

GX Microscopes

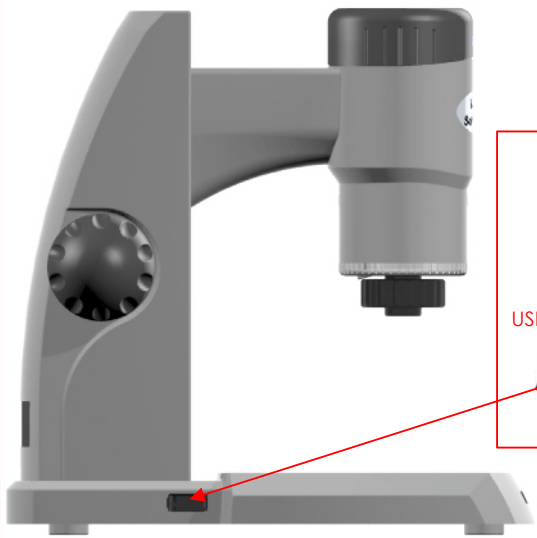
GXMGE-5 USB-2 Digital Microscope

product datasheet

A high quality, high magnification, digital microscope

The **GXMGE-5** digital microscope is the very latest in GX Microscopes' range of low cost digital microscopes. This model features a high quality digital camera giving a live feed of 1.3MP images direct to your PC screen, a remarkable set of four illumination methods, magnifications of up to 540X plus 4x digital zoom and software including measurements.

With this level of versatility the GXMGE-5 microscope can be used for a host of different applications ranging from inspection of industrial components to advanced research in universities. The microscope is even more remarkable for its low price making ideal for teaching laboratories at all levels of education. Its robust construction, no need for a separate power supply (power comes through USB2 cable from PC) and its light weight mean that it is an excellent portable field microscope for use with a laptop PC.



The microscope is supplied with 4 methods of LED illumination:

- ✓ Outer LED ring for enhanced relief contrast imaging of solid subjects such as components, insects, leaves, fossils etc
- ✓ Inner LED ring for near incident illumination of any solid subject, especially good for polished and flat specimens
- ✓ Flexible gooseneck LED spotlight illumination (plugs into side USB port on microscope), a really useful light source for highlighting those difficult subjects from any angle
- ✓ Base LED illumination with frosted diffuser for transmitted light illumination of slides and other transparent materials. The microscope is supplied with an attachable slide stage which provides a smooth white background, slide clips and a moveable platform
- ✓ The 4 illumination sources are fully software controlled and can be used in any combination providing a truly versatile lighting system
- ✓ The LEDs provide cool lighting with an excellent white colour temperature which improves the quality of the imaging showing true colours with optimum matching of the camera's sensitivity range
- ✓ LED lights are rugged and also require no maintenance with a very long life, almost no intensity degradation and they draw very little power



USB Gooseneck Light

Supplied as standard with:

- ✓ 60X integral objective
- ✓ 3x auxiliary objective to give 180X total magnification
- ✓ Integral LED lights
- ✓ USB Light
- ✓ Software
- ✓ USB connection cable

Options:

- ✓ 9X auxiliary objective to give 540X total magnification
- ✓ Extension pole (requires USB lead)

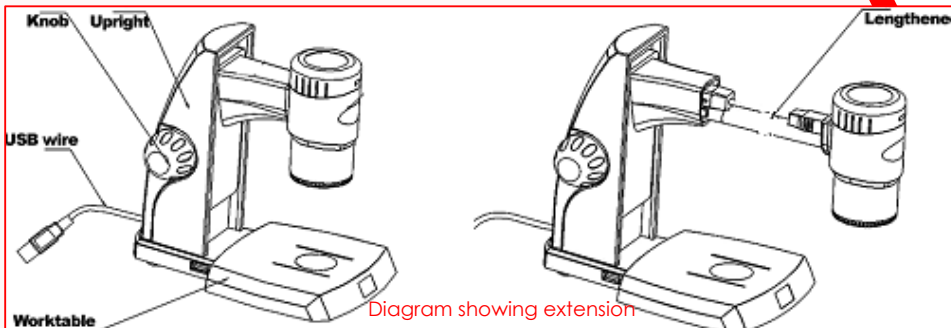


Diagram showing extension

www.gxmicroscopes.com

Applications:

These images have all been taken using the GXM GE-5 Microscope

Industry and Materials Research

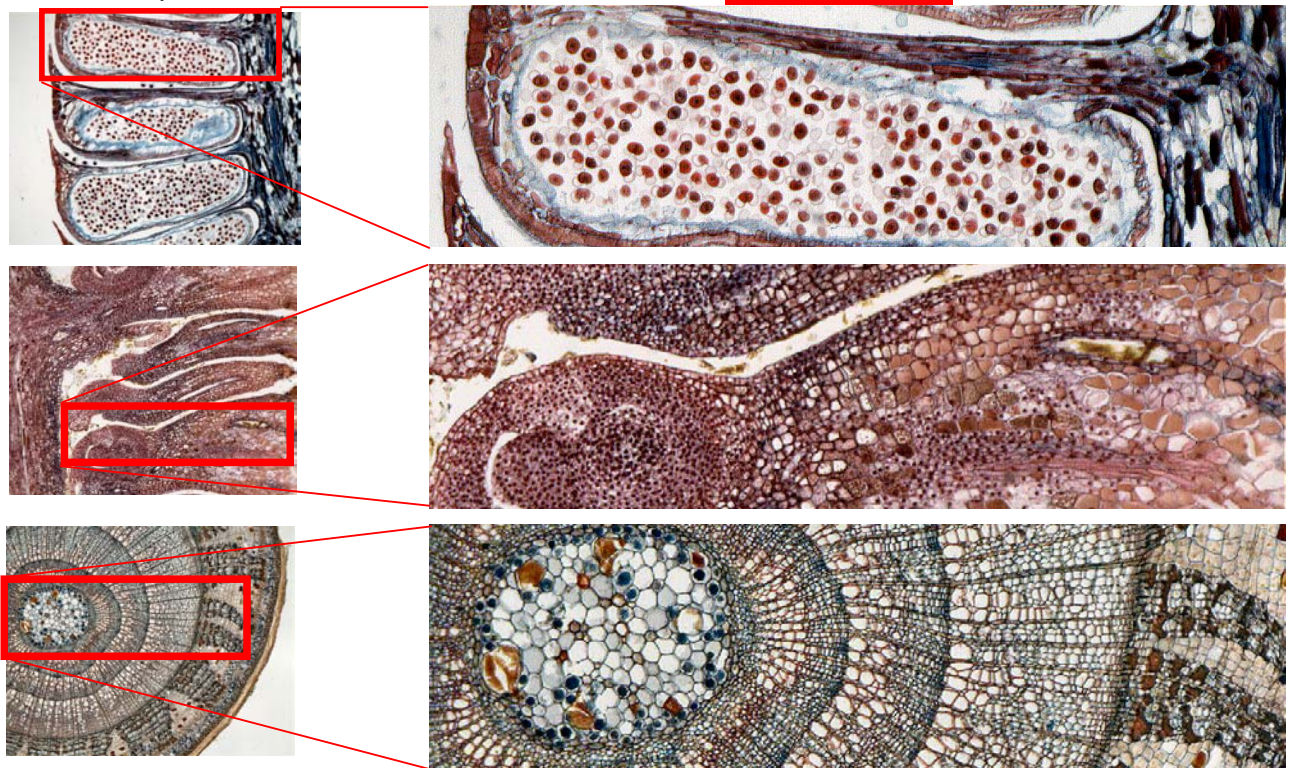


Entomology & Botany

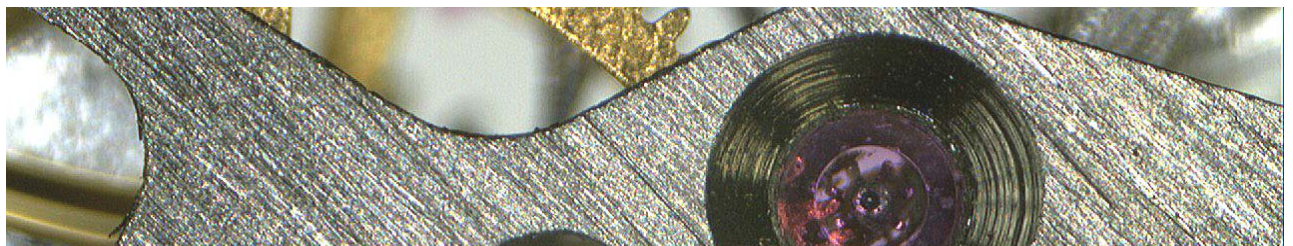


Slide mounted specimens

See the detail



Other



High magnifications and easy-to-use

The GXMGE-5 microscope has 3 magnifications available,

- ✓ 60X (integral std), 180X (std) and 540X (optional)
- ✓ The higher magnifications are selected by attaching objective screw-on lenses

Laser Pointer for quick positioning

- ✓ The GXMGE-5 microscope includes a laser pointer which shines a red laser onto the centre of the field of view. This excellent innovation makes it quick and simple to position areas of interest under the microscope for immediate observation without searching.
- ✓ The laser pointer is turned on and off in the software

Extendable arm for larger objects (optional)

- ✓ For those subjects that cannot easily be accommodated on the stage of the microscope the arm of the GXMGE-5 microscope can be easily extended so that the optical head reaches beyond the microscope stage allowing other size objects to be studied.

Removable optical/camera head for full portability and experimental rigs.

- ✓ The entire cylindrical optical head with integrated camera can be removed from the stand and connected via USB-2 to the computer to act as a hand-held device or for attaching to experimental rigs. This is a very useful feature in many laboratories where the constraints of the microscope stand would otherwise limit the use of the microscope. Requires USB lead.

Fully integrated high resolution USB-2 colour camera

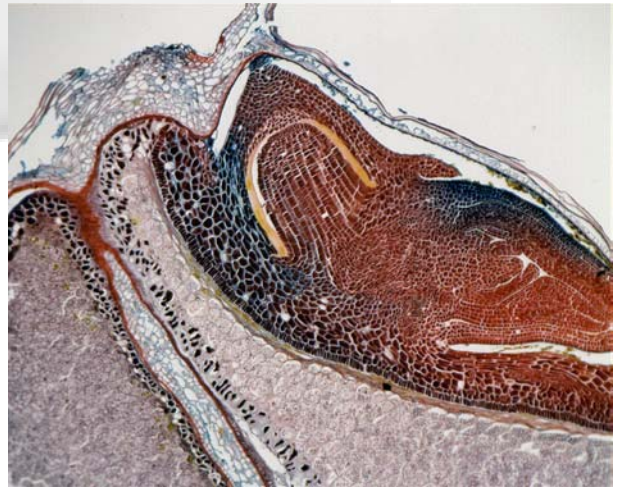
- ✓ Built into the microscope, mounted just above the optics, is a high quality, high grade colour digital camera delivering a high speed output, live image at a full 1.3 Megapixel resolution to the PC display. Typical refresh rates of 16 frames per second can be achieved at this resolution. Speeds will vary according to PC specifications. Lower resolutions for even faster refresh rates can be selected.

Great software with a host of functions

- ✓ Supplied with this microscope is a software program for Windows XP and Vista which provides:
 - Full camera controls:
 - Exposure
 - Manual/Auto white balance
 - Image size
 - Image quality
 - Brightness/Contrast/ Gamma
 - Image capture:
 - Stills
 - Time Lapse
 - Video
 - Through-focus series 3D movie
 - Illumination and Laser pointer controls
 - Measurements
 - Calibration
 - Image manipulation

Camera Specifications:

- 0.5 in colour CMOS
- 5.2x5.2um pixel size
- Spectral response 400nm – 1000nm
- 1.8V/lux sec @550 nm
- Non-interlaced (flicker free)
- Electronic Rolling Shutter
- 1.3 million pixels professional grade chip
- Typical 16 frames/sec at full resolution
- USB-2 output at typical 480MB/sec
- Operating range 0-50deg C



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