



GEM STEREO MICROSCOPES



GEMZ-5



GEMZ-8TR



GEM and GM SERIES STEREO MICROSCOPES

for the professional Jeweler/Gemologist

Superb Optics:

Multi-coated optical components, free from chromatic and spherical aberration, provide crystal-clear, three-dimensional, high-resolution images. The Greenough optical design provides superior erect, unreversed, stereoscopic images, rich in contrast, brightness and correct in their original color.

Rugged Dependability:

All metal aluminum alloy microscope bodies and components with chemical resistant finishes guarantee stability and rugged dependability for a lifetime of day-in and day-out use. Superior craftsmanship, quality components and materials result in long-lasting, high-performance products.

Ergonomic design:

All GEM and GM Series stereo microscope bodies feature adjustable diopter tubes and interpupillary distance adjustment. Observation tubes are inclined at 45° for convenient fatigue free viewing. All GEM Series feature tilting bases for additional user comfort. A choice of a continuous magnification Zoom stereo body or a two-power Turret type stereo body. Optional eyepieces, supplementary lenses, 35mm and video camera components allows the user to design a system to fulfill their specific requirements.

GEM Series Features:

- Choice of Zoom or Turret Stereo Body
- Professional GEM stand with built-in 30W transmitted light darkfield illuminator
- Inclinable base for greater ease of use.
- Adjustable iris diaphragm
- 10X and 20X Super widefield eyepieces
- Magnifications from 7X to 90X
- Gem clamp
- Rubber eye shields
- Dust cover
- Optional-Fluorescent box illuminator with articulating arm

GM Series Features:

- Choice of Zoom or Turret Stereo Body
- Stand with 20W halogen transmitted light illumination and darkfield attachment
- Adjustable iris diaphragm
- 10X and 20X Super widefield eyepieces
- Magnifications from 7X to 90X, and 10X, 20X, 30X, 60X or 20X, 40X, 80X, by model
- Gem clamp
- Rubber eye shields
- Dust cover
- Fluorescent box illuminator with articulating arm

GEMZ-8TR GEM TRINOCULAR ZOOM STEREO SYSTEM

Composed of:

CAT NO.

DESCRIPTION

EMZ-8TR

EMZ-8TR Trinocular stereo microscope body, 0.7X to 4.5X zoom range with magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces)

(The EMZ-8TR directs the image to both eyetubes and the photo or video port simultaneously)

MA502

Super widefield 10X eyepiece, FN 23mm (paired)

MA504

Super widefield 20X eyepiece, FN 11.5mm (paired)

GEMZ/PT

Professional GEM stand, inclinable for greater ease of use, with built-in 30W darkfield transmitted light illumination system.

MA557

Iris diaphragm with adapter.

MA309

Fluorescent box illuminator with articulating arm and 115V or 220/240V transformer

MA555/05

Gem clamp



GEMZ-8TR



GEMZ-5TR

GEMZ-5TR GEM TRINOCULAR ZOOM STEREO SYSTEM

Composed of:

EMZ-5TR

EMZ-5 Trinocular stereo microscope body, 0.7X to 4.5X zoom range, magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces)

(EMZ-5TR directs the image to the right eyetubes and photo or video port simultaneously)

MA502

Super widefield 10X eyepiece, FN 23mm (paired)

MA504

Super widefield 20X eyepiece, FN 11.5mm (paired)

GEMZ/PT

Professional GEM stand, inclinable for greater ease of use, with built-in 30W darkfield transmitted light illumination system.

MA557

Iris diaphragm with adapter.

MA309

Fluorescent box illuminator with articulating arm and 115V or 220/240V transformer

MA555/05

Gem clamp

GEMZ-5 GEM BINOCULAR ZOOM STEREO SYSTEM

Composed of:

EMZ-5

Binocular zoom stereo microscope body with 0.7X to 4.5X zoom range, magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces)

MA502

Super widefield 10X eyepiece, FN 23mm (paired)

MA504

Super widefield 20X eyepiece, FN 11.5mm (paired)

GEMZ/PT

Professional GEM stand, inclinable for greater ease of use, with built-in 30W darkfield transmitted light illumination system with iris diaphragm.

MA557

Iris diaphragm with adapter.

MA309

Fluorescent box illuminator with articulating arm and 115V or 220/240V transformer

MA555/05

Gem clamp



GEMZ-5

GEMT-2 GEM BINOCULAR TURRET STEREO SYSTEM

Composed of:

CAT NO.	DESCRIPTION
EMT-2	Binocular stereo body with 1X and 3X objectives in a turret magnification changer. Magnification range: 10X, 20X, 30X and 60X. (Using 10X and 20X eyepieces)
MA502	Super widefield 10X eyepiece, FN 23mm (paired)
MA504	Super widefield 20X eyepiece, FN 11.5mm (paired)
GEMT/PT	Professional GEM stand, inclineable for greater ease of use, with built-in 30W darkfield transmitted light illumination system with iris diaphragm.
MA557	Iris diaphragm with adapter.
MA309	Fluorescent box illuminator with articulating arm and 115V or 220/240V transformer
MA555/05	Gem clamp



GEMT-2

GEMT-4 GEM BINOCULAR TURRET STEREO SYSTEM

Composed of:

CAT NO.	DESCRIPTION
EMT-4	Binocular stereo body with 1X and 4X objectives in a turret magnification changer. Magnification range: 10X, 20X, 30X and 80X. (Using 10X and 20X eyepieces)
MA502	Super widefield 10X eyepiece, FN 23mm (paired)
MA504	Super widefield 20X eyepiece, FN 11.5mm (paired)
GEMT/PT	Professional GEM stand, inclineable for greater ease of use, with built-in 30W darkfield transmitted light illumination system with iris diaphragm.
MA557	Iris diaphragm with adapter.
MA309	Fluorescent box illuminator with articulating arm and 115V or 220/240V transformer
MA555/05	Gem clamp



GEMT-4

EYEPIECES AND ACCESSORIES FOR GEM SERIES

MA502	Super widefield eyepiece 10X (paired), FN: 23
MA520	Super widefield eyepiece 12.5X (paired), FN: 20
MA503	Super widefield eyepiece 15X (paired), FN: 15.4
MA535	Super widefield eyepiece 15X high-eyepoint (paired), FN: 16
MA504	Super widefield eyepiece 20X (paired), FN: 11.5
MA521	Super widefield eyepiece 30X (paired), FN: 7.7
MA519	Super widefield focusing eyepiece 10X (ea)
MA600	Eyeshields for SWF eyepieces (paired)

REPLACEMENT BULBS FOR GEM STANDS

MA309/05	Replacement bulb for fluorescent illuminator, 4W
MA350/10	Replacement bulb for (transmitted light) GEM stand, 115V 30W
MA350/20	Replacement bulb for (transmitted light) GEM stand, 220/240V 30W

REPLACEMENT ILLUMINATOR COMPONENTS FOR GEM STANDS

MA309/100	Fluorescent box illuminator with articulating arm and 115V transformer
MA309/200	Fluorescent box illuminator with articulating arm and 220/240V transformer
MA309/25	Transformer in case with cord, plug and switch for MA309/100, 115V
MA309/30	Transformer in case with cord, plug and switch for MA309/200, 220/240V

GM-8TR TRINOCULAR ZOOM STEREO SYSTEM

Composed of:

CAT NO.	DESCRIPTION
EMZ-8TR	EMZ-8TR Trinocular stereo microscope body, 0.7X to 4.5X zoom range with magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces) <i>(The EMZ-8TR directs the image to both eyetubes and the photo or video port simultaneously)</i>
MA502	Super widefield 10X eyepiece, FN 23mm (paired)
MA504	Super widefield 20X eyepiece, FN 11.5mm (paired)
ABZH/1	Stand with transmitted illuminator, 6V 20W halogen lamp and overhead fluorescent box illuminator with dual 4W fluorescent lamps.
MA555	Gem clamp
MA556	Darkfield attachment
MA557/01	Iris diaphragm with adapter



GM-8TR



GM-5TR

GM-5TR TRINOCULAR ZOOM STEREO SYSTEM

Composed of:

EMZ-5TR	EMZ-5TR Trinocular stereo microscope body, 0.7X to 4.5X zoom range, magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces) <i>(EMZ-5TR directs the image to the right eyetube and photo or video port simultaneously)</i>
MA502	Super widefield 10X eyepiece, FN 23mm (paired)
MA504	Super widefield 20X eyepiece, FN 11.5mm (paired)
ABZH/1	Stand with transmitted illuminator, 6V 20W halogen lamp and overhead fluorescent box illuminator with dual 4W fluorescent lamps.
MA555	Gem clamp
MA556	Darkfield attachment
MA557/01	Iris diaphragm with adapter

GM-5Z BINOCULAR ZOOM STEREO SYSTEM

Composed of:

EMZ-5	EMZ-5 Binocular stereo microscope body, 0.7X to 4.5X zoom range, magnification from 7X to 90X (Using SWF10X and SWF20X eyepieces)
MA502	Super widefield 10X eyepiece, FN 23mm (paired)
MA504	Super widefield 20X eyepiece, FN 11.5mm (paired)
ABZH/1	Stand with transmitted illuminator, 6V 20W halogen lamp and overhead fluorescent box illuminator with dual 4W fluorescent lamps.
MA555	Gem clamp
MA556	Darkfield attachment
MA557/01	Iris diaphragm with adapter



GM-5Z

GM-2T

GM TURRET STEREO SYSTEM

Composed of:

CAT NO.

DESCRIPTION

EMT-2

Stereo microscope body with 1X and 3X objectives in turret changer. Magnification: 10X, 20X, 30X and 60X (Using SWF10X and SWF20X eyepieces)

MA502

Super widefield 10X eyepiece, FN 23mm (paired)

MA504

Super widefield 20X eyepiece, FN 11.5mm (paired)

ABH/1

Stand with transmitted illuminator, 6V 20W halogen lamp and overhead fluorescent box illuminator with dual 4W fluorescent lamps.

MA555

Gem clamp

MA556

Darkfield attachment

MA557/01

Iris diaphragm with adapter



GM-2T

GM-3T

GM TURRET STEREO SYSTEM

Composed of:

EMT-3

Stereo microscope body with 2X and 4X objectives in turret changer. Magnification: 20X, 40X and 80X (Using SWF10X and SWF20X eyepieces)

MA502

Super widefield 10X eyepiece, FN 23mm (paired)

MA504

Super widefield 20X eyepiece, FN 11.5mm (paired)

ABH/1

Stand with transmitted illuminator, 6V 20W halogen lamp and overhead fluorescent box illuminator with dual 4W fluorescent lamps.

MA555

Gem clamp

MA556

Darkfield attachment

MA557/01

Iris diaphragm with adapter



GM-3T

EYEPIECES AND ACCESSORIES FOR GM SERIES

MA502	Super widefield eyepiece 10X (paired), FN: 23
MA520	Super widefield eyepiece 12.5X (paired), FN: 20
MA503	Super widefield eyepiece 15X (paired), FN: 15.4
MA535	Super widefield eyepiece 15X high-eyepoint (paired), FN: 16
MA504	Super widefield eyepiece 20X (paired), FN: 11.5
MA521	Super widefield eyepiece 30X (paired), FN: 7.7
MA519	Super widefield focusing eyepiece 10X (ea)
MA600	Eyeshields for SWF eyepieces (paired)

SPARE BULBS

MA311	Halogen lamp, 6V 20W for ABH/1
MA309/05	Replacement bulb for MA309/100 and MA309/200 fluorescent illuminators, 4W, (Note: MA309/100 and MA309/200 require two MA309/05 bulbs)

REPLACEMENT COMPONENTS

MA309/100	Fluorescent box illuminator with articulating arm for use with ABH/1 and ABZH/1, 115V
MA309/200	Fluorescent box illuminator with articulating arm for use with ABH/1 and ABZH/1, 220/240V
MA309/15	Replacement transformer (without external case) for MA309/100, 115V
MA309/20	Replacement transformer (without external case) for MA309/200, 220/240V

CCD VIDEO CAMERAS

A separate "C" mount adapter is required to connect the CCD TV camera to the microscope.

CAT.NO.	DESCRIPTION
CK3100N	CCD color TV camera, 1/3" CCD, 450 TV lines of horizontal resolution, NTSC system, with 115V or 220V-DC12V adapter
CK3100P	CCD color TV camera, 1/3" CCD, 450 TV lines of horizontal resolution, PAL system, with 220V-DC12V adapter
CK3900N	CCD color TV camera, 1/2" CCD, 450 TV lines of horizontal resolution, NTSC system, with 115V or 220V-DC12V adapter
CK3900P	CCD color TV camera, 1/2" CCD, 450 TV lines of horizontal resolution, PAL system, with 220V-DC12V adapter



CK3900

"C" MOUNT ADAPTERS FOR GEM AND GM SERIES TRINOCULAR BODY

The total magnification displayed on a video monitor is determined by the following formula:

Objective magnification x "C" mount magnification x Video magnification

MA151/35/03	"C" Mount adapter with 0.3X lens (Slips over top of existing photo tube)
MA151/35/04	"C" Mount adapter with 0.45X lens (Slips over top of existing photo tube)
MA151/35/15	"C" Mount adapter with 1.0X lens (Slips over top of existing photo tube)
MA151/35/20	"C" Mount adapter with 0.7X lens (Slips over top of existing photo tube)
MA151/35/25	"C" Mount adapter with 2.5X lens (Slips over top of existing photo tube)
MA151/8TR	"C" Mount adapter with 0.6X lens (Replaces existing photo tube)

ADAPTER FOR DIGITAL CAMERA

MA151/35/50 Adapter to connect GEM and GM Series Trinocular body to NIKON Cool PIX 950 Digital Camera

35mm PHOTOMICROSCOPY ACCESSORIES

Three parts are required to mounting a 35mm SLR camera body to the GEM and GM series trinocular microscope bodies:

1. One of the two MA150/50 series camera attachments:

MA150/50	Straight-tube camera attachment
MA150/60	Camera attachment with built-in focusing eyepiece (The MA150/60 is provided with a focusing eyepiece viewfinder for framing and parfocalizing the camera attachment to the microscope.)

2. A photo eyepiece, available in the following magnifications:

MA512	2.5X magnification
MA500	3.3X magnification (with reticle mount)
MA508	5X magnification (The photo eyepiece performs the same function as a standard 35mm camera lens, i. e. focusing the image of the specimen onto the film plane.)

3. The appropriate T-2 adapter ring for your SLR camera body:

T2-1	Cannon	T2-2	Minolta
T2-3	Pentax-K (bayonet)	T2-4	Pentax S (threaded)
T2-5	Nikon	T2-6	Olympus
T2-7	Contax, Yashica	T2-8	Konica
T2-9	Cannon EOS	T2-10	Minolta Alpha/Maxim 2000

(The T2 adapter rings connect your camera body to one of the MA150 camera attachments.)



MA150/50



MA150/60

Agent:

MEIJI TECHNO AMERICA

2186 Bering Drive
San Jose, CA., 95131, USA
Phone : 408-428-9654 Fax : 408-428-0472
Toll free : 800-832-0060



MEIJI TECHNO CO.,LTD.

6, Oi-670, Oi-machi, Iruma-gun
Saitama 356-0053, Japan
Phone : 492-67-0911
Fax : 492-69-0691, 492-69-0692

<http://www.meijitechno.com>