus CKX41



MODELS IN THIS RANGE:

IDMS-LED-BG Dual for Compound Microscopes

IDMS-LED Single Selectable for Compound Microscopes

IDMS-ZX-LED-BG Dual for Stereo Microscopes

IDMS-I-LED-BG Dual for Inverted Microscopes

We are also authorised resellers of
CoolLED and Prior Lumen Systems



BIOLOGICAL MICROSCOPES

Inverted Microscopes

Inverted Microscopes are used for observing materials, cells and organisms in culture and in the bottom of flasks, petri dishes, microtitre plates and tubes. They are usually equipped with brightfield and phase contrast capabilities so that unstained transparent tissue can be observed more clearly. Typically they are supplied with a selection from 4X, 10x, 20x, 40X with higher power objectives available, providing a magnification range from 40X up to 1000X.

XDS/XDY Research Series

GXMICROSCOPES



A range of well-designed, modern inverted microscopes that have been specially developed to produce exceptionally high quality, high contrast phase and brightfield images of your specimens with superb LED fluorescence versions also available. The controls are ergonomically positioned and the large stage, with its range of standard inserts and accessories, allows you to observe almost all classes of specimens on the microscope.

- All microscopes have camera ports
- XDS- 1 has plan achromatic optics and is part of our GX Value range
- XDS-5 & XDY-2 have infinity plan achromatic optics
- All models have phase and brightfield long working distance objectives and condensers
- All models have mechanical stages with a selection of inserts for slides and culture vessels/petri dishes
- XDS-1 is designed for routine laboratory use and teaching
- XDS-5 and XDY-2 models are more substantial and can be used for both advanced research and routine applications
- XDY fluorescence models are supplied with a selection of filter cubes & fluorite objectives

MODELS IN THIS RANGE:

ID5533 XDS-1 Compact, Low Cost Trinocular Head, Plan Achromatic Phase and Brightfield Objectives & Mechanical Stage.

ID0456 XDS-5 Substantial, Research Grade, Side Camera Port, Infinity Plan Achromatic Phase and Brightfield Objectives & Mechanical Stage

ID9096 XDY-2 Fluorescence, Research Grade, Infinity Plan Achromatic Phase and Brightfield Objectives (Incl Fluorite) & Mechanical Stage, Fluorescence Cubes

ID9096 CoolLED as ID9096 but with CoolLED Fluorescence System



ID9096CoolLED XDY-2
LED Fluorescence



ID5533 XDS-1

Portable Microscopes

GXMICROSCOPES



EXAMPLE MODELS IN THIS RANGE:

**ID0219 Newton
Professional—X1600**

**IDP001 Inverted
With Case—X400**

**IDP002
50X**

**ID0941
GXC100L
100X**

**ID0282 F6DRECH
Battery & Mains -
1600X**

**ID0358
L1000LED
-X1600**

Portable microscopes are powered either by batteries or a USB connection to a laptop. GT Vision offer the largest selection in Europe and we are also specialist manufacturers of this class of microscope. There are a huge variety of types ranging from digital to battery powered benchtop to compact handheld devices. These are just a few examples from our extensive range.

MATERIALS MICROSCOPES



Materials Microscopes

Materials microscopes (also known as metallurgical microscopes) are equipped with an incident light source (also called reflected) which sends the light through the objective onto the reflective surface of the metal. The sample has to be perfectly flat and is usually polished, a 'micro' specimen will normally have been prepared of the metal, composite, ceramic or polymer sample. This type of microscope can sometimes also be used to look at particles trapped on filters. Typical applications are grain sizing, inclusion counts, layer thickness assessment and phase determination. Some models have special facilities such as darkfield and DIC which produce improved observation techniques for some classes of specimen. All models have polarised light ability, a range of filters and a camera port for photography and image analysis. Some upright models have both incident and transmitted light for more transparent materials.

There are three main types of metallurgical microscope:

- **Upright** – where the objectives are above the specimen – this is the most commonly used type
- **Inverted** – where the objectives are beneath the specimen, permitting larger specimens to be observed
- **Semiconductor (upright and inverted)** - where the stage is especially large to accommodate whole wafers

L3230 & L3203 Research Series

GXM MICROSCOPES



A range of superbly engineered, super-widefield (fn22mm) microscopes with reflected (L3203) or both reflected and transmitted light (L3230) that are developed to produce exceptionally high quality, high contrast reflected light and transmitted light images of your specimens including polarised light. Optional darkfield reflected light on BD models and all models are equipped with multiple filters. The controls are ergonomically positioned and the large stage, with its range of standard accessories, allows you to observe almost all classes of specimens on the microscope.

- **Trinocular head with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR adapters**
- **Pair 10X, FN22 super widefield eyepieces**
- **Quintuple nosepiece including 5X, 10X, 20X, 40X, 80X infinity plan achromatic objectives. Optional 60X & 100X.**
- **Objectives (4) and reflected light system are brightfield and darkfield on *BD models**
- **Mechanical stage, coaxial coarse/fine focus. On L3230 models: Abbe condenser on rack & pinion, large stable stand**
- **Bright white adjustable reflected light (L3203). Or reflected & transmitted light (L3230). With polarisers and filters included on all models**
- **Large range of accessories including camera adapters and cameras**

MODELS IN THIS RANGE:

ID0295 L3230 Reflected & Transmitted Light, Trinocular, Infinity Plan Achromatic

ID0390 L3203 Reflected Light, Trinocular, Infinity Plan Achromatic

ID7278 L3230BD Reflected & Transmitted Light, Trinocular, Brightfield & Darkfield Top Light, Infinity Plan Achromatic

ID0211 L3203BD Reflected Light, Trinocular, Brightfield & Darkfield, Infinity Plan Achromatic

ID0526 L3230BDDIG as ID7278 with Digital Camera and Display



ID0526 L3230BDDIG

MATERIALS MICROSCOPES

ICM100 Research & Industry Series

GXMICROSCOPES



MODELS IN THIS RANGE:

ID0304 ICM100 Trinocular, Pillar Stand, Top Light, Infinity Plan Achromatic Optics

ID9033 ICM100BD Trinocular, Pillar Stand, Top Light with Darkfield, Infinity Plan Achromatic Optics

A very useful industrial inspection microscope suitable for viewing any reflective sample and it is also widely used in component inspection. The whole microscope is mounted on a pillar stand which allows the inspection of unusually large specimens. If required it is possible to mount the head on optional long reach boom arm stands. It is equipped with a trinocular head ready for the attachment of a digital camera. This microscope includes a full set of high quality brightfield plan achromatic infinity corrected materials objectives with the option of a darkfield optical system (BD).

- Trinocular head with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR adapters
- Pair 10X widefield eyepieces
- Quintuple nosepiece, 5X, 10X, 20X, 40x, 80X infinity plan achromatic objectives, optional 60X & 100X. Objectives and lighting system are 'BD' (Brightfield/Darkfield) on ICM100BD
- Mechanical stage, coaxial coarse/fine focus
- Unusual pillar stand to accommodate larger specimens
- Bright white LED adjustable reflected light with polarisers and filters included on all models
- Large range of accessories including camera adapters and cameras

L2003 Routine Series

GXMICROSCOPES



MODELS IN THIS RANGE:

ID0687 L2003AHTG Trinocular, 40X-400X GX Value

ID0354 L2003AHTG Trinocular, 40X-600X

ID0523 L2003DIG Camera & Display, 40X-600X

A robust, good quality, superb value for money—the ID0687 model is part of our GX Value range. This is a classic, routine metallurgical microscope equipped with a trinocular head ready for the attachment of a digital camera. This microscope includes a set of high quality plan achromatic metallurgical objectives on a reversed objective turret. Specimens can be placed on the mechanical stage with controls for XY stage and focus control. Offering a magnification range from 40X-600X (expandable to 1600X) the L2003 series is popular for many applications from industrial, inspection tasks, through to researchers and educational establishments.

- Trinocular head with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR adapters. Pair 10X widefield eyepieces
- Quadruple nosepiece with 4X, 10X, 40X, (also 60X on ID0354 & 0523 models) plan achromatic objectives. Optional 80X and 100X objectives available.
- Mechanical stage, coaxial coarse/fine focus, large stable stand
- Adjustable reflected light with polarisers and filters included on all models
- Large range of accessories including camera adapters and cameras



ID0523 L2003DIG



MATERIALS MICROSCOPES

XJL17 & 20 Inverted Series

GXM MICROSCOPES



ID8404 XJL20BD

GX Microscopes' most popular microscopes for high throughput routine inspection of metallurgical specimens. These microscopes are simple to use, especially where you need to examine many specimens with frequent changes of polished 'micros'. Each successive specimen is immediately in focus and it is also very useful for large specimens that cannot fit under an upright microscope model. The microscopes are equipped with a photoport ready for the attachment of a digital camera.

- All microscopes in this series have either a trinocular head with a camera port or a side camera port. The camera port accepts c-mount and DSLR adapters. Pair 10X Widefield Eyepieces
- Quintuple (XJL20) inverted objective nosepiece
- 10X, 20X, 40X, 100X Plan Achromatic long working distance objectives on XJL17 (optional 5X and 80X)
- 10X, 20X, 50X, 80X (BD) Plan Achromatic infinity long working distance objectives on XJL20 (BD) (optional 5X and 100X)
- Mechanical stage, coaxial coarse/fine focus
- Substantial inverted stand to accommodate larger specimens
- Bright adjustable reflected light with filters and polariser option
- Large range of accessories including camera adapters and cameras

MODELS IN THIS RANGE:

ID8404 XJL20BD BF/DF Side Cam Port 100X-800X
ID0378 XJL17AT Trinocular 100X-1000X
ID1092 XJL17ATPOL Trinocular POL 100X-1000X
ID0524 XJL17ATPOLDIG Trinocular Polariser Camera & Display 100X-1000X



ID0378 XJL17ATPOL



XJL101 & 302 Semiconductor Series

GXM MICROSCOPES



ID6073 XJL302BD

These very substantial, highly stable microscopes are designed to hold large wafers on specialised stages and have incident (reflected) light sources. They include wafer holders on the large stages and have special quick movement, free-glide mechanisms for increased efficiency. All microscopes in this family have a range of filters and polarisers.

- Trinocular head with interpupillary adjustment and diopter adjustment. The camera port accepts c-mount and DSLR adapters
- Pair 10X widefield eyepieces
- Quintuple nosepiece 5X, 10X, 20X, 40X, 80X plan achromatic objectives, optional 60X & 100X. Objectives are 'BD' (Brightfield/Darkfield) on XJL302BD
- Large mechanical stage with free-glide mode, coaxial coarse/fine focus. Wafer holders
- Bright white adjustable top light with polarisers and filters included on all models
- Large range of accessories including camera adapters and cameras
- DIC equipped versions are also available

MODELS IN THIS RANGE:

ID1047 XJL101A Trinocular, Large Stage, Top Light, Plan Achromatic Optics
ID6073 XJL302BD Trinocular, Large Stage, Large Throat Depth, Top Light, Plan Achromatic Optics including Brightfield/Darkfield



ID1047 XJL101A



MATERIALS MICROSCOPES

Portable Microscopes

GXM MICROSCOPES



ID9170 PMM

EXAMPLE MODELS IN THIS RANGE:

ID9170 PMM Top Light, Camera Port 100X-500X

ID0965 GXC20L Side Light, 20X, with Scale

ID0958 GXC50L Side Light, 50X, with Scale

ID0941 GXC100L Side Light, 100X, with Scale

Portable microscopes are designed so they can be used away from the laboratory if needed. Many are battery powered, they are all relatively lightweight. GT Vision have the largest range of portable microscopes in the world including exclusive models that we manufacture ourselves. We are the experts in this field.

- **PMM:**
 - Unique roller feet for flat or curved surfaces
 - Battery powered light
 - Camera port, 4 plan achromatic objectives 5X, 10X, 20X and 50X
 - Highly robust, micrometer scale
 - Optional height gauge
- **GXC Series:**
 - Low cost, free standing, focussable, tough metal body and stand
 - Micrometer scale & pen light



ID0965 GXC20L

Toolmaker's Microscope

GXM MICROSCOPES



MODELS IN THIS RANGE:

IDTMM01

Toolmaker's Measuring Microscope, includes manual XY vernier gauges a 15X eyepiece and a 2X objective giving a total magnification of 30X expandable to 150X with accessories. This is a compact microscope, well suited for measuring dimensions and angles of machined metals

- Eyepiece protractor: graduation 1°, protractor range 360°
- Eyepiece: 10X. Optional, 15X
- Objectives: 2X, 5X (optional), 10X (optional). Magnifications with all options purchased: 20X, 30X, 50X, 75X, 100X, 150X
- XY Stage: 250mmx50mm (2"x2") Rotary stage: stage diameter: 112mm (4.41"). Glass plate diameter: 66mm (2.60"). Rotation range: 360°. Minimum angle reading: 6'. Steel gauge block: 25mm (1") (optional)
- Transmitted and reflected illumination
- Vernier micrometers. Digimatic micrometer heads are optional

Metallurgical Preparation Equipment

Kemet



CUTTING



GRINDING



MOUNTING

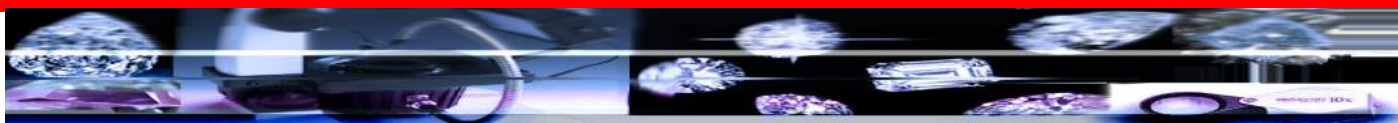


POLISHING



GT Vision supplies a full range of sample preparation equipment including complete laboratory systems by Kemet a top quality British manufacturer.

GEM MICROSCOPES



Gemmological Microscopes

Gemmological microscopes are used for the examination of diamonds and other precious stones and mounted jewellery. They are essentially stereo microscopes with very special illumination and stand design incorporating darkfield stages and a variety of lights and, on some models, a turntable base for client viewing. The image quality from a well set-up gemscope is outstanding and is perfectly usable in other fields such as entomology.

JW Series

GXM MICROSCOPES



ID7971 JW-H3

The JW series of gemmological microscopes are designed to give outstanding images of gems, diamonds and jewellery under a range of illumination types including darkfield. They include special specimen holders and are ergonomically and stylishly designed. In the range are dual magnification (JW-7C) and zoom magnification models (JW-7E, H series). The JW-H models are more substantial, professional level and have base turntables and every conceivable tool and illumination options.

- Binocular head (or trinocular on JW-H3) with interpupillary adjustment and diopter adjustment
- Zoom magnifications (10-40X JW-7E) (7.5X-50X JW-H series) operated by a zoom knob
- Dual magnification (20X & 40X JW-7C) operated by rotating the nosepiece turret
- Pair 10X widefield eyepieces (Optional 15X, 20X and micrometer scale eyepieces)
- Darkfield illumination
- Adjustable angle diffuse light on JW-7E and JW-H series
- Gooseneck point illumination on JW H series
- Turntable base on JW-H series
- Adjustable angle stand on JW-H series
- Specimen holders on all models
- Range of accessories including cameras

MODELS IN THIS RANGE:

ID7940 JW-7C 20X & 40X Dual Magnification
ID7957 JW-7E 10X - 40X Zoom Magnification
ID7964 JW-H2 7.5X—50X Zoom Magnification
ID7971 JW-H3 7.5X—50X Zoom Magnification, Trinocular



ID7940 JW-7C



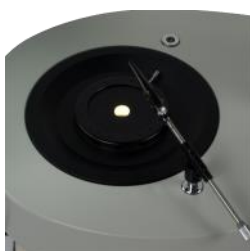
ID7957 JW-7E



ID7964 JW-H2

Adding Darkfield to Stereos

GXM MICROSCOPES



Many of our standard stereo microscopes can be upgraded so they provide darkfield transmitted light for the examination of gems, diamonds, jewellery, plastics, glass, in fact any transparent material with reflective edges. For instance it is amazing for the examination of fish scales.

GX Microscopes have darkfield attachments which rest over the base illuminator of many stereo microscopes. Some include fine jewellery tweezers in the kit.

MONOZOOM MICROSCOPES

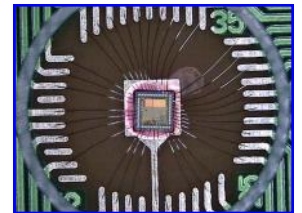
MZD Series

GXM MICROSCOPES



If you need outstanding quality, high contrast, images then the compact MZD Monozoom Microscope Series is the obvious solution. Designed specifically for industrial inspection and materials research applications this microscope offers a host of advantages to the user:

- A huge choice of magnifications from 15X to 1350X
- Zoom magnification
- Large Zoom Ratio of 1:6.7 (1.5x-10x)
- Direct Viewing Optics from the Monozoom Body
- Superb quality, High Contrast images to the eyepieces and camera port
- This is one of the very few monozoom systems with a binocular and trinocular head facility
- The bright, adjustable coaxial LED illumination is perfect for looking at metallurgical specimens, PCBs, IC circuits, electronic components, plastics, surfaces, insects and almost every kind of material
- On some models the pillar stand is supplied with a very useful XY stage enabling convenient and accurate position of your subject sample
- The microscope is held in a focussing ring with a precise coarse and fine focus mechanism, necessary particularly for high magnifications and precise, height determining applications.
- Working distance of up to an amazing 175mm



GX Microscopes MZD Objectives, Eyepieces and Camera Couplers



Coaxial LED, Ring Lights and Gooseneck Illumination



OBSERVATION THROUGH THE BINOCULAR EYEPIECES:

EYEPIECES	OBJECTIVE:	MAIN BODY	0.5X	0.75X	1.5X	2X	4.5X
10X (FN 22mm)	Total Magnification	15X-100X	7.5X-50X	11.25X-75X	22.5X-150X	30X-200X	67.5X-450X
	Field of View (mm)	14.67-2.20	29.33-4.4	19.56-2.93	9.78-1.47	7.33-1.10	3.25-0.49
15X (FN 17mm)	Total Magnification	22.5X-150X	11.25X-75X	16.88X-112.5X	33.75X-225X	45X-300X	101.3X-675X
	Field of View (mm)	11.33-1.70	22.67-3.40	15.11-2.27	7.56-1.13	5.67-0.85	2.52-0.38
20X (FN 14mm)	Total Magnification	30X-200X	15X-100X	22.5X-150X	45X-300X	60X-400X	135X-900X
	Field of View (mm)	9.33-1.40	18.67-2.80	12.44-1.87	6.22-0.93	4.67-0.70	2.07-0.31
30X (FN 9mm)	Total Magnification	45X-300X	22.5X-150X	33.75X-225X	67.5X-450X	90X-600X	203X-1350X
	Field of View (mm)	6.00-0.90	12.00-1.80	8.00-1.20	4.00-0.60	3.00-0.45	0.13-0.20
WORKING DISTANCE:		82	175	117	54	35	16
Magnification Range:		1.5X-10X					

Total magnification= Eyepieces magnification × Zoom body magnification × Objective magnification

For example: With 10X eyepieces, selecting 3X on the zoom body's scale and with a 2X objective attached. Total magnification = $10 \times 3 \times 2 = 60X$

Field of View = The diameter of field number (FN) of the eyepieces ÷ selected zoom body magnification ÷ objective magnification

For example: 10X eyepieces, selecting 3X on the zoom body's scale and with a 1X auxiliary objective attached. Field of view = $22 \div 3 \div 1 = \Phi 7.33mm$

MONOZOOM MICROSCOPES

OBSERVATION VIA A CAMERA MOUNTED ON THE CAMERA PORT OF THE TRINOCULAR HEAD (values shown assume a 1/3rd inch camera sensor size):

OBJECTIVE	CAMERA COUPLER			
	0.5X		1X	
Main Zoom Body (1X Objective)	Total Optical Magnification:	0.75X~5X	Total Optical Magnification:	1.5X~10X
	Field of View (mm):	4.8X6.4~0.72X0.96	Field of View (mm):	2.4X3.2~0.36X0.48
	Working Distance (mm):	82		
0.5X	Total Optical Magnification:	0.375X~2.5X	Total Optical Magnification:	0.75X~5X
	Field of View (mm):	9.6X12.8~1.44X1.92	Field of View (mm):	4.8X6.4~0.72X0.96
	Working Distance (mm):	175		
0.75X	Total Optical Magnification:	0.5625X~3.75X	Total Optical Magnification:	1.125X~7.5X
	Field of View (mm):	6.4X8.53~0.96X1.28	Field of View (mm):	3.2X4.27~0.48X0.64
	Working Distance (mm):	117		
1.5X	Total Optical Magnification:	1.125X~7.5X	Total Optical Magnification:	2.25X~15X
	Field of View (mm):	3.2X4.27~0.48X0.64	Field of View (mm):	1.6X2.13~0.24X0.32
	Working Distance (mm):	54		
2X	Total Optical Magnification:	1.5X~10X	Total Optical Magnification:	3X~20X
	Field of View (mm):	2.4X3.2~0.36X0.48	Field of View (mm):	1.2X1.6~0.18X0.24
	Working Distance (mm):	35		
4.5X	Total Optical Magnification:	3.38X~22.5X	Total Optical Magnification:	6.75X~45X
	Field of View (mm):	1.07X1.42~0.16X0.21	Field of View (mm):	0.53X0.71~0.08X0.107
	Working Distance (mm):	16		
Magnification Range of Zoom Body: 1.5X - 10X				

Note: Field of View is based on 1/3" camera.



Example Models in the range (many more configurations are available):

MODEL	MICROSCOPE SPECIFICATION	MAGNIFICATION RANGE (to eyepieces)	STAND TYPE	ILLUMINATION	OBJECTIVES	EYEPIECES	CAMERA COUPLER	WORKING DISTANCE (MM)	FOCUSING RING
0753-0001 MZD75	Trinocular Zoom	11X-75X	Pillar with XY Stage	LED Coaxial	0.75X	Pair 10X FN22mm	0.5X	117	Coarse & Fine Focus Graduated
0753-0002 MZD450	Trinocular Zoom	11X-75X & 67.5X-450X	Pillar with XY Stage	LED Coaxial	0.75X & 4.5X	Pair 10X FN22mm	0.5X	117 & 16	Coarse & Fine Focus Graduated
0753-0003 MZD900	Trinocular Zoom	15X-100X & 135X-900X	Pillar with XY Stage	LED Coaxial	0.75X & 4.5X	Pair 20X FN14mm	0.5X	117 & 16	Coarse & Fine Focus Graduated
0753-0004 MZD75V1	Trinocular Zoom	11X-75X	V1 Long Reach Boom Stand	LED Coaxial	0.75X	Pair 10X FN22mm	0.5X	117	Coarse & Fine Focus Graduated
0753-0005 MZD75V7	Trinocular Zoom	11X-75X	V7 Long Reach Articulated Stand	LED Coaxial	0.75X	Pair 10X FN22mm	0.5X	117	Coarse & Fine Focus Graduated
0753-0006 MZD50V7RING	Trinocular Zoom	7.5X-50X	V7 Long Reach Articulated Stand	LED Coaxial & LED Ring Light	0.5X	Pair 10X FN22mm	0.5X	175	Coarse & Fine Focus Graduated

The exact appearance and some minor specifications may change over time as the product is continuously developed.

For friendly, expert advice or to order call : (+44) (0)1284 789697 E-Mail: sales@gtvision.co.uk
or visit our on-line store www.gtvision.co.uk

MONOZOOM MICROSCOPES

MZ Series

GXM MICROSCOPES



Monozoom microscopes are widely used in industry and research. Providing a supremely versatile, high quality solution in adaptable microscopy. They are a compact type of microscope that can be configured using a range of components. They provide a flexible, upgradable solution for many users. Monozooms are designed for use with a camera and can be equipped with an enormous range of objectives, couplers, lighting systems and diaphragms. The perfect experimental rig, ideal for many OEM customers.

The Compact GXM Monozoom MZ Lens system provides users with the ultimate flexible microscope set-up. It gives you a huge choice of:

- **Magnifications:** 5X - 2500X
- **Fields of view:** 2um - 77mm
- **Working distances:** <1mm - 331mm
- **Depth of focus:** >5um-5mm
- **Illumination:** coaxial, ringlight, light guides etc
- **Stands:** long reach, articulated, pillar, track, XY stages
- **Motorisation options**

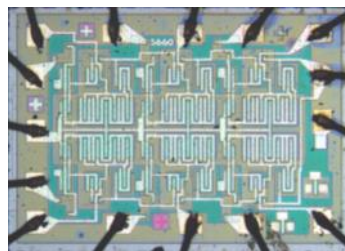
This system is ideal for OEMs, industry and researchers.

At the heart of the system is a Monozoom Zoom Body with a zoom magnification range of 0.68X-4.5X. This is the main part of the Monozoom System, it will not function unless the following additional components are added (as a minimum) :

- **Camera coupler** (fits above the zoom body) various magnifications are available (0.35X-2X)
- **C-mount microscope camera** (fits onto the coupler) eg one of our GXCAM range
- **Auxiliary low power objective** (0.3X to 2X range) or a special objective coupler with a high power Plan Apo microscope objective (to 100X)

Additionally the following optional accessories are often purchased to complete the system:

- **Illumination** - choice of ringlights, gooseneck illuminators or coaxial illumination
- **Stands** - a choice of long reach, articulated, pillar, track, XY stages, motorisation etc
- **Iris diaphragm** - to control the depth of focus/resolution



EXAMPLE MODELS IN THIS RANGE:

ID6462 GXMZ Zoom Body 0.68X-4.5X with Huge Range of (necessary) Accessories to Give Magnifications up to 1500X

ID0536 MZ4004 Complete System with Camera, Fibre Optic Ringlight on Dual Arm Boom Stand

ID0535 MZ3004 Complete System with Camera, Fibre Optic Ringlight or Dual Light Guide on Boom Stand

ID0537 MZ2004 System, LED Ringlight on a Track Stand

ID0537 MZ1004 System, LED Ringlight on a Pillar Stand



Zoom Body & Low Mag Objectives



Couplers



High Mag Objectives


MONOZOOM MICROSCOPES

Table showing magnifications and fields of view achievable with a 1/3rd inch sensor camera attached:

Objectives	Working Distance (mm)	C-Mount Camera Couplers											
		0.35X		0.5X		0.75X		1.0X		1.5X		2.0X	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.3X	331	4.65X-31X	77-12	6X-41X	59-9	9X-61X	39-6	12X-81X	29-4	18X-121X	19.6-3	24X-162X	14.7-2
0.5X	198	7.8X-51X	46-7	10X-68X	35-5	15X-101X	23.5-4	20X-135X	17.6-3	31X-203X	11.8-2	41X-270X	8.8-1.3
0.75X	131	11.6X-77X	31-4.7	15X-101X	23.5-3.6	23X-152X	15.7-2.4	30.6X-202X	12-1.8	46X-304X	7.8-1.2	61X-405X	6-0.9
1.0X	96	15.5X-102X	23-3	20X-135X	17.6-2.7	30.6X-202X	12-1.8	41X-270X	9-1	61X-405X	6-0.9	81.6X-540X	4-0.7
1.5X	63	23X-154X	15-2.3	31X-203X	11.8-1.8	46X-304X	7.8-1.2	61X-405X	6-0.9	92X-607X	4-0.6	122X-810X	3-0.4
2X	46	31X-205X	11.6-1.7	41X-270X	8.8-1.3	61X-405X	6-0.9	81.6X-540X	4-0.7	122X-810X	3-0.4	163X-1080X	2-0.3

GT VISION

**GX Microscopes Flexible
GXMZ Monozoom
Microscope System**



Coaxial Illuminator With fibre optic lamphouse and light guide

Infinity Camera Adapter

Plan APO Microscope Objectives (5 different magnifications available)

C-Mount GXCAM camera 1.3 - 10MP


C-Mount Camera Coupler (5 different magnifications available)

Zoom Body 0.68X-4.5X

Iris (optional) mounted above or below zoom body

Monozoom Objectives (5 different magnifications available)

Huge Choice of Stands




Dual Illuminated Track Stand

Pillar Stand


Dual Illuminated Track Stand With XY Stage

Dual Arm Long Reach Stand


Articulated G-Clamp Pneumatic Stand



ID0538 MZ1004




ID0537 MZ2004



ID0536 MZ4004

Accessories



LED Ring Lights 39mm Focussing Ring

Example complete systems with camera, stand and illumination



STEREO MICROSCOPES

PS-T Research Series

GXMICROSCOPES

Zoom Optics

Advanced Research Grade

4X-360X

Parallel Optics

Top Quality Images

Huge Choice of Stands and illumination



ID9206 PS-T

PS-T research grade, parallel optics, 10:1 zoom ratio, stereo microscopes range.

The PS-T series of parallel optics, research grade stereo microscopes are GX Microscopes' highest quality zoom microscopes with superb optical performance for both observation and imaging. Providing magnifications of 8X-80X expandable to 360X. There is a huge choice of stands, camera and illumination options. This microscope is ideal for applications where the highest quality image is required. Users benefit from an exceptionally large zoom range with a ratio of 10:1 making it particularly useful for observing specimens that require a large change in magnification. The super-widefield parallel optics provide the optimum optical configuration, hugely diminishing aberration and fringing errors and making prolonged use of the microscope comfortable.

Each microscope in the range is equipped with a pair of 0.8X-8X zoom objectives controlled by a zoom knob and a pair of 10X super wide-field eyepieces. Each eyepiece links directly to one of the angled zoom objectives, this gives a stunning 3 dimensional image of your specimen. The optical quality is bright, pin-sharp and distortion free giving a bright, crisp 3D image of the specimen.

- Binocular head with interpupillary adjustment and diopter adjustment
- Parallel optics, continuous zoom 8X-80X (expandable to 360X with accessories).
- Common main objective, modular optical system
- Camera port accepts c-mount and DSLR adapters
- Pair 10X super-widefield eyepieces (optional 15X, 20X, 30X and micrometer scale eyepieces)
- 1X objective included as standard (optional 0.5X, 0.7X and 1.5X objectives)
- Working distance 91mm (expandable to 40-186mm with optional objectives)
- Huge choice of stands & illumination options
- Large range of accessories including camera adapters and cameras

EXAMPLE MODELS IN THIS RANGE:

ID9206 PS-T with Camera Port and Stand
ID0151 PSTV1 + Camera Port & V1 Boom Stand
ID9212 PST103C + Camera Port & XY Stage Stand
ID0508 PSV7 + Articulated V7 Long Reach Stand



ID0151 PSTV1



ID0508 PSV7



ID9212 PST103C



Eyepieces	Objective:	0.5X	0.7X	1X (std)	1.5X
10X	Total magnification	4X~40X	5.6X~56X	8X~80X	12X~120X
	Diameter of visual field (mm)	Φ55~Φ5.5	Φ39.3~Φ3.93	Φ27.5~Φ2.75	Φ18.33~Φ1.83
15X	Total magnification	6X~60X	8.4X~84X	12X~120X	18X~180X
	Diameter of visual field (mm)	Φ42.5~Φ4.25	Φ30.36~Φ3.04	Φ21.25~Φ2.13	Φ14.17~Φ1.42
20X	Total magnification	8X~80X	11.2X~112X	16X~160X	24X~240X
	Diameter of visual field (mm)	Φ35~Φ3.5	Φ25~Φ2.5	Φ17.5~Φ1.75	Φ11.67~Φ1.17
30X	Total magnification	12X~120X	16.8X~168X	24X~240X	36X~360X
	Diameter of visual field (mm)	Φ22.5~Φ2.25	Φ16.1~Φ1.61	Φ11.25~Φ1.13	Φ7.5~Φ0.75
Working distance (mm)		186	135	91	40

STEREO MICROSCOPES

MZS Series Ultra Long WD* Series

GXM MICROSCOPES

Zoom Optics

Research Grade

3.5X-420X

Ultra-Long Working Distance

Top Quality Images

Huge Choice of Stands and Illumination

*WD=Working Distance



ID0505 MZS1065V7

EXAMPLE MODELS IN THIS RANGE:

ID0202 MZSTLED 7-45X Trinocular & LED Stand

ID0140 MZSTV7 7X-45X Trinocular & Articulated Stand

ID0505 MZS1065V7 10X-65X Trinocular & Articulated Stand

ID0653/0421 MZST0870 8-70X Trinoc. & Stand

The MZS series of ultra-long working distance (of 118mm up to 195mm) professional stereo microscopes are GX Microscopes' most popular zoom microscopes for applications where work needs to be undertaken on the subject under observation. This includes the electronics industry, jewellery manufacture, engraving, component assembly work, soldering, dissections and live sample work. These microscopes also produce an unusually high quality image to the camera and they are often the microscope of choice among customers requiring really good photographic images of their specimens. With over 1000 installations in the UK alone, they provide the highest quality images, have a remarkably long working distance, provide a wide field of view, have a wide zoom range and are highly robust and extremely well built - suitable for the most demanding uses. Each microscope in the range is equipped with a pair of zoom objectives controlled by a zoom knob and, as standard, a pair of 10X extra wide-field eyepieces. Each eyepiece links directly to one of the angled zoom objectives, this gives a stunning 3 dimensional image of your specimen. The optical quality is exceptionally good giving a bright and sharp 3D image of the specimen. All MZS microscopes are supplied with trinocular heads. In this range there is a choice of zoom magnification ranges with the 10X eyepieces, this magnification range can be extended **3.5X - 420X** with the optional objectives and eyepieces. The binocular eyepiece tubes are inclined at a comfortable 45°. The entire head can be easily rotated through 360°, it has interpupillary distance adjustment and both eyepiece tubes have diopter adjustment. The head of the microscope sits in a 76mm focussing ring, this ring can be mounted on a very wide variety of stands including pillar stands (eg 0745, 103B & 103C) and long reach boom arm & articulated arm stands (eg V1, V6 & V7). Illumination is built-in with many stands providing both incident and transmitted light. Additionally some models have coaxial LED built-in illumination. Alternatively, with all other stands, illumination can be provided separately using LED ringlights or LED & halogen spot or fibre optic illuminators.

- Binocular or trinocular head with interpupillary adjustment and diopter adjustment

- Continuous zoom optics

- MZS standard models: 7X-45X (expandable to 360X with accessories)

- MZS1065 models: 10X-65X (expandable to 390X with accessories)

- MZS0870 models: 8X-70X (expandable to 420X with accessories)

- Camera port accepts c-mount and DSLR adapters

- Pair 10X super-widefield eyepieces (optional 15X, 20X, 30X and micrometer scale eyepieces)

- Optional 0.37X, 0.5X, 0.7X, 1.5X and 2X objectives (dependent on model)

- **ULTRA LONG** working distance 118mm (expandable to 195mm with optional objectives)

- Huge choice of stands & illumination options **including coaxial LED** on some models

- Large range of accessories including camera adapters and cameras



V10 Professional Workstation Stand with Headrest Ultra-Stable & Comfortable



Coaxial LED Lighting



STEREO MICROSCOPES

XTL Routine & Research Series

GXM MICROSCOPES

ZOOM Optics

Super-Widefield

Research Grade

Top Quality Optics

3.5X-220X

Large Choice of Stands and Illumination



ID4567 XTL3T101

EXAMPLE MODELS IN THIS RANGE:

ID4567 XTL3T101 Trinocular & LED Stand
ID5588 XTL3TV1 + Trinocular & V1 Boom Stand
ID9186 XTL3T103B + Trinocular & Wide Stand
ID5625 XTL3TV7 + Trinocular & V7 Articulated Stand

The XTL series of professional stereo microscopes are GX Microscopes' most popular zoom microscopes with over 2,000 installations in the UK alone, they provide high quality, wide field of view images, a wide zoom range and are highly robust and extremely well built, suitable for the most demanding uses. Each microscope in the range is equipped with a pair of 0.7X-4.5X zoom objectives controlled by a zoom knob and a pair of 10X extra wide-field eyepieces. Each eyepiece links directly to one of the angled zoom objectives, this gives an impressive 3 dimensional image of your specimen. The optical quality is very good giving a bright, crisp 3D image of the specimen.

All models give 7X-45X zoom magnification range with the 10X eyepieces, this magnification range can be extended 3.5X -220X with optional objectives and eyepieces. The binocular eyepiece tubes are inclined at a comfortable 45°, can be rotated through 360°, have interpupillary distance adjustment and both eyepiece tubes have diopter adjustment. This makes these microscopes suitable for ergonomic use by the greatest number of people and assists in achieving parfocality when cameras are attached. The head of the microscope can be mounted on a very wide variety of stands including pillar stands (eg 103A, 103B & 103C) and long reach boom arm and articulated arm stands (eg V1, V6 & V7). Illumination is built-in with the 101 stand providing both incident and transmitted light. Alternatively, with all other stands, illumination can be provided separately using LED ringlights or LED & halogen spot or fibre optic illuminators. Each microscope is supplied with a pair of rubber eyeguards, manual and a dust cover. The stands have a well painted base with steel poles. There is a precision, smooth focus system using a rack and pinion mechanism.

The XTL Microscope range is our most versatile stereo zoom microscope and is an excellent, professional grade instrument for industry, hobbyists, researchers and educational establishments.

- **Binocular or trinocular head with interpupillary adjustment and diopter adjustment**
- **Continuous zoom optics 7X-45X (expandable to 220X with accessories)**
- **Camera port accepts c-mount and DSLR adapters**
- **Pair 10X super-widefield eyepieces (optional 15X, 20X, 25X and micrometer scale eyepieces)**
- **Optional 0.5X, 0.75X, 1X, 1.5X and 2X objectives**
- **Working distance 88mm (expandable to 137mm with optional objectives)**
- **Huge choice of stands & illumination options**
- **Large range of accessories including camera adapters and cameras**



ID5625 XTL3TV7



ID9186 XTL3T103B



Objectives



Extra WF Eyepieces



Camera Adapters

Eyepieces	Objective:	0.5X	0.75X	None (or with 1X)	1.5X	2X
10X	Total magnification	3.5X~22.5X	5.2X~33.7X	7X~45X	10.5X~67.5X	14X~90X
15X	Total magnification	5.2X~33.7X	7.8X~50.5X	10.5X~67.5X	15.7X~101.2X	21X~135X
20X	Total magnification	7X~45X	10.5X~67.5X	14X~90X	21X~135X	28X~120X
25X	Total magnification	8.7X~56.2X	13X~84.2X	17X~112.5X	26.2X~168.7X	35X~225X
Working distance (mm)		137	103	88	48	25

STEREO MICROSCOPES

ZTX Economy Zoom Range

GXM MICROSCOPES

ZOOM Optics

Great Value

Routine Grade

Compact Design

3.5X-160X

Large Choice of Stands and Illumination



The ZTX series of economy zoom stereo microscopes are a low cost version of the XTL series by GX Microscopes. They have a narrower field of view to the XTL and a zoom range of 10X-40X which can be expanded to 2.5X-160X with optional eyepieces and auxiliary objectives. Each of the WF eyepieces links directly to one of the angled zoom objectives, this gives a three dimensional image of your specimen. The optics give a sharp crisp 3D image of the specimen.

- Great value for money
- Binocular or trinocular head with interpupillary adjustment and diopter adjustment
- Zoom magnification 10X-40X expandable to 2.5X-160X + optional objectives and eyepieces
- Dual illuminated desk stand and long reach stands available
- Pair 10X widefield eyepieces (optional 15X, 20X and micrometer scale eyepieces)
- Range of accessories including cameras and illuminators

Ideal for hobbyists and schools

Easy to use

Compact size

EXAMPLE MODELS IN THIS RANGE:

ID9187 ZTX Binocular + Dual Illuminated Stand
ID9188 ZTX-T Trinocular + Dual Illuminated Stand
ID0130 ZTXTV6 Trinocular + Dual Arm Boom Stand
ID0129 ZTXTV1 Trinocular + Boom Stand
ID0131 ZTXTV7 Trinocular + Articulated Arm Stand
ID9191 ZTX 103B Binocular + Large Base Pillar Stand



ID0130 ZTXTV6



ID9191 ZTX103B



Objectives



High Power Eyepieces

Eyepieces	Objective:	0.5X (ID9301)	0.75X (ID9302)	None (or with 1X)	1.5X (ID9203)	2X (ID9204)
5X (ID9197)	Total magnification	2.5X-10X	3.75-15X	5X-20X	7.5X-25X	10X-40X
10X (std.) (ID9198)	Total magnification	5X-20X	7.5X-30X	10X-40X	15X-60X	20X-80X
15X (ID9199)	Total magnification	7.5X-30X	11.25X-45X	14X-90X	22.5X-90X	30X-120X
20X (ID9200)	Total magnification	10X-40X	15X-60X	20X-80X	30X-120X	40X-160X
Working distance (mm)		167	97	85	42	28

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STEREO MICROSCOPES

IO Zoom

GXM MICROSCOPES

ZOOM Optics

Our Best Deal

Routine Grade

Modern Design

3.5X-180X

Binocular Only

Single Model



ID0586 GXM-IO

MODELS IN THIS RANGE:

ID0586 GXM-IO Binocular & LED Stand

The IO stereo microscope is GX Microscopes' latest amazing value zoom microscope. It provides all-round, good quality images at an extremely good value price. This microscope is equipped with a pair of 0.7X-4.5X zoom objectives controlled by a zoom knob and a pair of 10X wide-field eyepieces, giving a total magnification of 7X-45X which can be extended to 3.5X to 180X with accessories. Each eyepiece links directly to one of the angled zoom objectives, this gives a stunning 3 dimensional image of your specimen. The optical quality is very good giving a bright, crisp 3D image of the specimen.

The binocular head can easily have a camera attached.

The microscope head is mounted in a modern track stand with carry handle.

LED illumination is built-in with the stand providing both incident and transmitted light.

Additional illumination can be provided separately using LED ringlights or LED & halogen spot or fibre optic illuminators. Each microscope is supplied with a pair of rubber eyeguards, manual and a dust cover. The stands have a well painted metal base with steel poles. There is a precision, smooth focus system using a rack & pinion mechanism, manual and a dust cover. The stands have a well painted base with steel poles. There is a precision, smooth focus system using a rack and pinion mechanism.

- **Binocular head with interpupillary adjustment and diopter adjustment**
- **Continuous zoom uncoated optics 7X-45X (expandable to 180X with accessories)**
- **Pair 10X widefield eyepieces (optional 15X and 20X eyepieces)**
- **Optional 0.5X, 1.5X and 2X objectives**
- **Working distance 100mm (expandable to 165mm with optional objectives)**
- **Stylish dual illuminated LED track stand with handle**



Objectives



Eyepieces

Eyeieces	Objective:	0.5X	None (or with 1X)	1.5X	2X
10X (std)	Total magnification	3.5X~22.5X	7X~45X	10.5X~67.5X	14X~90X
15X	Total magnification	5.2X~33.7X	10.5X~67.5X	15.7X~101.2X	21X~135X
20X	Total magnification	7X~45X	14X~90X	21X~135X	28X~120X
Working distance (mm)		165	100	45	30

STEREO MICROSCOPES

ST50 Long Reach

GXMICROSCOPES

Singe Mag. Optics

Great Price

Long Working Distance

Boom Stand

Integrated Light

5X-70X

Binocular Only

Vertical and Angled Heads



ID9036 ST50B

MODELS IN THIS RANGE:

ID9036 ST50A 20X Straight Head

ID9037 ST50A 20X Angled Head

The outstanding value for money ST50 series of single magnification stereo microscopes are designed for those inspection and assembly/soldering tasks requiring plenty of distance between the microscope and the object under observation with a long reach and viewing angle flexibility.

The optics give an upright, non-inverted image over a wide field of view which is sharp and clear.

- The ST-50B model has a 45° inclined binocular head with locked-in eyepieces
- The ST-50B model has a straight tube binocular head with locked-in eyepieces

As standard a slide-in 2X objective with a working distance of 119mm is supplied along with a pair of 10X Widefield eyepieces which combine to give a total magnification of 20X. This magnification range can be expanded to 5X—70X using the range of optional objectives and eyepieces.

- Binocular head with interpupillary adjustment and diopter adjustment
- Interchangeable magnifications using objective cartridges and eyepieces
- Long reach, adjustable angle stand with built-in illumination
- Pair 10X widefield eyepieces (optional 15X, 20X and micrometer scale eyepieces)
- Optional 1X and 3.5X 'slide-in' objective cartridges
- **LONG** working distance 119mm (expandable to 165mm with optional 1X objective)
- Range of accessories including cameras



Objective cartridge

XTX Series for Teaching & Home

GXMICROSCOPES

Singe Mag. Optics

Teaching Grade

Dual Illuminated Stand

20X-120X

Binocular Only

Compact Size for Children

Easy to Use



MODELS IN THIS RANGE:

ID1276 XTX-1C 20X + Dual Illuminated Stand

The XTX-1C 20X stereo microscope provides great value for such high performance. These are classed as single magnification microscopes which can have a range of auxiliary objectives and eyepieces inserted to achieve different magnifications and working distances. Each microscope is equipped with high quality glass optics, a sturdy metal stand and built-in top and bottom halogen lamp illumination. The simplicity of design and robustness of build makes it particularly suitable for use by the young enthusiast and in schools and colleges.

- Binocular head with interpupillary adjustment and diopter adjustment
- 20X Std. interchangeable magnifications using objective cartridges and eyepieces up to 120X
- Dual illuminated stand with frosted glass and solid black/white base inserts
- Pair 10X widefield eyepieces (optional 15X and 20X eyepieces)
- Optional 3X, 4X and 6X 'slide-in' objective cartridges
- Working distance 80mm with standard 20X
- Range of accessories including cameras

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POLARISING MICROSCOPES



Polarising Microscopes

Polarising microscopes are used to observe the polarisation characteristics of materials. Typical specimens are geological, crystals, asbestos, fibres and polymers. This type of microscope typically has an upper polariser (called an 'Analyser') in the head of the microscope and a lower polariser (called a 'Polariser') which is mounted beneath the specimen stage and above the illumination. The polarisers are rotatable and are often positioned so that they are 'crossed' at 90 degrees to each other. With no specimen in place this will produce a black image (called 'extinction'). When a light diffracting specimen is placed on the stage, light is scattered producing an often beautifully coloured image where the colours are proportional to the diffractive characteristics of the specimen.

XPL 3200 Series

GXM MICROSCOPES

Research Grade

Infinity Optics

Plan Achromatic

Koehler Illumination

Super Widefield Eyepieces

Advanced Design

Trinocular



ID4321 XPL3230

The XPL 3200 series are GX Microscope's most advanced range of research grade polarising microscopes representing the very best value for money in this demanding area of technology and they are an important part of the largest range of polarising microscopes in Europe

XPL3200 series microscopes are available in two configurations:

XPL3200—transmitted light

XPL3230—transmitted and incident (reflected) light

Each is equipped with very widefield, strain-free infinity optics, a trinocular head, a fine set of first class plan achromatic objectives giving a magnification range of typically 40X-600X (with options of up to 1000X). Each microscope comes complete with a substantial research grade stand, 1/4 and 1 Wavelength Retardation Plates, Quartz Wedge and Bertrand Lens.

- Trinocular head with interpupillary adjustment and diopter adjustment
- Strain free, infinity, plan achromatic optics
- Rotating stage with clamps, alignment screws and an optional attachable XY stage
- The camera port accepts c-mount and DSLR adapters
- Pair super-WF10X eyepieces with a built-in crosshair and scale for alignment and measurement
- Centerable objective positions on the reversed objective turret
- Full set of wave plates, Bertrand lens and quartz wedge
- Rotatable analyser and polarisers with reference scales



MODELS IN THIS RANGE:

ID4321 XPL3230 Dual illuminated Research

ID5373 XPL3200 Transmitted Light Research

XPL3200 Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Trinocular	Substantial, stable, robust, research grade stand	Modern, strain-free, infinity corrected optics throughout	Bright White 3W LED or halogen, adjustable intensity	Rotating Stage Diameter Ø150mm
Pair Super Widefield 10X Eyepieces (Field Number 22mm) <i>Optional 15X</i> Includes focussing eyepiece with crosshair and scale	Rotatable, graduated polariser(s) in front of light source(s)	Plan Achromatic Objectives 4X, 10X, 40X, 60X (optional 100X & 20X)	Koehler Illumination with an Iris in the collector lens	360° graduated in 1° increments Adjustable + lock
Eyepiece Tube Inclination: 30 degrees. Rotatable Head through 360 degrees. Interpupillary Distance Adjustment.	Ergonomic, stylish, modern	Abbe Condenser + Iris NA 1.25 mounted on a rack & pinion	220V/240V std. Optional 110V	Optional XY stage
Diopter Adjustment. Integrated, retractable, rotatable (0-90deg) analyser in head. Retractable, centerable Bertrand Lens Full waveplate, quarter waveplate and quartz wedge inserts	Quadruple reversed objective nosepiece/turret with objective centering controls. (quintuple optional)			
Camera : Eyepiece Split on Trinocular Head: 100%:0% via lever for optimum imaging performance. Exceptional picture quality to camera port Optional 0.5X & 1X C-mount camera adapters also DSLR adapters	Coaxial Coarse & Fine Focus knobs ergonomic graduated in microns (2um)			

POLARISING MICROSCOPES

XPL 1500 Series

GXM MICROSCOPES

Routine Grade

Plan Achromatic

Widefield Eyepieces

Robust Design

Trinocular & Binocular



ID1054 XPL1500

GX Microscope's XPL 1500 series are our largest selling range of routine/teaching grade polarising microscopes which are highly competitively priced and extremely demanding. They are widely used in university teaching laboratories.

XPL1500 series microscopes are available in three configurations:

XPL1500—transmitted light

XPL1530—transmitted and incident (reflected) light

XPL1503—incident (reflected) light

Each is equipped with widefield, strain-free optics, a trinocular (optional binocular) head, a set of class plan achromatic objectives giving a magnification range of typically 50X-600X (with options of up to 1000X). Each microscope comes complete with a highly robust, easy to carry routine/teaching grade stand, 1/4 and 1 Wavelength Retardation Plates, Quartz Wedge and Bertrand Lens.

- Trinocular head with interpupillary adjustment and diopter adjustment
- Strain free, infinity, plan achromatic optics
- Rotating stage with clamps, alignment screws and an optional attachable XY stage
- The camera port accepts c-mount and DSLR adapters
- Pair WF10X eyepieces with a built-in crosshair and scale for alignment and measurement
- Centerable objective positions on the reversed objective turret
- Full set of wave plates, Bertrand lens and quartz wedge
- Rotatable analyser and polarisers with reference scales

MODELS IN THIS RANGE:

ID1076 XPL1530 Dual illuminated Routine

ID1061 XPL1503 Top illuminated Routine

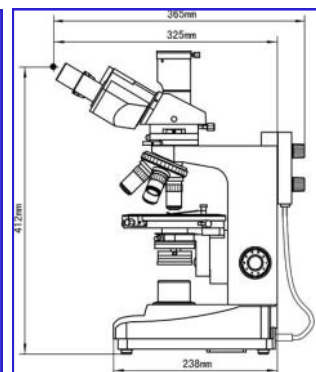
ID1054 XPL1500 Transmitted Light Routine



ID1061 XPL1503



ID1076 XPL1530



XPL1500 Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Trinocular (optional binocular)	Compact, easy to carry, robust, routine grade stand	Modern, strain-free, infinity corrected optics throughout	Bright White 3W LED or halogen, adjustable intensity	Rotating Stage Diameter Ø150mm
Pair Widefield 10X Eyepieces (Field Number 18mm, optional 20) Optional 16X Includes focussing eyepiece with crosshair and scale	Rotatable, graduated polariser(s) in front of light source(s)	Plan Achromatic Objectives 5X, 10X, 40X, 60X (optional 100X & 20X)	220V/240V std. Optional 110V	360° graduated in 1° increments Adjustable + lock
Eyepiece Tube Inclination: 30 degrees. Rotatable Head through 360 degrees. Interpupillary Distance Adjustment.	Ergonomic, stylish, modern	Abbe Condenser + Iris NA 1.25 mounted on a rack & pinion		Optional XY stage
Diopter Adjustment. Integrated, retractable, rotatable (0-90deg) analyser in head. Retractable, centerable Bertrand Lens Full waveplate, quarter waveplate and quartz wedge inserts	Quadruple objective nose-piece/turret with objective centering controls. (quintuple optional)			
Camera: Eyepiece Split on Trinocular Head: 100%:0% via lever Good picture quality to camera port Optional 0.5X & 1X C-mount camera adapters also DSLR adapters	Coaxial Coarse & Fine Focus knobs graduated in microns (2µm)			

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or visit our on-line store www.gtvision.co.uk

POLARISING MICROSCOPES

XPLPOLTEC 1,2 & 3 Series

GXM MICROSCOPES

Research/Routine Grade

Infinity Optics

Plan Achromatic

Koehler Illumination

Widefield Eyepieces

Modern Stand

Trinocular/Binocular



ID0724-0001

GXM-XPLPOLTEC 1, 2 & 3 Series—Great Value, Advanced Design, Polarising Microscopes.

There are 3 models in this our latest addition to our extensive polarising microscope range, the main characteristics of this series are:

- Superior infinity corrected optics
- Plan achromatic objectives giving optimum clarity and flatness of field
- Strain-free glass in the optics, designed specifically for polarised light microscopy
- Objective centration for each objective position on the objective nosepiece/turret.
- Reversed nosepiece/objective turret
- Rotating circular stage with specimen clips and full graduations with position lock
- Retractable, rotatable Bertrand Lens
- A range of waveplate inserts including 4 orders quartz wedge, quarter wavelength compensator and first order red waveplates and rotatable Analyser
- Modern ergonomic, compact design microscope stands (there are two stand types in the range) with Carry Handle
- Widefield Eyepieces including an extra eyepiece with a crosshair and graduated micrometer scale
- NA1.25 Abbe Condenser with integrated, rotatable polariser with graduations
- LED illumination (halogen optional and on some models)
- Binocular and trinocular models
- Incident and transmitted light models with corresponding objectives

MODELS IN THIS RANGE:

ID0724-0001 XPLPOLTEC-1 Trinocular, Dual Illuminated

ID0724-0002 XPLPOLTEC-2 Trinocular, Transmitted Light

ID0724-0003 XPLPOLTEC-3 Binocular, Transmitted Light

GXM MICROSCOPES



XPLPOLTEC-1 (trinocular)
Transmitted & Incident Light

XPLPOLTEC-2 (trinocular)
Transmitted light

GXM MICROSCOPES



Condenser with clear iris
settings and integrated
graduated polariser

GXM MICROSCOPES



Condenser with iris
and integrated
Polariser

Analysers and inserts

Bertrand Lens

XPL3200 Series SPECIFICATIONS

HEAD	STAND & FOCUS	OPTICS	ILLUMINATION	STAGE
Trinocular on	Substantial, stable, robust, research grade stand	Modern, strain-free, infinity corrected optics throughout	Bright White 3W LED or halogen, adjustable intensity	Rotating Stage Diameter Ø150mm
Pair Super Widefield 10X Eyepieces (Field Number 22mm) <i>Optional 15X</i> Includes focussing eyepiece with crosshair and scale	Rotatable, graduated polariser(s) in front of light source(s)	Plan Achromatic Objectives 4X, 10X, 40X, 60X (optional 100X & 20X)	Koehler Illumination with an Iris in the collector lens	360° graduated in 1° increments Adjustable + lock
Eyepiece Tube Inclination: 30 degrees . Rotatable Head through 360 degrees. Interpupillary Distance Adjustment.	Ergonomic, stylish, modern	Abbe Condenser + Iris NA 1.25 mounted on a rack & pinion	220V/240V std. Optional 110V	Optional XY stage
Diopter Adjustment. Integrated, retractable, rotatable (0-90deg) analyser in head. Retractable, centerable Bertrand Lens Full waveplate, quarter waveplate and quartz wedge inserts	Quadruple reversed objective nosepiece/turret with objective centering controls. (quintuple optional)			
Camera : Eyepiece Split on Trinocular Head: 100%:0% via lever for optimum imaging performance. Exceptional picture quality to camera port Optional 0.5X & 1X C-mount camera adapters also DSLR adapters	Coaxial Coarse & Fine Focus knobs ergonomic graduated in microns (2um)			

POLARISING MICROSCOPES

XPLPOLTEC 4 & 5 Series

GXMICROSCOPES

Routine/Teaching Grade

Infinity Optics

Plan Achromatic

Carry Handle

Widefield Eyepieces

Compact Stand

Trinocular/Binocular



ID0724-0004

GXM-XPLPOLTEC 4 & 5 Series of Amazing Value, Routine Grade, Advanced Design, Modern Polarising Microscopes—ideal for university teaching laboratories.

There are 2 models in this polarising microscope range a binocular and a trinocular model, the main characteristics of this series are:

These microscopes share most characteristics of the XPLPOLTEC-1,2 & 3 series, the differences are:

- ◇ Lower cost
- ◇ Smaller, more compact stand with handle and cord winder
- ◇ Transmitted light models only
- ◇ Less intense illumination
- ◇ Quadruple objective turret/nosepiece
- ◇ Some simplified polarising components
- ◇ Non-Koehler Illumination
- ◇ Optional XY attachable Stage
- ◇ Plan Achromatic, Strain Free Objectives 4X, 10x, 40X, 60X (optional 100X & 20X)
- ◇ Diopter Adjustment. Integrated, retractable
- ◇ Rotatable (0-90deg) analyser in head. Retractable, centerable Bertrand Lens
- ◇ Full waveplate, quarter waveplate and quartz wedge inserts

MODELS IN THIS RANGE:

ID0724-0004 XPLPOLTEC-4 Binocular, Transmitted Light

ID0724-0005 XPLPOLTEC-5 Trinocular, Transmitted Light

JPL Series

GXMICROSCOPES

Starter/Teaching Grade

Achromatic

Widefield Eyepieces

Compact Stand

Binocular/Monocular



ID0385-JPL1350

The JPL Series of affordable polarising microscopes provide high performance at an extremely competitive price.

In the range are monocular (JPL-135) binocular (JPL130HBG) and trinocular (JPL1350HTG) models. This microscope is a teaching/amateur/starter grade but it is well equipped and has a high specification producing excellent quality images. All models have transmitted light and are suitable for observing polarisable materials such as geological thin sections. Each microscope has one or a pair of Widefield (FN18mm) 10X eyepieces with a crosshair for centering the stage and objectives. The JPL1350 models have 4 achromatic, Strain-free, centerable objectives 4X, 10X, 40X, 100Xoil (optional 20X, 60X objectives), the JPL135 model has three objectives 4X, 10X, 40X. These microscopes are also equipped with a smooth, clampable, calibrated, rotating, centerable stage, a retractable analyser in head, a rotatable polariser, an Abbe condenser, adjustable intensity lights and coarse/fine focus knobs with adjustable tension and limit stopper on JPL1350 models.

These models are part of GX Microscopes' exciting and extensive range of polarising microscopes, they are designed to be affordable by amateur microscopists, schools and colleges.



ID8466-JPL135

MODELS IN THIS RANGE:

ID0385 JPL1350 Binocular

ID4406 JPL1350 Trinocular

ID8466 JPL135 Monocular

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DIGITAL MICROSCOPES

Handheld with Optional Stands



ID0599 Dino-Lite AM4515T8



Dino-Lite AM4115ZTW

Digital microscopes can be loosely defined as microscopes with cameras built-in. Adding a camera to an existing microscope will also create a digital microscope. In this section we will display mainly those microscopes that have built-in cameras.

There are various categories and levels of digital microscopes:

- Microscopes with built-in USB cameras requiring a PC (or MAC) to see the live image
- Microscopes with built-in HDMI, Wi-Fi, video or SXGA cameras requiring connection direct to a monitor or Wi-Fi connection to a smartphone or tablet to see the live image
- Microscopes with built-in cameras and a display monitor on top, some of these include touch screen controls

In this category in particular, price is an extremely clear indicator of product quality, functionality and the expected product support and lifetime. A really low price will nearly always equate to a limiting and disappointing product. One important yet often overlooked aspect to consider is whether the product is likely to be supported in the medium term as new versions of Windows or MAC OS are released, really cheap products invariably stop working with new operating system releases and there is no competent, UK or European based support to assist you. On our website we only offer properly supported high quality products from microscope manufacturers whose products we have thoroughly tested. GT Vision has sold many thousands of digital microscopes and we are able to advise you about the choice of resolution, illumination types, the merit of the software functions and which stand is best for your application. Some of the different categories are shown below:

EXAMPLE MODELS IN THIS RANGE:

ID0599 Dino-Lite AM4515T8, 700X-900X,
Auto-Calibration and Measurement

ID5588 Dino-Lite AM4115ZTW 20X-230X,
Polarising

ID9106 AM2111 Basic, 10X-50X & 200X

ID0601 AM4815ZT, 20X-220X, EDGE with
Extended Dynamic Range

ID3515 AM4113T Pro, 10X-50X & 200X



- Huge range of styles available
- Magnifications to 500X
- Specialised systems for IR, UV, polarised light, long working distance, portable use & high speed
- Innovative products include automatic extended depth of focus and auto-calibrated measurements & Wi-Fi
- First class software with a rich selection of practical tools
- Capture, stills, videos and time-lapse
- Huge choice of stands, automation & illumination options



FORENSIC MICROSCOPES

Comparison Microscopes

Comparison microscopes are used mainly in the forensics field for comparing two objects such as cartridges or tool marks. There are two principle types, one offer 'macro-scale' imaging for lower magnification examination of bullet cases, firing pin marks etc. The other is for higher magnifications for the comparison of paint flakes and other materials. These are essentially two microscopes combined by a bridge which splits or merges the images.

XZB—5C

GXMICROSCOPES



MODELS IN THIS RANGE:
ID0996 XZB-5C

XZB-5C is a high quality forensic macro comparison microscope with integrated micro and macro viewing systems for the easy comparison, side-by-side, of two objects with variable split and merged images.

This microscope is commonly used in forensics for examining ballistics, fibres, tool marks and other materials and also in archaeology, palaeontology and other collections and artefact identification studies.

- Trinocular head with interpupillary adjustment and diopter adjustment
- Digital USB camera included
- Magnification tumbler optics 7.68X-120X
- Camera port accepts c-mount and DSLR adapters
- Pairs of 10X widefield, 20X & 25X Eyepieces
- 0.64X, 1X, 1.6X, 2.5X and 4X objectives with in-built 1.2X bridge magnification
- Working distance 100mm typical
- Pairs of adjustable spot lamps and cold light sources on goosenecks, trans-illuminators and polarisers
- Full set of calibration reticles and set-up tools included
- Rotatable, independently adjustable, tiltable vernier stages included
- Optional cartridge and specimen holders



XZB—605

GXMICROSCOPES



MODELS IN THIS RANGE:
ID0996 XZB-605

A high quality high magnification dual compound microscope with integrated camera option for the comparison, side-by-side, of two specimens illuminated by transmitted light.

This microscope is commonly used in forensics for examining hair, stains, glass fragments, animal and human tissue, plant materials, insects, insect larvae, fibres, translucent replicates and other materials. It is also widely used in archaeology, botany, entomology, micropalaeontology and other collections and artefact identification studies.

- Trinocular head with interpupillary adjustment and diopter adjustment.
- Optional digital USB camera and camera adapters
- Two turrets of 4 objectives giving a total magnification range of 40X—1600X
- 2 Pairs of 10X widefield eyepieces
- 2 sets of 4X, 10X, 40X, 100X oil immersion objectives
- Bridge with knob for image splitting and merging
- Abbe condensers NA1.25
- XY mechanical stages 140x140mm
- Coarse & fine focus
- Adjustable transmitted illumination

CAMERAS FOR MICROSCOPES

GXCAM Series

GXCAM



GT Vision are probably the UK's largest supplier of cameras for microscopy. Our range of cameras for microscopy provide high levels of functionality at excellent prices and have been specially designed for microscopy use. The most popular are our GXCAM family which includes a range of useful accessories and a very comprehensive GXCAPTURE software package making them the most popular range of cameras we supply.

We offer a huge choice of camera systems at great prices, incorporating all the very latest in this technology. Cameras can be fitted to almost any type of microscope, many of our cameras include all the camera adapters you will need. We also offer adapters for almost every known make of microscope.

You can attach a camera to a phototube of a trinocular headed microscope or to an eyepiece tube of a binocular or monocular microscope—we are specialists in this area and can advise you exactly what you need.

HDMI DIRECT TO DISPLAY - USB TO COMPUTER - SD CARD - C-mount cameras

GXCAM— HICHROME Series - HDMI, USB & SD card



MODELS IN THIS RANGE:
ID0541 HICHROME SMII 1080P
ID0684 HICHROME LITE

High Resolution 1080P Live Camera Direct to Display & USB with SD storage - C-mount—no computer needed; also includes a USB link to PC and the superb GXCapture software suite, compatible also with our advanced GX Capture Pro software.

This stunning camera has a unique internal dual processor design producing fantastic colour images with no flicker. It connects direct to any HDMI display displaying 2.0MP (1920x1080) resolution images live at an amazing 60 frames per second. Superb performance in fluorescence. Simply one of the very best, truest colour, sharp, live image you can get for microscopy. To capture a 6MP image simply press the button to store onto a removable SD card. Perfect for industry, teaching, displays, demonstrations and collaborative work. Includes an eyepiece adapter, GX Capture software, a mouse for on-screen menu control, USB and HDMI cables. If not used on an eyepiece tube the camera requires a c-mount adapter.



HDMI, USB, SD Card & Built-in Display—our most popular camera



BEST SELLER

Turn any microscope into a true colour, high resolution digital microscope

Based on the HICHROME camera above but with a high resolution, tiltable HDMI monitor attached to the camera body. Making this a superbly useful camera for almost any purpose which you simply turn on and use with nothing to plug into, unless you want to of course.

Perfect for teaching & industry, giving strain-free, comfortable operation with a bright, crisp image.

MODELS IN THIS RANGE:
ID0541M HICHROME SMII 1080P



Wi-Fi C-mount cameras - wireless live images to your phone or pad with holder



Supports multiple viewers from a single camera

All the latest WiFi technology has been deployed in this incredibly simple-to-use and handy camera. Simply attach it to your microscope, download the free App and instantly see and capture images from the camera wirelessly.

It is hard to think of a more useful device for teaching, training and for its pure convenience.

MODELS IN THIS RANGE:
ID0654 ECLIPSE Wi-Fi



CAMERAS FOR MICROSCOPES

GXCAM Series

GXCAM**USB-3 TO COMPUTER CAMERAS – superfast refresh rate**

GXCAM3 Series USB-3 C-mount cameras



GXCAM3 Series USB-3 C-mount microscopy cameras are designed to be attached to c-mount microscope adapters an excellent tool for a variety of applications. In particular their bandwidth means stunning fast refresh rates for live images. In addition, the USB 3.0 is perfectly tailored for the latest generation of CMOS sensors, which also have greater colour quality, hugely improved sensitivity giving bright, crisp images with a great dynamic range allowing you to take advantage of all that new technology has to offer. In this range we have 5MP and 18MP versions. Supplied with microscopy software and compatible with our advanced GXCapture Pro software

EXAMPLE MODELS IN THIS RANGE:

ID0814 GXCAM-U3-5 5MP**ID0815 GXCAM-U3-18 18MP**[See also our GXCAM-U3-PRO high performance models](#)

GXCAM3EY Series USB-3 Eyepiece tube cameras



GXCAM3EY Series USB-3 Eyepiece tube microscopy cameras can be inserted directly into a 23.2mm eyepiece tube on a microscope and we can supply adapters to make them fit 30mm and 30.5mm tubes.

In this range we currently have a 5MP version.

Supplied with microscopy software and compatible with our advanced GXCapture Pro software

MODELS IN THIS RANGE:

ID0816 GXCAM3EY-5 5MP

FLUORESCENCE C-mount cameras - high sensitivity



GT Vision are specialist suppliers of high performance, high sensitivity, low noise cameras for fluorescence including cooled CCD and high sensitivity CMOS sensors. Each camera is supplied with software that allows multiple channel image capture and merging and individual channel adjustment. This ensures the optimum image obtained from even the most difficult specimens. Most of these cameras have a USB connection to the computer and many are compatible with our advanced GXCapture Pro software.

MODELS IN THIS RANGE:

ID0235 GXCAM-FLUOMAX-S 1.3MP**ID0155 GXCAM-5C 5MP****ID7919 GXCAM-1.4MC**

BASLER Series

Basler are Europe's largest manufacturer of machine vision and industrial cameras based in Germany. They have recently launched two superb ranges of truly exceptional quality cameras suitable for microscopy together with a microscopy software for the camera control and image acquisition. [EXTENDED WARRANTY](#)

ACE Series USB-3 top quality C-mount cameras



The Ace series are fitted with the very latest high performance CMOS sensor with extremely high refresh rates and simply the best achievable image quality. These cameras are a very small format, require no additional power supply and incorporate Basler's unique PGI technology which hugely enhances resolution and image quality. Every camera is supplied with microscopy software.

MODELS IN THIS RANGE:

ID ACE1.2 1.3MP**ID ACE2 2MP****ID ACE5 5MP**

PULSE Series USB-3 low cost C-mount cameras



The Pulse series are Basler's more economically priced camera giving overall good performance with extremely high refresh rates and simply the best achievable image quality. These cameras are a very small format, require no additional power supply. Featuring an ultra-modern cylindrical design.

MODELS IN THIS RANGE:

ID PULSE1.3 1.3MP**ID PULSE2 2MP****ID PULSE5 5MP**

MICROSCOPY ACCESSORIES

Microscopy Accessories

GXM MICROSCOPES

All microscopes require a range of options and accessories. The range of products is enormous. GT Vision has the largest range and stocks of microscope parts, options and accessories. Some of the more important categories are shown below:

MICROSCOPE STANDS - for stereo microscopes, monozoom microscopes and cameras

ARTICULATED ARM STANDS



BOOM ARM STANDS



PILLAR STANDS



TRACK STANDS



DIGITAL MICROSCOPE STANDS & STAND ACCESSORIES



ILLUMINATORS - for microscopy

RING LIGHTS



SPOT LIGHTS



VIBRATION ISOLATION—tables and platforms



MICROSCOPY ACCESSORIES

MICROSCOPE MOTORISATION

GT Vision have extensive experience in the field of motorisation and can provide both standard and customised systems for almost any application. Our systems can include motorised stages, focus, choppers, turrets and much more. All motorised microscope systems are controlled by software and the software communicates with a controller which can be a separate box or a card in a PC. For setting up an XY stage and focus system a joystick is also normally required. Selecting the optimum set of compatible components for your application requires considerable expertise which GT Vision's staff can assist with.

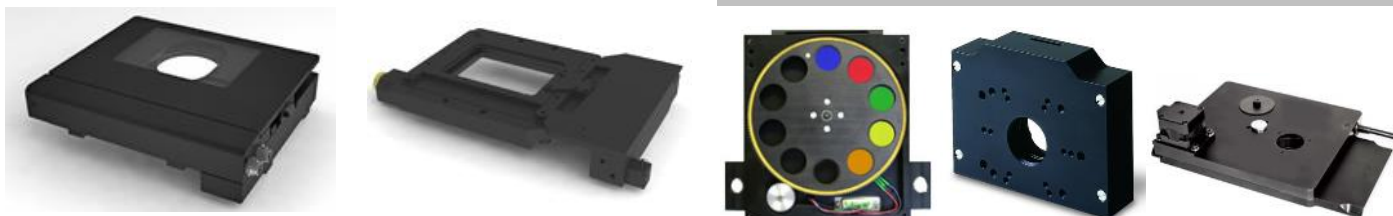
XY STAGES



FOCUS

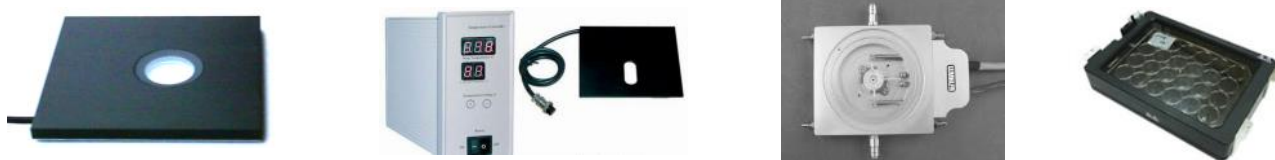


SHUTTERS & WHEELS



HEATED STAGES & INCUBATION SYSTEMS

Heated stages are available in a large range of formats designed to fit different types of microscopes and with a large range of controller functionalities which can often be software controlled. Applications include sperm motility studies, melting point determinations and materials analysis.



MICROTOMES, TISSUE PROCESSORS & SLIDE WARMERS



MICROSCOPE STORAGE & CARRY CASES



MICROSCOPE SLIDE STORAGE



MICROSCOPY ACCESSORIES

Microscopy Accessories

GXMICROSCOPES

MICROSCOPE SLIDES & COVER GLASSES

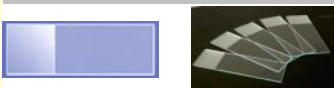
PLAIN SLIDES



WELL SLIDES



FROSTED END SLIDES



COVER GLASSES



PREPARED SLIDES



GT Vision offer a large range of different types of slides at low prices. Slides are used for observing biological specimens, powders and crystals and are normally used with cover glasses to reduce the specimen thickness. Prepared slides of specimens are also available in botany, histology and zoology collections

MICROSCOPE PARTS & SPARES

BULBS



OBJECTIVES



EYEPIECES

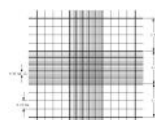
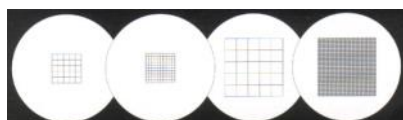


CONDENSERS



Most microscopes can be enhanced with the addition of a variety of different components such as different magnification objectives and eyepieces or specialist illumination systems such as phase contrast. GT Vision supply components for most microscopes including spare lamps. We can supply components for most makes and types of microscope.

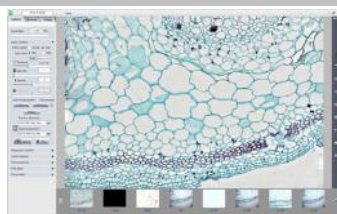
MICROSCOPE SLIDE & EYEPIECE MICROMETERS, COUNTING CHAMBERS & SCALES



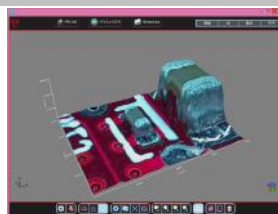
If you want to make measurements on your microscope you will need to calibrate it. GT Vision Ltd have the largest range of specialist microscopy calibration scales backed by expert advice. To calibrate a Microscope Camera System or a Microscope Eyepiece Reticle/Scale you will need a Micrometer Slide. If you have a metallurgical microscope you will need a reflective Micrometer Slide. To make measurements or to perform particle sizing on your microscope without a suitable Microscope Camera System you will need an Eyepiece Reticle as well as a Micrometer Slide.

MICROSCOPY SOFTWARE

IMAGE CAPTURE SOFTWARE



EXTENDED FOCUS & 3D MODELLING SOFTWARE



AUTOMATED IMAGE ANALYSIS

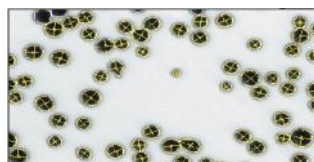
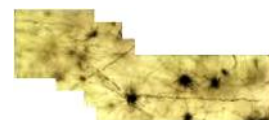
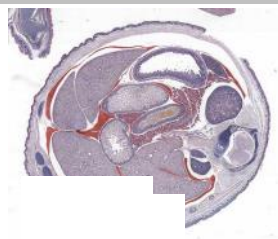


IMAGE MONTAGING



MAGNIFIERS

Magnifiers

GT Vision offer one of the largest range of magnifiers in Europe, we have a specialist division devoted to this area and can offer a great deal of expertise and support to our customers as well as the very best products.

There are many categories of magnifiers just some of which are listed below.

DESK STAND—LED illuminated



DESK CLAMP



HANDHELD—including illuminated and pop-up



FOLDING POCKET & LINEN TESTERS



LOUPES—including illuminated



HEAD MOUNTED & HANDS FREE



INDUSTRIAL & MEASURING



ELECTRONIC



GT Vision

Europe's favourite microscope supplier



UK's Largest Microscope Servicing Organisation

MICROSCOPE SERVICING & REPAIRS
Great Value – UK Coverage

Serviced On-Site or at our Service Centre

Universities, Colleges, Industry, Research Labs, Vets, Hospitals

Expert – Thorough – Reliable – Qualified Engineers

Our service and technical team annually service and repair many thousands of microscopes across the UK. **ALL MAKES & MODELS SERVICED.**

We have a wealth of experience in the supply, maintenance and design of microscopes and accessories.

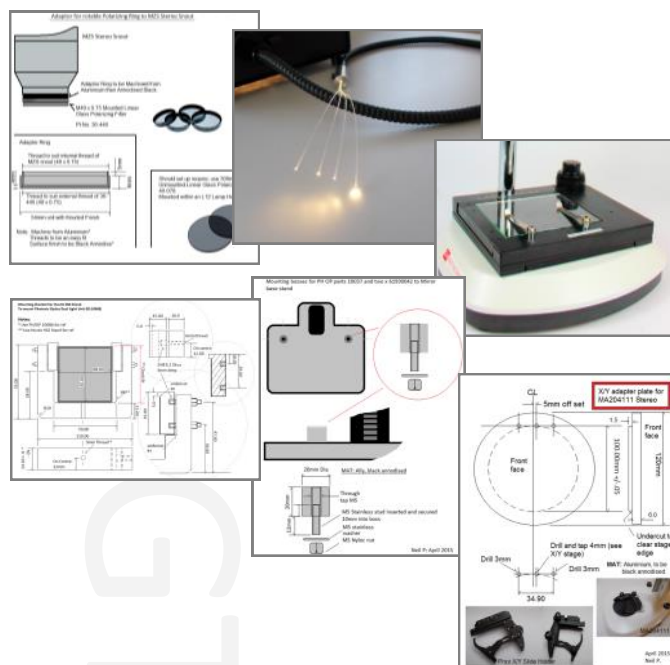
Call us now or email us for your quotation.

Our Microscope Servicing Facility is the base for our Microscopy Service Organisation and is fully equipped for the maintenance of microscopes and various accessories associated with microscopy such as stands, camera adapters, controllers and lamphouses

What is included in a Microscope Service:

- A full optical clean (this will include the eyepieces, objectives and condenser which are removed for inspection and cleaning)
- A full framework clean
- An inspection of the rack and pinion mechanisms and external adjustment where necessary
- An inspection of the stage, condenser and focus mechanisms and adjustment where necessary
- A full inspection of the assembled microscope with adjustments and re-alignments made where necessary
- Finally, the unit is tested for image quality using a suitable specimen, then identified by sticker that the unit has been serviced and when the next service is due
- The engineer will report any parts that need to be replaced, re-greased, repaired and if the microscope needs more significant cleaning requiring extra time. If minor repairs can be carried out within the allotted service time they will be made without extra charge

Special Engineering

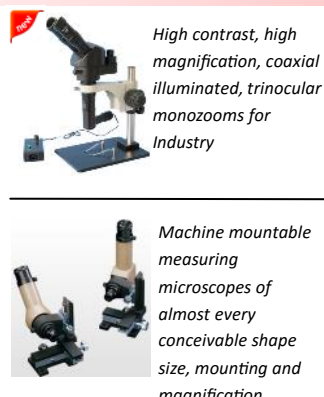


GT Vision's experienced technical team manage the company's manufacturing, Servicing and R&D. One of our popular services is the development of special designs and modifications for our customers including entire products. A recent list of R&D projects includes:

- Special fibre optic illumination for 'bore' imaging
- XY attachable stages for stereo microscope and monozoom stages
- Rotatable polarised light assemblies for stereo microscopes and stands
- Light guide holders
- Special monitor and camera brackets for long reach microscopes ensuring a non-inverted image.
- LED conversions of microscopes

For custom designed microscopy related products or modifications contact our technical team for a quotation.

Other Interesting & New Products



YOUR LOCAL SUPPLIER:

GT Vision Ltd
Aspen Grove Farm
Assington Green
Stansfield
Suffolk
CO10 8LY
TEL: 01284 789697 (+44 1284 789697)
FAX: 01284 789438 (+44 1284 789438)
EM: sales@gtvision.co.uk

Visit our On-Line Store to see our full range:

www.gtvision.co.uk