GX Microscopes

GXMZ Series

MonoZoom Microscopes

GXMZ2011 MonoZoom Microscope on track stand with LED ring light

GXMZ4003 MonoZoom Microscope

GXMA242101 Articulated Arm Stand

Optional Trinocular Head

Crosshair Reticule

Coupler

Iris

Zoom Body
Optional:
Motorised zoom
Zoom with detents

Coaxial Illuminator

Objective Lens

GXMZ MonoZoom Microscopes

ADVANTAGES

The GXMZ series of monozoom microscopes have ultra-low distortion optics optimised for image projection to a camera system. Representing outstanding value for money this compact, modular system is ideal for numerous inspection tasks with a magnification range of up to 1000x.

MODULAR

Every aspect of the design of the GXMZ system ensures maximum interchangability of parts. You can configure precisely the system and performance you need to produce an economic, high performance, compact solution.

ERGONOMIC

Most GXMZ systems are supplied with no eyepieces with simply a camera providing a clear, image on a computer display or video monitor. With the GXMZ there is no need to lean over and observe through eyepieces, you can just sit back and make your observations without strain.

QUALITY

The outstanding lens quality of this system delivers superb quality images to the camera. The camera can be mounted on a range of stable, well designed stands ensuring optimum image stability.

COMPREHENSIVE

The GXMZ microscope system gives you the choice of 6 objective lenses, 6 camera and head couplers, 8 stands, 12 illumination sources, 12 cameras and an optional iris and a range of reticules.

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GX Microscopes

Specifications	GXMZ MonoZoom System Microscopes	
Overall	Total optical magnification range (requires range of eyepieces and auxiliary objectives): 4.65X – 1080X Total magnification range to 1/3" chip CCD camera and 15" monitor: 4.5X – 1428.75X	
Head	Types	Direct to Camera (standard) / Binocular option / Trinocular option
	Crosshair reticule	Optional
	CCD Coupler	Used to connect camera to main zoom body Also connects to bino/trino head Magnification depends on CCD size: 0.38x, 0.5x, 0.75x, 1.0x, 1.5x, 2.0x
Zoom Body	Zoom Control	Manual Zoom (Standard) / Manual Zoom with Detents option / Motorised Zoom option
	Zoom Range	0.68x – 4.5x
	Zoom Ratio	1:6.6
Objective Lenses	Screw onto Zoom Body	Semi plan achromatic 0.3X, 0.5X, 0.75X, 1X, 1.5X, 2X Can also be used with infinity corrected metallurgical plan achromatic microscope objectives: HL5X/0.13NA, HL10X/0.28NA HL20X/0.29NA, HL50X/0.42NA,
Iris Diaphragm	Aperture Control	Assists with optimum image quality - optional
Coaxial illumination	Attachment	Provides high quality incident illumination with polariser
Stands	Choice of Post, Articulated or Track stands	GXMA231101 Standard Boom Stand (requires GXMZ-E-arm) GXMA232101 Dual Arm Boom Stand (requires GXMZ-E-arm) GXMA242101 Flexible Articulated Arm (with clamp for table – no base) (requires GXMZ-E-arm) GXMA255101 Heavy Base for Flexible Articulated Arm (provides base for flexible articulated arm) GXMA211103/TI Post Stand, Base and Top Illuminated GXMA211103 Post Stand, no illumination GXMA221103/TI Track Stand, Base and Top Illuminated GXMA221103 Track Stand, no illumination
Stand Power	Only for illuminated post or Track Stands	Mains 110/220V input for DC halogen Lamps
Stage option	GXMA261101 Manual Stage for use with Post or Track stand (LxWxH mm) 180x155x27 Glass insert 116x96mm specimen clips	
External Illumination	LED	GXMAPZ342101 Ring Light, 34mm ID, 85mm OD, H 25mm, 60 LEDs, Adjustable Intensity Controller GXMAPZ344101 Base Light, (LxWxH mm) 86x52x16, Adjustable Intensity Controller
	Fibre Optic	L1 Lamphouse with choice of fibre optics: L2, single goose neck, L3 dual goose necks

GXMZ Typical configuration with 0.5x CCD camera coupler and 0.5X objective lens fitted

GXM7 CCD Couplers

GXMZ Objectives

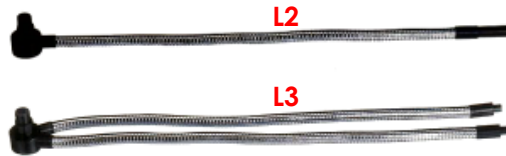| GXMA231101 Standard Boom Stand	GXMA232101 Dual Arm Boom Stand	Dual Illuminated Track Stand	GXMA221102 Track Stand	Illuminated Base and LED ring	GXMA242101 Flexible Articulated Arm Stand

GX Microscopes

GXMZ Performance Table

Coupler:	0.38X		0.5X		0.75X		1.0X		1.5X		2.0X		Working Distance mm
Objective	Mag	FOV mm	Mag	FOV mm	Mag	FOV mm	Mag	FOV mm	Mag	FOV mm	Mag	FOV mm	
0.3x	4.65x31x	77-12	6x41x	59-9	9x-61x	39-6	12x-81x	29-4	18x-121x	19.6-3	24x-162x	14.7-2	331
0.5x	7.8x-51x	46-7	10x-68x	35-5	15x-101x	23.5-4	20x-135x	17.6-3	31x-203x	11.8-2	41x270x	8.8-1.3	198
0.75x	11.6x-77x	31-4.7	15x-101x	23.5-3.6	23x-152	15.7-2.4	30.6x-202x	12-1.8	46x304x	7.8-1.2	61x-405x	6-0.9	131
1.0x	15.5x-102x	23-3	20x135x	17.6-2.7	30.6x-202x	12-1.8	41x270x	9-1	61x-405x	6-0.9	81.6x-540	4-0.7	96
1.5X	23x-154x	15-2.3	31x-203x	11.8-1.8	46x-304	7.8-1.2	61x-405x	6-0.9	92x-607x	4-0.6	122x-810x	3-0.4	63
2.0x	31x-205x	11.6-1.7	41x-270x	8.8-1.3	61x-405x	6-0.9	81.6x540x	4-0.7	122x-810x	3-0.4	163x-1080x	2-0.3	46

Additional Illumination Options - L Series (see separate datasheet)

L1

L2

L3

RFL4

Additional Illumination Options - LED Series (see separate datasheet)

Adjustable Intensity Controller (included with all LED lamps)

GXMA342101 LED for GXMZ

GXMA344101 LED back light 2" x 2"

GXMA261101 Mechanical Stage

E-Arm connector for GXMZ Stand

Coarse/fine focus coaxial knobs

*Due to our policy of continuous development specifications may vary without notice
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This table shows just a few sample configurations, for a full list of the options available please contact GX Microscopes direct or your local dealer.

GXMZ Microscope Example Configurations					
GXM Part No.	Head & Body type	Stand	Mag range	Illumination	Options
GXMZ3004	0.5X CCD Coupler Zoom body 0.68x-4.5x 1X Plan achromatic Objective	Boom Stand with E-arm	20x-135x	LED Ring Light Adjustable Intensity	• Auxiliary objectives • Binocular/Trinocular Head • Motorised zoom • Iris diaphragm • Crosshair reticule
GXMZ4004	0.5X CCD Coupler Zoom body 0.68x-4.5x 1X Plan achromatic Objective	Dual Arm Boom Stand with E-arm	20x-135x	LED Ring Light Adjustable Intensity	• Auxiliary objectives • Binocular/Trinocular Head • Motorised zoom • Iris diaphragm • Crosshair reticule
GXMZ2004	0.5X CCD Coupler Zoom body 0.68x-4.5x 1X Plan achromatic Objective	Track Stand	20x-135x	LED Ring Light Adjustable Intensity	• Auxiliary objectives • XY stage • Coarse/fine focus knob • Base illumination • Binocular/Trinocular Head • Motorised zoom • Iris diaphragm • Crosshair reticule
GXMZ1004	0.5X CCD Coupler Zoom body 0.68x-4.5x 1X Plan achromatic Objective	Post Stand	20x-135x	LED Ring Light Adjustable Intensity	• Auxiliary objectives • XY stage • Base illumination • Binocular/Trinocular Head • Motorised zoom • Iris diaphragm • Crosshair reticule

CAMERAS

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