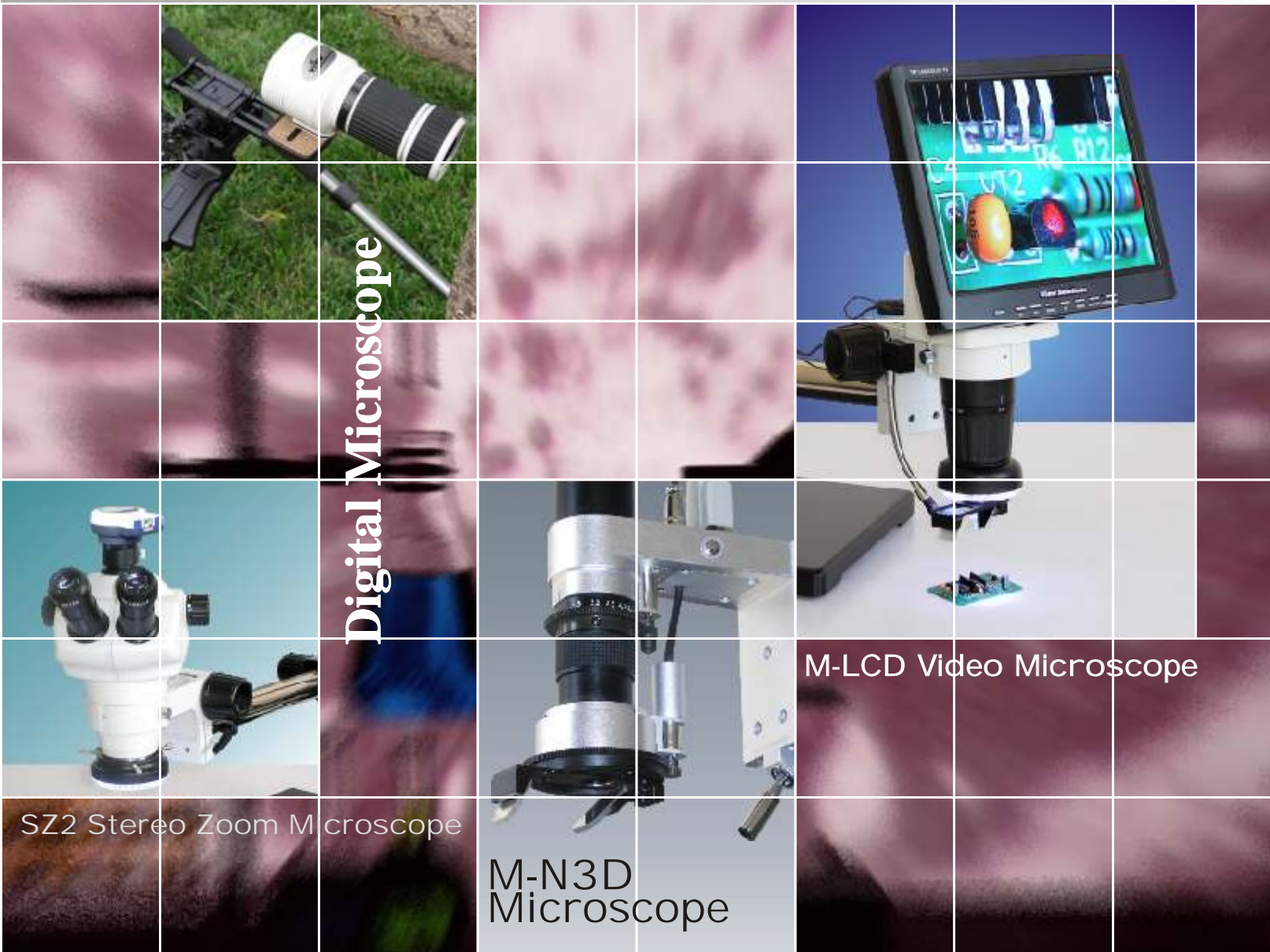




- Stereo Microscope
- Video Inspection Microscope
- Video Measurement System
- Microscope Accessories
- Biological Microscope
- Metallurgical Microscope
- Magnifier Lamp
- Endoscope

View Solutions Inc.

Total Solutions in Micro Visuals



Digital Microscope

M-LCD Video Microscope

SZ2 Stereo Zoom Microscope

M-N3D
Microscope

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www.viewsolutionsinc.com

Company Introduction

View Solutions is an international corporation based in both the United States and China. Our core employees in the US have over 10 years optical background and experiences. Our company has been servicing electronic industry, optical industry, precision inspecting and testing, teaching and laboratory fields, and obtained a large amount of customers and well built distribution networks internationally. Our product lines are focused on machine vision, optical and digital images, video processing systems, optical and electrical control modules.

Purchase Information

Products

Our products cover Optical Microscopes, Industrial Stereo Microscopes, Video Microscopes, Video Inspection Systems, Optical Video Measurement Systems, Optical Inspection Instruments, Digital Cameras, and Microscope Accessories, such as lights, stands, arms, adapters, and etc.



OEM Products and Customized Products

Our own manufacturing and engineer teams guarantee the capabilities, quality and speed for OEM products and customized products.

Sales Networks

To best serve our customers, we have our dealer and distributor networks set up in America, Asia, Australia, Europe and etc.



Same Day Shipping

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Great Prices Everyday!

Our cost-effective operation has benefited our customers with the best quality products at great prices internationally. Please contact our Sales Dept. for Quantity Prices.

Quality Guarantee

Our Quality Control Center checks every single product before shipping to our distribution centers.

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We fully support our dealers and distributors in taking care of After Sales Services and Technical Support. Please log on to our website for full service information.



Vision

View Solutions is dedicated to becoming a top international company in visual instruments by providing the most advanced technologies, the best quality products at the best possible pricing and excellent services to all of our customers.

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The paint on all of our products meet the requirement of LEAD standard.

Warranty Information

View Solutions microscopes, microscope stands, optical components are warranted against manufacturer's defects in material and workmanship for five (5) years from the original date of purchase; View Solutions electrical and electronic products including light sources, cameras, monitors and electronic components are warranted against manufacturer's defects in material and workmanship for one (1) year from the original date of purchase; Bulbs are non-warranted items.

New Products

DM Digital Video Microscope



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M-N3D Video Microscope



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M-LCD Video Microscope



Page 32

Camera



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MS Measurement Microscope



Page 31

Microscope Cleaning Kit



Page 75



SZ-20 Stereo Zoom Microscope

SZ STEREO ZOOM MICROSCOPE

Stereo zoom microscope
 High definition 3D images and large depth of field
 Diopter adjustment for different eye widths
 Compact design

The brand new optics design adopted in the SZ Stereo Zoom Microscope facilitates the microscope to deliver excellent flatness, good contrast and high definition images in the wide field, especially on the periphery of Field of View. The combination of compact design, long working distance and variety of functions enables SZ Stereo Zoom Microscope to be applied in precision of requirements, such as in semi-conductor and other scientific fields. The photographing system of SZ Stereo Zoom Microscope can be equipped with CCD cameras, digital cameras and DSLR for processing micro-image acquisition and storage, and can be widely used in teaching, scientific research, electronic inspection and test and assembly industry.

Specifications

Zoom Range of Zoom Body: 0.67X-4.5X	Eyepiece Diopter Correction: ± 5 Diopter
Zoom Ratio: 1: 6.7	Working Distance of Built-in Objective Lens: 100mm
Magnification: 2X-270X	Optional Eyepieces: 10X, 15X, 20X, 25X and 30X
Field of View: 1mm-109.5mm	Optional Auxiliary Lenses: 0.3X, 0.5X, 0.75X, 1.5X and 2.0X
Working Distance: 26mm-287mm	Optional Video Couplers: 0.5X and 1X
Interpupillary Adjustment: 52mm-75mm	(For Trinocular Body)
Eyepiece Inclination: 45 ° and 60 °	
360 ° rotatable microscope head	



Eyepiece Diopter



Zoom Knob



Video Transform

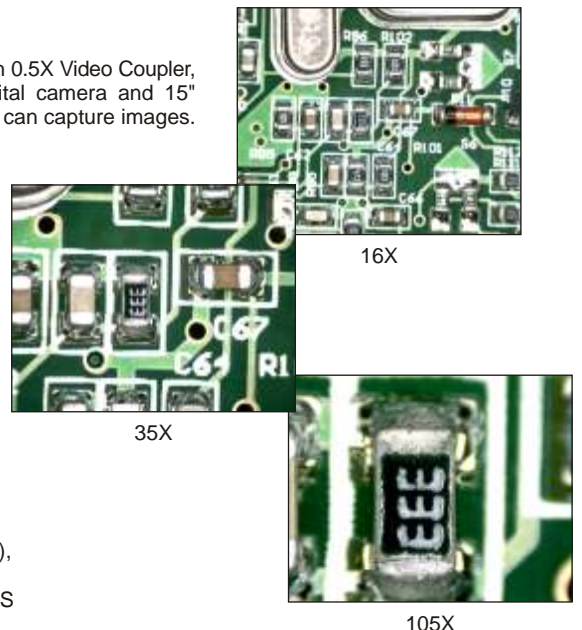
Optical Datasheet

Auxiliary Lens	Working Distance (mm)	Eyepieces									
		10X(22mm)		15X(16mm)		20X(12mm)		25X(11.5mm)		30X(9mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.3X	287	2.0X-13.5X	109.5-16.3	3.0X-20.3X	79.6-11.9	4.0X-27.0X	59.7-8.9	5.0X-33.8X	57.2-8.5	6X-40.5X	44.8-6.7
0.5X	177	3.4X-22.5X	65.7-9.8	5.0X-33.8X	47.8-7.1	6.7X-45.0X	35.8-5.3	8.4X-56.3X	34.3-5.1	10X-67.5X	26.9-4
0.75X	117	5.0X-33.8X	43.8-6.5	7.5X-50.6X	31.8-4.7	10.1X-67.5X	23.9-3.6	12.6X-84.4X	22.9-3.4	15X-101X	17.9-2.7
Built-in(1X)	100	6.7X-45.0X	32.8-4.9	10.1X-67.5X	23.9-3.6	13.4X-90.0X	17.9-2.7	16.8X-112.5X	17.2-2.6	20X-135X	13.4-2
1.5X	47	10.1X-67.5X	21.9-3.3	15.1X-101.3X	15.9-2.4	20.1X-135.0X	11.9-1.8	25.1X-168.8X	11.4-1.7	30X-202X	9-1.3
2X	26	13.4X-90.0X	16.4-2.4	20.1X-135X	11.9-1.8	26.8X-180X	9-1.3	33.5X-225X	8.6-1.3	40X-270X	6.7-1



GP030303
 15" LCD Color Monitor (optional)

When used with 0.5X Video Coupler, 1.3M pixel digital camera and 15" LCD monitor, it can capture images.



16X

35X

105X

SZ-200T-LED-D Stereo Zoom Microscope

Includes: SZ301201 Stereo Zoom Trinocular Body, SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), SZ304101 0.5X Video Coupler, MA221101 76mm Track Stand, SZ303201 Ring Adapter, MA341103 LED Ring Light and DC133210 1.3M CMOS Color Camera.

Application

High-eyepoint and Wide Field 10X Eyepieces can be attached to SZ Stereo Zoom Microscope, and the continuous magnification is from 7X to 45X. Optional high-eyepoint and wide field eyepieces: 10X,15X,20X,25X and 30X; Optional auxiliary lenses: 0.3X,0.5X,0.75X,1.5X and 2.0X; Optional standard video couplers: 0.5X and 1X; Different eyepieces and auxiliary lenses are optional and available; The 35mm CCD camera can be attached to the True-Trinocular body by T-mount of 35mm cameras. All kinds of scope stands are optional and available.

Picture Preview	P/N	Name	Description
	SZ301101	Stereo Zoom Binocular Body	Zoom range 0.67-4.5X, zoom ratio 1:6.7, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ301111	Stereo Zoom Binocular Body	Zoom range 0.67-4.5X, zoom ratio 1:6.7, with two horizontal zoom knobs, 60 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ301121	Stereo Zoom Binocular Body	Zoom range 0.67-4.5X, zoom ratio 1:6.7, with two horizontal zoom knobs, 45 ° inclined observation tubes, ESD safe. Eyepieces are not included for this item No.
	SZ301201	Stereo Zoom Trinocular Body	Trinocular zoom range 0.67-4.5X, zoom ratio 1:6.7, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ301202	Stereo Zoom True-Trinocular Body	SZ301201 with 50/50 True-Trinocular Body
	SZ301221	Stereo Zoom Trinocular Body	Trinocular zoom range 0.67-4.5X, zoom ratio 1:6.7, with two horizontal zoom knobs, 45 ° inclined observation tubes, ESD safe. Eyepieces are not included for this item No.
	SZ302101	10X Eyepieces (Pair)	High-eyepoint and wide Field 10X Eyepieces, with 22mm field of view, the tube outside dia. 30mm.
	SZ302103	15X Eyepieces (Pair)	High-eyepoint and wide field 15X Eyepieces, 16mm field of view, the tube outside dia. 30mm.
	SZ302104	20X Eyepieces (Pair)	High-eyepoint and wide field 20X Eyepieces, 12mm field of view, the tube outside dia. 30mm.
	SZ302105	25X Eyepieces (Pair)	High-eyepoint and wide field 25X Eyepieces, 11.5mm field of view, the tube outside dia. 30mm.
	SZ302106	30X Eyepieces (Pair)	High-eyepoint and wide field 30X Eyepieces, 9mm field of view, the tube outside dia. 30mm.
	SZ302201	Eye Guards (Pair)	Rubber Eyepiece Guards, for 10X High-eyepoint Eyepieces.
	SZ302202	Eye Guards (Pair)	For 15X, 20X, 25X Eyepieces.
	SZ302311	10X Eyepiece with Reticle	SZ302101 10X Single Eyepiece with a Reticle, single line 10mm/100 Cross Hair, 24mm Dia.
	SZ302312	10X Eyepiece with Reticle	SZ302101 10X Single Eyepiece with a Reticle, 10mm/100 Cross Line, 24mm Dia.
	SZ302313	10X Eyepiece with Reticle	SZ302101 10X Single Eyepiece with a Reticle, Cross Hair, 24mm Dia.
	SZ302314	10X Eyepiece with Reticle	SZ302101 10X Single Eyepiece with a Reticle, Net Grid 10 x 10mm / 10 x 10mm
	SZ302341	20X Eyepiece with Reticle	SZ302104 20X Single Eyepiece with a Reticle, single line 10mm/100 Cross Hair, 24mm Dia.
	SZ302342	20X Eyepiece with Reticle	SZ302104 20X Single Eyepiece with a Reticle, 10mm/100 Cross Line, 24mm Dia.
	SZ302343	20X Eyepiece with Reticle	SZ302104 20X Single Eyepiece with a Reticle, Cross Hair, 24mm Dia.
	SZ303101	0.3X Auxiliary Lens	0.3X Optics, outside dia. 49.5mm, working distance 287mm, for SZ Series Stereo Zoom Microscope.
	SZ303102	0.5X Auxiliary Lens	0.5X Optics, outside dia. 49.5mm, working distance 177mm, for SZ Series Stereo Zoom Microscope.
	SZ303103	0.75X Auxiliary Lens	0.75X Optics, outside dia. 49.5mm, working distance 177mm, for SZ Series Stereo Zoom Microscope.
	SZ303104	1.5X Auxiliary Lens	1.5X Optics, outside dia. 49.5mm, working distance 47mm, for SZ Series Stereo Zoom Microscope.
	SZ303105	2X Auxiliary Lens	2X Optics, outside dia. 49.5mm, working distance 26mm, for SZ Series Stereo Zoom Microscope.
		SZ303201	Ring Adapter
SZ303203		Ring Light Adapter with Cover Glass	SZ303201 Ring Adapter with an anti-dust optical glass cover, for SZ Series Stereo Zoom Microscope.
	SZ304101	0.5X Video Coupler	0.5X with adjustable focus, for connecting SZ Series of Trinocular and CCD camera.
	SZ304102	1X Video Coupler	1X adjustable focus, for connecting SZ Series of Trinocular and CCD camera.
	SZ306101	35mm Camera T-Mount Adapter	For connecting with SZ Trinocular and a 35mm Camera, 4.5X Optical Photo Eyepiece inside, with a standard T-Mount adapter.

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

SZ-100/SZ-100T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler.
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA211101 76mm Post Stand, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-100-AN/SZ-100T-AN		●	○	○	○
SZ-100-DPL/SZ-100T-DPL		○	●	○	○
SZ-100-FR/SZ-100T-FR		○	○	●	○
SZ-100-LED/SZ-100T-LED		○	○	○	●





SZ-220 Stereo Zoom Microscope

SZ-220/SZ-220T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler.
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA225401 LED High Track Stand, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-220-AN/SZ-220T-AN		●	○	○	○
SZ-220-DPL/SZ-220T-DPL		○	●	○	○
SZ-220-FR/SZ-220T-FR		○	○	●	○
SZ-220-LED/SZ-220T-LED		○	○	○	●



SZ-1000-AN Stereo Zoom Microscope

SZ-1000/SZ-1000T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler.
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-1000-AN/SZ-1000T-AN		●	○	○	○
SZ-1000-DPL/SZ-1000T-DPL		○	●	○	○
SZ-1000-FR/SZ-1000T-FR		○	○	●	○
SZ-1000-LED/SZ-1000T-LED		○	○	○	●



SZ-1000-DPL Stereo Zoom Microscope

SZ-2000/SZ-2000T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler.
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA232101 Dual Arm Boom Stand, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-2000-AN/SZ-2000T-AN		●	○	○	○
SZ-2000-DPL/SZ-2000T-DPL		○	●	○	○
SZ-2000-FR/SZ-2000T-FR		○	○	●	○
SZ-2000-LED/SZ-2000T-LED		○	○	○	●



SZ-4000- Stereo Zoom Microscope

SZ-4000/SZ-4000T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA242101 Flexible Arm, MA251101 76mm E-Arm, SZ303201 Ring Adapter

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-4000-AN/SZ-4000T-AN		●	○	○	○
SZ-4000-DPL/SZ-4000T-DPL		○	●	○	○
SZ-4000-FR/SZ-4000T-FR		○	○	●	○
SZ-4000-LED/SZ-4000T-LED		○	○	○	●



SZ-5000T-FR-D Stereo Zoom Microscope

SZ-5000/SZ-5000T Stereo Zoom Microscope

SZ301101 Stereo Zoom Binocular Body/SZ301201 Stereo Zoom Trinocular Body, SZ304101 0.5X Video Coupler.
 SZ302101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA241102 76mm Pneumatic Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ-5000-AN/SZ-5000T-AN		●	○	○	○
SZ-5000-DPL/SZ-5000T-DPL		○	●	○	○
SZ-5000-FR/SZ-5000T-FR		○	○	●	○
SZ-5000-LED/SZ-5000T-LED		○	○	○	●

SZ2 STEREO ZOOM MICROSCOPE

- High precision zoom with detents
- High definition and large depth of field
- Diopter adjustment for different eye widths
- Ergonomic design

SZ2 Stereo Zoom Microscope features good performance and high quality. It is ideal for schools, scientific research institutes and industrial field. SZ2 can generate a high definition 3D images with large depth of field. The horizontal dual zoom knobs with detents are more flexible and comfortable. ESD design can help release the continuous static electricity generated by the microscope and protect the specimens from damage. ESD microscope is optional and for special order.



SZ2-40 Stereo Zoom Microscope

SZ STEREO ZOOM MICROSCOPE

Specifications	
Zoom Range of Zoom Body: 0.8X-5X	Eyepiece Inclusion: 45 °
Zoom Ratio: 1: 6.3	Eyepiece Diopter Correction: -8+5 Diopter
Magnification: 4X-200X	360 ° rotatable microscope head
Field of View: 1.3mm-55mm	Optional Eyepieces: 10X, 15X and 20X
Working Distance: 43.5mm-211mm	Optional Auxiliary Lenses: 0.5X and 2X
Working Distance of Built-in 1X Lens: 115mm	Optional Video Couplers: 0.4X
Adjustable Interpupillary Distance: 52mm-75mm	(For Trinocular Body)

High-eyepoint and Wide Field 10X Eyepieces can be attached to SZ2 Stereo zoom microscope, and the continuous magnification is from 8X-50X. The adjustable binocular vision can help the operator to get a clear and satisfactory image. Different eyepieces and objectives are optional for observation.



Eyepiece Diopter



Zoom Knob



Video Coupler

Application

High-eyepoint and wide field 10X, 15X and 20X eyepieces are optional; 0.5X and 2X Auxiliary Lenses are optional; The optional 0.4X C-mount video coupler with adjusting screw is for connecting SZ2 Trinocular body and camera. With 50/50 True-Trinocular Body, CCD images can be seen in binocular observation simultaneously. Different types of stands are available and optional.

Picture Preview	P/N	Name	Description
	SZ401101	Stereo Zoom Binocular Body	Zoom range 0.8-5X, zoom ratio 1:6.3, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ401121	Stereo Zoom Binocular Body, ESD	SZ401101 Binocular with ESD Safe
	SZ401201	Stereo Zoom Trinocular Body	Zoom range 0.8-5X, zoom ratio 1:6.3, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ401221	Stereo Zoom Trinocular Body, ESD	SZ401201 True-Trinocular with ESD SAFE
	SZ402101	10X Adjustable Eyepieces (Pair)	Wide Field 10X Eyepieces, with adjustable eyepiece diopter correction, 22mm field of view, the tube outside dia. 30mm. For SZ2 and PZ2 Series of Stereo Microscopes.
	SZ402103	15X Adjustable Eyepieces (Pair)	Wide Field 15X Eyepieces, with adjustable eyepiece diopter correction, 16mm field of view, the tube outside dia. 30mm. For SZ2 and PZ2 series of Stereo Microscopes.
	SZ402104	20X Adjustable Eyepieces (Pair)	Wide Field 20X Eyepieces, with adjustable eyepiece diopter correction, 12.5mm field of view, the tube outside dia. 30mm. For SZ2 and PZ2 series of Stereo Microscopes.
	SZ402311	10X Adjustable Eyepiece with Reticle	SZ402101 10X Adjustable single eyepiece, with a single line 10mm/100 cross hair Reticle, 26mm dia.
	SZ402331	15X Adjustable Eyepiece with Reticle	SZ402103 15X Adjustable single eyepiece, with a single line 10mm/100 cross hair Reticle, 18mm dia.
	SZ403102	0.5X Auxiliary Lens	Outside dia. 60mm, working distance 220mm, for SZ2 Series Stereo Zoom Microscope.
	SZ403105	2X Auxiliary Lens	Outside dia. 60mm, working distance 45mm, for SZ2 Series Stereo Zoom Microscope.
	SZ403201	49.5mm Ring Adapter	Outside dia. 49.5mm, for SZ2 Series Stereo Zoom Microscope.
	SZ403202	60mm Ring Adapter	Outside dia. 60mm, for SZ2 Series Stereo Zoom Microscope.
	SZ404101	0.4X Video Coupler	0.4X C-Mount Video Coupler with adjustable screw, for connecting SZ2 Trinocular and CCD camera.

Optical Datasheet							
Auxiliary Lens	Working Distance (mm)	Eyepieces					
		10X(22mm)		15X(16mm)		20X(12.5mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.5X	220	4X-25X	55-8.8	6X-37.5X	40-6.4	8X-50X	31.2-5
Built-in(1X)	115	8X-50X	27.5-4.4	12X-75X	20-3.2	16X-100X	15.6-2.5
2X	45	16X-100X	13.8-2.2	24X-150X	10-1.6	32X-200X	7.8-1.3

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)



SZ2-200/SZ2-200T Stereo Zoom Microscope

SZ401101 Stereo Zoom Binocular Body/SZ401201 Stereo Zoom Trinocular Body, SZ404101 0.4X Video Coupler.
 SZ402101 10X Adjustable Eyepieces (Pair), MA221101 76mm Track Stand, Sz403201 49.5mm Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ2-200-AN/SZ2-200T-AN		●	○	○	○
SZ2-200-DPL/SZ2-200T-DPL		○	●	○	○
SZ2-200-FR/SZ2-200T-FR		○	○	●	○
SZ2-200-LED/SZ2-200T-LED		○	○	○	●



SZ2-1000/SZ2-1000T Stereo Zoom Microscope

SZ401101 Stereo Zoom Binocular Body/SZ401201 Stereo Zoom Trinocular Body, SZ404101 0.4X Video Coupler.
 SZ402101 10X Adjustable Eyepieces (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm, SZ403201 49.5mm Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ2-1000-AN/SZ2-1000T-AN		●	○	○	○
SZ2-1000-DPL/SZ2-1000T-DPL		○	●	○	○
SZ2-1000-FR/SZ2-1000T-FR		○	○	●	○
SZ2-1000-LED/SZ2-1000T-LED		○	○	○	●



SZ2-2000/SZ2-2000T Stereo Zoom Microscope

SZ401101 Stereo Zoom Binocular Body/SZ401201 Stereo Zoom Trinocular Body, SZ404101 0.4X Video Coupler.
 SZ402101 10X Adjustable Eyepieces (Pair), MA232101 Dual Arm Boom Stand, MA251101 76mm E-Arm, SZ403201 49.5mm Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ2-2000-AN/SZ2-2000T-AN		●	○	○	○
SZ2-2000-DPL/SZ2-2000T-DPL		○	●	○	○
SZ2-2000-FR/SZ2-2000T-FR		○	○	●	○
SZ2-2000-LED/SZ2-2000T-LED		○	○	○	●



SZ2-5000/SZ2-5000T Stereo Zoom Microscope

SZ401101 Stereo Zoom Binocular Body/SZ401201 Stereo Zoom Trinocular Body, SZ404101 0.4X Video Coupler.
 SZ402101 10X Adjustable Eyepieces (Pair), MA241102 76mm Pneumatic Arm, SZ403201 49.5mm Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ2-5000-AN/SZ2-5000T-AN		●	○	○	○
SZ2-5000-DPL/SZ2-5000T-DPL		○	●	○	○
SZ2-5000-FR/SZ2-5000T-FR		○	○	●	○
SZ2-5000-LED/SZ2-5000T-LED		○	○	○	●

SZ3 STEREO ZOOM MICROSCOPE

- High precision zoom knob
- High definition and large depth of field
- Diopter adjustment for different eye widths
- Ergonomic design

SZ3 Stereo Zoom Microscope features good performance and high quality. It is ideal for schools, scientific research institutes and industrial field. SZ3 can generate a high definition 3D images with large depth of field. Super long working distance gives more work space. The horizontal dual zoom knobs with detents are more flexible and comfortable.



Specifications
Zoom Range of Zoom Body: 0.7X-4.5X
Zoom Ratio: 1: 6.5
Max. Optic Magnification: 2.1X-270X
Field of View: 1mm-95.2mm
Working Distance: 30mm-165mm
Working Distance with Built-in 1X Lens: 100mm
Interpupillary Adjustment: 54mm-75mm
Eyepiece Inclination: 45 °
Eyepiece Diopter Correction: ± 5 Diopter
360 ° Rotatable Microscope Head
Optional Eyepieces: 10X, 15X, 20X, 25X and 30X.
Optional Auxiliary Lenses: 0.3X, 0.5X, 0.75X, 1.5X and 2X.
Optional Video Couplers: 0.3X and 0.5X (For Trinocular Body)

High-eyepoint and Wide Field 10X Eyepieces can be attached to SZ3 Stereo zoom microscope, and the continuous magnification is from 7X to 45X.



Eyepiece Diopter



Zoom Knob



Video Transform



Video Coupler

Application

For the convenience of eyeglasses wearers, 10X, 15X and 20X high-eyepoint WF eyepieces are available for options. The optional 0.3X and 0.5X Video Couplers with fine focus can be used for connecting CCD camera to SZ3 Zoom Stereo Microscope. Different types of stands are available for options.

Picture Preview	P/N	Name	Description
	SZ501101	Stereo Zoom Binocular	Zoom range 0.7-4.5X, zoom ratio 1:6.5, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ501201	Stereo Zoom Trinocular	Trinocular zoom range 0.7-4.5X, zoom ratio 1:6.5, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ502101	10X Eyepieces (Pair)	High-eyepoint and Wide Field 10X Eyepieces, with 20mm field of view, the tube outside dia. 30mm.
	SZ302103	15X Eyepieces (Pair)	High-eyepoint and wide field 15X Eyepieces, 16mm field of view, the tube outside dia. 30mm.
	SZ302104	20X Eyepieces (Pair)	High-eyepoint and wide field 20X Eyepieces, 12mm field of view, the tube outside dia. 30mm.
	SZ302105	25X Eyepieces (Pair)	High-eyepoint and wide field 25X Eyepieces, 11.5mm field of view, the tube outside dia. 30mm.
	SZ302106	30X Eyepieces (Pair)	High-eyepoint and wide field 30X Eyepieces, 9mm field of view, the tube outside dia. 30mm.
	SZ504101	0.3X Video Coupler	0.3X with adjustable focus, for connecting SZ3 Series of Trinocular and CCD camera.
	SZ504102	0.5X Video Coupler	0.5X with adjustable focus, for connecting SZ3 Series of Trinocular and CCD camera.

Optical Datasheet											
Auxiliary Lens	Working Distance (mm)	Eyepieces									
		10X(20mm)		15X(16mm)		20X(12mm)		25X(11.5mm)		30X(9mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.3X	287	2.1X-13.5X	95.2-14.8	3.0X-20.3X	79.6-11.9	4.0X-27.0X	59.7-8.9	5.0X-33.8X	57.2-8.5	6X-40.5X	44.8-6.7
0.5X	177	3.5X-22.5X	57.1-8.9	5.0X-33.8X	47.8-7.1	6.7X-45.0X	35.8-5.3	8.4X-56.3X	34.3-5.1	10X-67.5X	26.9-4
0.75X	117	5.25X-33.75X	38.1-5.9	7.5X-50.6X	31.8-4.7	10.1X-67.5X	23.9-3.6	12.6X-84.4X	22.9-3.4	15X-101X	17.9-2.7
Built-in(1X)	100	7X-45X	28.6-4.4	10.1X-67.5X	23.9-3.6	13.4X-90.0X	17.9-2.7	16.8X-112.5X	17.2-2.6	20X-135X	13.4-2
1.5X	47	10.5X-67.5X	19-3	15.1X-101.3X	15.9-2.4	20.1X-135.0X	11.9-1.8	25.1X-168.8X	11.4-1.7	30X-202X	9-1.3
2X	26	14X-90X	14.3-2.2	20.1X-135X	11.9-1.8	26.8X-180X	9-1.3	33.5X-225X	8.6-1.3	40X-270X	6.7-1



16X

35X

When used with 0.5X Video Coupler, 1.3M pixel digital camera and 15" LCD monitor, it can capture images.



105X



GP030303
15" LCD Color Monitor (optional)

SZ3-100-AN-D Stereo Zoom Microscope

Includes: SZ501201 Stereo Zoom Trinocular Body, SZ502101 10X Eyepieces (Pair), SZ504102 0.5X Video Coupler, MA211101 76mm Post Stand, SZ303201 Ring Adapter, MA311101 Fiber Optic Illuminator, MA321101 Annular Ring Light Guide and DC113200 1.3M Color Digital Camera.

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)



SZ3-200-LED Stereo Zoom Microscope

SZ3-200/SZ3-200T Stereo Zoom Microscope

SZ501101 Stereo Zoom Binocular Body/SZ501201 Stereo Zoom Trinocular Body, SZ504102 0.5X Video Coupler.
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA221101 76mm Track Stand, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ3-200-AN/SZ3-200T-AN		●	○	○	○
SZ3-200-DPL/SZ3-200T-DPL		○	●	○	○
SZ3-200-FR/SZ3-200T-FR		○	○	●	○
SZ3-200-LED/SZ3-200T-LED		○	○	○	●



SZ3-1000-DPL Stereo Zoom Microscope

SZ3-1000/SZ3-1000T Stereo Zoom Microscope

SZ501101 Stereo Zoom Binocular Body/SZ501201 Stereo Zoom Trinocular Body, SZ504102 0.5X Video Coupler.
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ3-1000-AN/SZ3-1000T-AN		●	○	○	○
SZ3-1000-DPL/SZ3-1000T-DPL		○	●	○	○
SZ3-1000-FR/SZ3-1000T-FR		○	○	●	○
SZ3-1000-LED/SZ3-1000T-LED		○	○	○	●



SZ3-4000-FR Stereo Zoom Microscope

SZ3-4000/SZ3-4000T Stereo Zoom Microscope

SZ501101 Stereo Zoom Binocular Body/SZ501201 Stereo Zoom Trinocular Body, SZ504102 0.5X Video Coupler.
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA242101 Flexible Arm, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ3-4000-AN/SZ3-4000T-AN		●	○	○	○
SZ3-4000-DPL/SZ3-4000T-DPL		○	●	○	○
SZ3-4000-FR/SZ3-4000T-FR		○	○	●	○
SZ3-4000-LED/SZ3-4000T-LED		○	○	○	●



SZ4-1000 Stereo Zoom Microscope

SZ4 STEREO ZOOM MICROSCOPE SZ611101 STEREO ZOOM BINOCULAR BODY

- High definition 3D image
- Adjustable diopter of eyepiece tube
- Wide field of view and long working distance
- Ergonomic design

SZ611101 Stereo Zoom Microscope adopts ergonomic design and assures that the operators feel comfortable for long time working. With high definition, wide Field of View, long working distance, genuine high definition 3D images, it can be widely applied to schools and institutes for natural science and education, routine clinical inspection, biological engineering, scientific research, industrial test and assembly, measurement, quality control and inspection and test in IT fields.

Specifications

Zoom Range of Zoom Body: 0.7X-3X	Interpupillary Distance: 52mm-72mm
Zoom Ratio: 1:4.3	Eyepiece Diopter Correction: ± 5 Diopter
Magnification: 3.5X-120X	Eyepiece Inclination: 60 °
Field of View: 1.8mm-51.4mm	Optional Eyepieces: 10X, 15X and 20X
Working Distance: 50mm-107mm	Optional Auxiliary Lenses: 0.5X and 2X.

Magnification is 7X through 30X when 10X eyepieces are equipped. With the continuous single zoom knob on the top and the adjustable single eyetube diopter, it is more comfortable and convenient for operators.



Zoom Knob

Application

Optional Wide Field of View Eyepieces: 10X, 15X and 20X; Optional Auxiliary Lenses: 0.5X and 2X.

Picture Preview	P/N	Name	Description
	SZ611101	Stereo Zoom Binocular Body	0.7-3X zoom objective range, Zoom ratio 4.3:1. Working distance 100mm. Eyepieces are not included for this item No.
	SZ612101	10X Eyepieces	Wide Field 10X Eyepieces, 18mm field of view, the tube outside dia. 23mm; For SZ611101 Series of Stereo Microscopes.
	SZ612103	15X Eyepieces	Wide Field 15X Eyepieces, 14mm field of view, the tube outside dia. 23mm; For SZ611101 Series of Stereo Microscopes.
	SZ612104	20X Eyepieces	Wide Field 20X Eyepieces, 11mm field of view, the tube outside dia. 23mm; For SZ611101 Series of Stereo Microscopes.
	SZ613102	0.5X Auxiliary Lens	0.5X Auxiliary Lens, working distance 197mm, for SZ611101 Series Stereo Zoom Microscope
	SZ613105	2X Auxiliary Lens	2X Auxiliary Lens, working distance 50mm, for SZ611101 Series Stereo Zoom Microscope.
	SZ613201	Ring Adapter	For SZ4 Series Stereo Zoom Microscope.

Optical Datasheet

Auxiliary Lens	Working Distance (mm)	Eyepieces					
		10X(18mm)		15X(14mm)		20X(11mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.5X	197	3.5X-15X	51.4-12	5.25X-22.5X	40-9.3	7X-30X	31.4-7.3
Built-in(1X)	107	7X-30X	25.7-6	10.5X-45X	20-4.7	14X-60X	15.7-3.7
2X	50	14X-60X	12.8-3	21X-90X	10-2.3	28X-120X	7.9-1.8

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

SZ4-200 Stereo Zoom Microscope

SZ611101 Stereo Zoom Binocular Body, SZ612101 10X Eyepieces (Pair), MA221106 B&L Track Stand, SZ613201 Ring Adapter.



SZ4-200 Stereo Zoom Microscope

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ4-200-AN		●	○	○	○
SZ4-200-DPL		○	●	○	○
SZ4-200-FR		○	○	●	○
SZ4-200-LED		○	○	○	●



SZ601102 STEREO ZOOM MICROSCOPE

High quality optics assures crisp and sharp images
Zoom magnification
3-way illumination system

Optical system is completely encased in the microscope body to prevent damage from dust and dirt, and prevent tampering and lost parts. Built-in and three-way illumination system supplies transmitted light, reflected light or both, simultaneously.

System is designed to keep the stage temperature cool for safe operation. From industrial and research, biology to botany, entomology to geology, ecology to electronics education, SZ601102 Binocular Stereo Zoom Microscope has applications wherever three-dimensional viewing is needed.

The magnification is 7X through 30X when 10X eyepieces are equipped; Magnification is 10.5X through 45X when 15X eyepieces are equipped. Interlocked, inclined eyepiece tubes allow adjustment for interpupillary distances from 49mm to 73mm. Tungsten and Halogen lights are used in illumination system.


Specifications

Zoom Range of Zoom Body: 0.7X-3X	Focusing Knob: Distance (up and down): 73mm
Zoom Ratio: 1:4.3	System Height: Max.: 410mm
Interpupillary Distance: 49mm-73mm	Base Size: 250mm x 175mm (L x W)
Incident Illumination : 6V 15W	Built-in 1X lens Working Distance: 100mm
Transmitted Illumination: 110V/220V 15W	
Stage Size: 84mm Dia. Glass plate	

SZ601102 Binocular Stereo Zoom Microscope has the continuous zoom system. When used with 10X or 15X eyepieces, the zoom range varies from 7X to 30X or from 10.5X to 45X. The user can get a clear and correct image with the zoom knob. All the eyepieces are fixed to avoid damaging or losing. With the three way illumination system, the user can easily control the on/off/on toggle switch and select the incident or transmitted illuminations. The illumination system can be used with tungsten and halogen light to provide a bright white light in order to get a clear image.



Zoom Knob

Picture Preview	P/N	Name	Description
	SZ601102	Stereo Zoom Microscope	0.7-3X Zoom objective range; Zoom ratio 1:4.3; Working distance 100mm; Fixed eyepieces & Tubes; 10X/18mm eyepiece; Illumination: Incident 6V 15W; Transmitted 120V 15W.
	SZ601112	Stereo Zoom Microscope	0.7-3X Zoom objective range; Zoom ratio 1:4.3; Working distance 100mm; Fixed eyepieces & Tubes; 15X eyepiece; Illumination: Incident 6V 15W; Transmitted 120V 15W.



SZ5 STEREO ZOOM MICROSCOPE

High definition 3D image
Ergonomic design
Eyepieces diopter correction
New three-'A' design
Low cost

With high definition, wide Field of View, long working distance, genuine high definition 3D images, it can be widely applied to schools and institutes for natural science and education, routine clinical inspection, biological engineering, scientific research, industrial test and assembly, measurement, quality control and inspection and test in IT fields. The Anti-dust design reduces the routine maintenance, and the Anti-mold design maintains the quality of the lenses even in hot and humid environments.

The Anti-electrostatic design enables SZ5 to be ESD safe and increase the quality of the product.



Eyepiece Diopter



Zoom Knob

Specifications

Zoom Range of Zoom Body: 0.7X-3X	The Eyetube Inclination: 45 ° and 60 °
Zoom Ratio: 1: 4.3	Eyepiece Diopter Correction: -8-+5 Diopter
Magnification: 3.5X-120X	Optional Adjustable Eyepieces: 10X and 20X
Field of View: 2mm-57.1mm	Optional Auxiliary Lens: 0.5X and 2X
Working Distance: 97mm-160mm	Optional Video Couplers: 0.4X
Interpupillary Adjustment: 52mm-75mm	(For Trinocular Body)
Working Distance of Built-in 1X Objective Lens: 97mm	

Optical Datasheet					
Auxiliary Lens	Working Distance (mm)	Eyepieces			
		10X(20mm)		20X(12mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)
0.5X	160	3.5X-15X	57.1-13.3	7X-30X	34.3-8
Built-in(1X)	97	7X-30X	28.6-6.7	14X-60X	17.1-4
2X	50	14X-60X	14.3-3.3	28X-120X	8.6-2

Application

10X, 20X Eyepieces and 0.5X, 2X Auxiliary Lens are optional, and the users can change total magnification and working distance to improve work efficiency. All kinds of illuminators and stands are optional.

Picture Preview	P/N	Name	Description
	SZ701101	Stereo Zoom Binocular	Zoom range 0.7X-3X, zoom ratio 1:4.3, with two horizontal zoom knobs, 60 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ701102	Stereo Zoom Binocular	Zoom range 0.7X-3X, zoom ratio 1:4.3, with two horizontal zoom knobs, 45 ° inclined observation tubes. Eyepieces are not included for this item No.
	SZ701202	Stereo Zoom Trinocular	Zoom range of zoom body: 0.7X-3X, zoom ratio: 1:4.3, 45 ° inclined observation tubes.
	SZ702101	10X Adjustable Eyepieces (Pair)	Wide Field 10X Eyepieces, with adjustable eyepiece diopter correction, 20mm field of view, the tube outside dia. 30mm. For SZ5 Series Stereo Zoom Microscope.
	SZ702104	20X Adjustable Eyepieces (Pair)	Wide Field 20X Eyepieces, with adjustable eyepiece diopter correction, 12mm field of view, the tube outside dia. 30mm. For SZ5 Series Stereo Zoom Microscope.
	SZ703102	0.5X Auxiliary Lens	Outside dia. 55mm, working distance 160mm, for SZ5 Series Stereo Zoom Microscope.
	SZ703105	2X Auxiliary Lens	Outside dia. 55mm, working distance 50mm, for SZ5 Series Stereo Zoom Microscope.
	SZ704101	0.4X Video Coupler	0.4X C-Mount Video Coupler with adjustable screw, for connecting SZ5 Trinocular and CCD camera.

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

SZ5-100/SZ5-100T Stereo Zoom Microscope

SZ701101 Stereo Zoom Binocular Body/SZ701202 Stereo Zoom Trinocular Body, SZ704101 0.4X Video Coupler
 SZ702101 10X Adjustable Eyepieces (Pair), MA211101 76mm Post Stand, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ5-100-AN/SZ5-100T-AN		●	○	○	○
SZ5-100-DPL/SZ5-100T-DPL		○	●	○	○
SZ5-100-FR/SZ5-100T-FR		○	○	●	○
SZ5-100-LED/SZ5-100T-LED		○	○	○	●



SZ5-1000/SZ5-1000T Stereo Zoom Microscope

SZ701101 Stereo Zoom Binocular Body/SZ701202 Stereo Zoom Trinocular Body, SZ704101 0.4X Video Coupler.
 SZ702101 10X Adjustable Eyepieces (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
SZ5-1000-AN/ SZ5-1000T-AN		●	○	○	○
SZ5-1000-DPL/SZ5-1000T-DPL		○	●	○	○
SZ5-1000-FR/SZ5-1000T-FR		○	○	●	○
SZ5-1000-LED/SZ5-1000T-LED		○	○	○	●





PZ2-40T Parallel Zoom Microscope

PZ2 PARALLEL ZOOM MICROSCOPE

- 0.8X-5X Zoom Body
- Long depth of field, plan field of view, long working distance
- 1.0X plan objective lens with 95mm working distance
- Parallel optical path design
- True-trinocular image port realizes video observation.

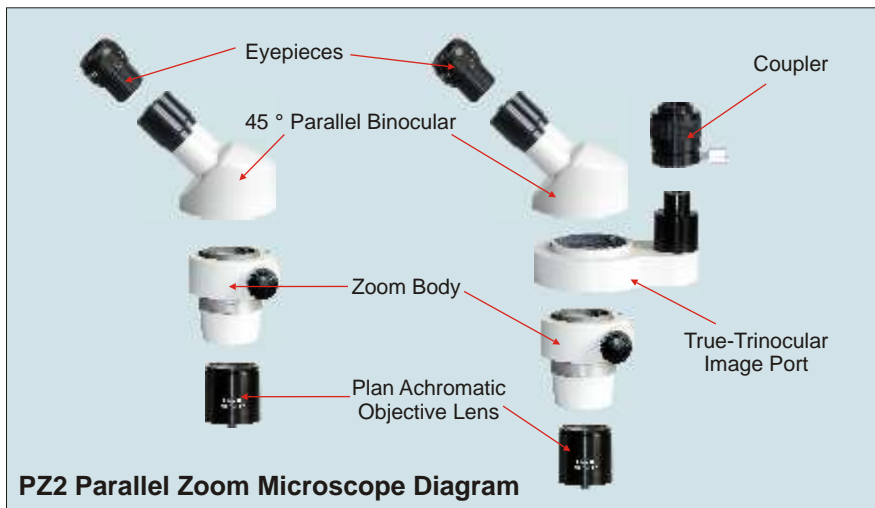
PZ2 Parallel Zoom Microscope adopts Galileo Optical System(Parallel Optical Path), which makes the image stay clear through the whole range of the FOV. The image is always clear and no twinkling in the whole course of zoom. Ergonomic design of long depth of field, plan field of view and long working distance, which ensures the observer against an uncomfortable feeling under prolonged use. True-Trinocular Image Port adopts fifty-fifty synchronous imaging system, and CCD camera, digital camera, film camera etc., video system can be connected. This microscope can meet the demand of analysis and examination of modern biology, medicine, environment, agriculture, public security, micro-electronics, semiconductor and so on. It can be widely applied in schools, biological engineering, scientific research, medical treatment, industrial assembly, test and measurement and quality control.



Zoom Knob



Video Coupler



PZ2 Parallel Zoom Microscope Diagram

Specifications

- Zoom Range of Zoom Body: 0.8X-5X
- Zoom Ratio: 1:6.3
- Optic Magnification: 5.6X-100X (Optical observation) 16.6X-148.2X (Video observation)
- Field of View: 2.5mm-39.3mm (Optical observation) 2.4mm-21.4mm (Video observation)
- Working Distance: 35mm-200mm
- Interpupillary Distance: 50mm-76mm
- Binocular Angle of View: 45 ° Parallel Binocular
- Eyepiece Diopter Correction: -8-+5 Diopter
- Optional Adjustable Eyepieces: 10X, 15X and 20X.
- Optional Objective Lenses: 0.7X and 1X Plan Achromatic objective lens
- Video System:0.5X Coupler (For Trinocular Body)

Picture Preview	P/N	Name	Description
	PZ201101	Parallel Zoom Body	PZ2 Series Parallel Zoom Stereo Microscope, Zoom range 0.8-5X, zoom ratio 1:6.3, with two horizontal zoom knobs.
	PZ202101	45 ° Parallel Binocular	45 ° Parallel Binocular Head. For PZ2 series Parallel Zoom Stereo Microscope, using SZ2 Series of Eyepieces. Eyepieces are not included for this item No.
	PZ204203	0.7X Plan Achromatic Objective Lens	0.7X Optics, outside dia. 60mm, working distance 135mm, N/A 0.065, for PZ2 Series Parallel Zoom Stereo Microscope.
	PZ204204	1X Plan Achromatic Objective Lens	1X Optics, outside dia. 60mm, working distance 95mm, N/A 0.087, for PZ2 Series Parallel Zoom Stereo Microscope.
	PZ205102	True-Trinocular Image Port	True-Trinocular image port, with a 50/50 Prism Lens, for PZ2 Series of Parallel Zoom Stereo Microscope.
	PZ206101	0.5X Coupler	0.5X Coupler for PZ2 Image Port

Optical observation

Plan Achromatic Objective Lens	Working Distance (mm)	Eyepieces					
		10X(22mm)		15X(16mm)		20X(12.5mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.7X	135	5.6X-35X	39.3-6.3	8.4X-52.5X	28.6-4.6	11.2X-70X	22.3-3.6
1X	95	8X-50X	27.5-4.4	12X-75X	20-3.2	16X-100X	15.625-2.5

Video observation(Based on 14" Monitor and 1/3" CCD Camera)

Plan Achromatic Objective Lens	Working Distance (mm)	Coupler	
		0.5X	
		Mag.	FOV (mm)
0.7X	135	16.6X-103.7X	21.4-3.4
1X	95	23.7X-148.2X	15-2.4

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

PZ2-200-S/PZ2-200T-S Parallel Zoom Microscope

PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular/PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular, PZ205102 Image Port, PZ206101 0.5X Coupler, PZ204204 1.0X Plan Achromatic Objective Lens, SZ402101 10X Adjustable Eyepieces (Pair), MA221201 76mm Fine Focus Track Stand.



Select different Illuminator		
Illuminator P/N	MA311101 Fiber Optic Illuminator	
	MA321401 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide
PZ2-200-AN-S/PZ2-200T-AN-S	●	○
PZ2-200-DPL-S/PZ2-200T-DPL-S	○	●

PZ2-1000/PZ2-1000T Parallel Zoom Microscope

PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular/PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular, PZ205102 Image Port, PZ206101 0.5X Coupler, PZ204204 1.0X Plan Achromatic Objective Lens, SZ402101 10X Adjustable Eyepieces (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm.



Select different Illuminator		
Illuminator P/N	MA311101 Fiber Optic Illuminator	
	MA321401 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide
PZ2-1000-AN/PZ2-200T-AN	●	○
PZ2-1000-DPL/PZ2-200T-DPL	○	●

PZ2-5000/PZ2-5000T Parallel Zoom Microscope

PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular/PZ201101 Parallel Zoom Body, PZ202101 45 ° Parallel Binocular, PZ205102 Image Port, PZ206101 0.5X Coupler, PZ204204 1.0X Plan Achromatic Objective Lens, SZ402101 10X Adjustable Eyepieces (Pair), MA241102 76mm Pneumatic Arm.



Select different Illuminator		
Illuminator P/N	MA311101 Fiber Optic Illuminator	
	MA321401 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide
PZ2-5000-AN/PZ2-200T-AN	●	○
PZ2-5000-DPL/PZ2-200T-DPL	○	●



FS-10 Dual Power Stereo Microscope

FS DUAL POWER STEREO MICROSCOPE

Unilateral eyepiece diopter correction
Vertical zoom knob

FS Stereo Microscope with the fixed dual power zoom body, wide field of view and large depth of field makes the observation much easier. The unilateral eyepiece diopter correction can ensure the users to work comfortably for long time. Different stands and illuminators are optional. FS Stereo Microscopes can be widely applied to scientific research, precision parts assembly, electronic processing and other industries.

Specifications

Dual Power Zoom Body: 1X/3X or 2X/4X
Optical Magnification: 10X-90X
(1X/3X zoom body with different optional eyepieces and auxiliary objectives);
20X-120X (2X/4X zoom body with different optional eyepieces and auxiliary objectives)
Field of View: 3mm-20mm (1X/3X zoom body with different optional eyepieces);
2.25mm-10mm (2X/4X zoom body with different optional eyepieces)

Working Distance of Built-in 1X Objective Lens: 100mm
Interpupillary Adjustment: 54mm-75mm
Eyepiece Inclination: 45 °
Eyepiece Diopter Correction: ± 5 Diopter for the left tube
Optional Eyepieces: 10X, 15X, 20X, 25X and 30X.

Optical Datasheet

Dual Power Zoom Body	Working Distance (mm)	Eyepieces									
		10X(20mm)		15X(16mm)		20X(12mm)		25X(11.5mm)		30X(9mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
1X/3X	100	10X/30X	20/6.7	15X/45X	16/5.3	20X/60X	12/4	25X/75X	11.5/3.8	30X/90X	9/3
2X/4X		20X/40X	10/5	30X/60X	8/4	40X/80X	6/3	50X/100X	5.75/2.875	60X/120X	4.5/2.25

Picture Preview	P/N	Name	Description
	FS101101	1X/3X Binocular Body	1X/3X Turret objectives, 45 ° inclined observation tubes with ± 5 diopter adjustments (left tube). Eyepieces are not included for this item No.
	FS101201	2X/4X Binocular Body	2X/4X Turret objectives, 45 ° inclined observation tubes with ± 5 diopter adjustments (left tube). Eyepieces are not included for this item No.

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

FS13-200/FS24-200 Stereo Microscope

FS101101 1X/3X Binocular Body/FS101201 2X/4X Binocular Body
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA221101 76mm Track Stand, SZ303201 Ring Adapter.

Select different Illuminator

Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
	MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
FS13-200-AN/FS24-200-AN	●	○	○	○
FS13-200-DPL/FS24-200-DPL	○	●	○	○
FS13-200-FR/FS24-200-FR	○	○	●	○
FS13-200-LED/FS24-200-LED	○	○	○	●



FS13-200-FR Stereo Microscope

FS13-4000/FS24-4000 Stereo Microscope

FS101101 1X/3X Binocular Body/FS101201 2X/4X Binocular Body
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA242101 Flexible Arm, MA251101 76mm E-Arm, SZ303201 Ring Adapter.

Select different Illuminator

Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
	MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
FS13-4000-AN/FS24-4000-AN	●	○	○	○
FS13-4000-DPL/FS24-4000-DPL	○	●	○	○
FS13-4000-FR/FS24-4000-FR	○	○	●	○
FS13-4000-LED/FS24-4000-LED	○	○	○	●



FS13-4000 Stereo Microscope

FS2 DUAL POWER STEREO MICROSCOPE

Dual power zoom
Unilateral eyepiece tube diopter correction
Easy operation

It features wide Field of View, large depth of field, compact structure and delivers genuine images. The horizontal zoom knobs make the operation more convenient.
FS Stereo Microscopes can be widely applied to education, research, assembly line and etc.



FS2-20 Dual Power Stereo Microscope

Specifications	
Dual Power Zoom Body: 1X/3X, 2X/4X or 1X/2X Optical Magnification: 10X-60X(1X/2X); 10X-90X(1X/3X); 20X-120X(2X/4X) Field of View: 4.5mm-20mm(1X/2X); 3mm-20mm(1X/3X); 2.25mm-10mm(2X/4X) Working Distance: 105mm	Interpupillary Adjustment: 52mm-76mm Binocular Eyetubes inclined at 45 ° Eyepiece Diopter Correction: ± 5 Diopter for left tube Optional Eyepieces: 10X, 15X, 20X, 25X and 30X.

Optical Datasheet		Eyepieces									
Dual Power Zoom Body	Working Distance (mm)	10X(20mm)		15X(16mm)		20X(12mm)		25X(11.5mm)		30X(9mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
1X/2X	105	10X/20X	20/10	15X/30X	16/8	20X/40X	12/6	25X/50X	11.5/5.75	30X/60X	9/4.5
1X/3X	102	10X/30X	20/6.7	15X/45X	16/5.3	20X/60X	12/4	25X/75X	11.5/3.8	30X/90X	9/3
2X/4X	90	20X/40X	10/5	30X/60X	8/4	40X/80X	6/3	50X/100X	5.75/2.875	60X/120X	4.5/2.25

Picture Preview	P/N	Name	Description
	FS201101	1X/3X Dual Power Stereo Microscope Binocular	1X/3X Turret objectives, 45 ° inclined observation tubes with ± 5 diopter adjustments (left tube). Eyepieces are not included for this item No.
	FS201201	2X/4X Dual Power Stereo Microscope Binocular	2X/4X Turret objectives, 45 ° inclined observation tubes with ± 5 diopter adjustments (left tube). Eyepieces are not included for this item No.
	FS201301	1X/2X Dual Power Stereo Microscope Binocular	1X/2X Turret objectives, 45 ° inclined observation tubes with ± 5 diopter adjustments (left tube). Eyepieces are not included for this item No.

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

FS213-1000/FS224-1000/FS212-1000 Stereo Microscope

FS201101 1X/3X Binocular Body/FS201201 2X/4X Binocular Body/FS201301 1X/2X Binocular Body
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA231101 Boom Stand, MA251101 76mm E-Arm.



FS213-1000-DPL Stereo Microscope

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
FS213-1000-AN/FS224-1000-AN/FS212-1000-AN		●	○	○	○
FS213-1000-DPL/FS224-1000-DPL/FS212-1000-DPL		○	●	○	○
FS213-1000-FR/FS224-1000-FR/FS212-1000-FR		○	○	●	○
FS213-1000-LED/FS224-1000-LED/FS212-1000-LED		○	○	○	●

FS213-5000/FS224-5000/FS212-5000 Stereo Microscope

FS201101 1X/3X Binocular Body/FS201201 2X/4X Binocular Body/FS201301 1X/2X Binocular Body
SZ502101 10X Eyepieces (Pair), SZ302201 Eye Guards (Pair), MA241102 76mm Pneumatic Arm



FS213-5000-LED Stereo Microscope

Select different Illuminator					
P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA331101 Fluorescent Ring Light	MA341103 LED Ring Light
		MA321101 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide		
FS213-5000-AN/FS224-5000-AN/FS212-5000-AN		●	○	○	○
FS213-5000-DPL/FS224-5000-DPL/FS212-5000-DPL		○	●	○	○
FS213-5000-FR/FS224-5000-FR/FS212-5000-FR		○	○	●	○
FS213-5000-LED/FS224-5000-LED/FS212-5000-LED		○	○	○	●

FS FIXED POWER STEREO MICROSCOPE

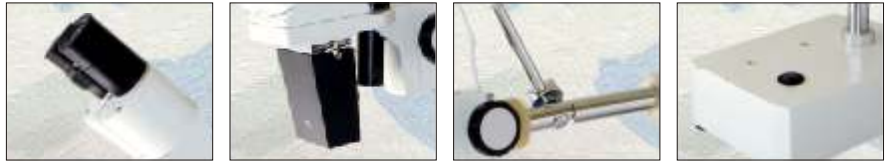
FS Fixed Power Stereo Microscope is integrated with stand, microscope and illuminator. It features wide Field of View, large depth of field, compact structure and delivers genuine images. FS Stereo Microscopes can be widely applied to education, research, assembly line and etc..





LONG ARM FIXED POWER STEREO MICROSCOPE

Specifications

Optical Magnification: 10X Field of View: 10mm-40mm (Different eyepieces and objectives for options) Working Distance: 230mm Interpupillary Adjustment: 55mm-75mm Eyepiece Diopter Correction: ± 5 Diopter for the left tube. Eyepiece: 10X/20 with locking screw Objective: 1X Dovetail style slot plug-in lens	Post Sizes: Height of the Post: 257mm; Length of the Arm: 292mm Base Dimensions: 190mm(L) × 117mm(W) × 62mm(H) Illumination: 12V 10W incandescent lamp with tilting illumination for multi-angle lighting. Input Voltage: 120V 60Hz (FS310111); 220V 50Hz (FS310112) Weight: 9kg
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Picture Preview	P/N	Name	Description
	FS310111	10X Long Arm Fixed Power Stereo Microscope	10X Eyepieces, 1X objective, 12V10W incandescent lamp, 120V 60Hz.
	FS310112	10X Long Arm Fixed Power Stereo Microscope	10X Eyepieces, 1X objective, 12V10W incandescent lamp, 220V 50Hz.





DUAL ILLUMINATED STEREO MICROSCOPE

Specifications

Optical Magnification: 20X (Different eyepieces and objectives for options) Field of View: 1.7mm-20mm (Different eyepieces and objectives for options) Working Distance: 80mm Interpupillary Adjustment: 55mm-75mm Eyepiece Diopter Correction: ± 5 Diopter for the right tube Eyepieces: standard 10X/20 eyepieces with locking screw Objectives: standard 2X Dovetail style slot plug-in lens Small post stand, Matte Finish Glass Plate (95mm) Illumination: 12V 10W incandescent lamp for top and bottom lighting Input Voltage: 120V 60Hz (FS310211); 220V 50Hz (FS310212) Weight: 3.75kg



Picture Preview	P/N	Name	Description
	FS310211	20X Dual Illuminated Stereo Microscope	10X Eyepieces, Inserted 2X objective, 12V10W incandescent lamp for top and bottom lighting, 120V 60Hz.
	FS310212	20X Dual Illuminated Stereo Microscope	10X Eyepieces, Inserted 2X objective, 12V10W incandescent lamp for top and bottom lighting, 220V 50Hz.

DUAL ILLUMINATED STEREO MICROSCOPE

Specifications

Eye tube inclined 45 ° ; Binocular head rotates at 360 °
 Optical Magnification: 10X and 30X
 (1X/3X objectives with 10X eyepieces)
 20X and 40X (2X/4X objectives with 10X eyepieces)
 Field of View: 6.7mm-20mm
 (1X/3X objectives with 10X eyepieces)
 5.0mm-10mm (2X/4X objectives with 10X eyepieces)
 Working Distance: 76mm
 Interpupillary Adjustment: 55mm-75mm
 Eyepiece Diopter Correction: ± 5 Diopter for the left tube
 Eyepieces: 10X/20mm eyepiece with locking screw

Objectives: 1X/3X or 2X/4X,
 90 ° rotatable objectives
 Small post stand, Matte Finish
 Glass Plate (95mm)
 Illumination: 12V 10W incandescent
 lamp for top and bottom lighting
 Input Voltage: 120V 60Hz
 (FS320141 and FS320241)
 220V 50Hz (FS320142 and
 FS320242, available per request.)
 Weight: 3.75kg



Darkfield Jewelry Microscope

Dual Illuminated Stereo Microscope



Picture Preview	P/N	Name	Description
	FS320141	10X/30X Dual Illuminated Stereo Microscope	10X Eyepieces, 1X/3X objectives, 12V10W incandescent lamp for top and bottom lighting, 120V 60Hz.
	FS320142	10X/30X Dual Illuminated Stereo Microscope	10X Eyepieces, 1X/3X objectives, 12V10W incandescent lamp for top and bottom lighting, 220V 50Hz.
	FS320241	20X/40X Dual Illuminated Stereo Microscope	10X Eyepieces, 2X/4X objectives, 12V10W incandescent lamp for top and bottom lighting, 120V 60Hz.
	FS320242	20X/40X Dual Illuminated Stereo Microscope	10X Eyepieces, 2X/4X objectives, 12V10W incandescent lamp for top and bottom lighting, 220V 50Hz.
	GI111101	10X/30X Darkfield Jewelry Microscope	10X Eyepieces, 1X/3X objectives, 12V10W incandescent lamp for top and bottom lighting, 95mm dia. For Darkfield attachment. 120V 60Hz.
	GI111102	20X/40X Darkfield Jewelry Microscope	10X Eyepieces, 2X/4X objectives, 12V10W incandescent lamp for top and bottom lighting, 95mm dia. For Darkfield attachment. 120V 60Hz.
	GI112101	Darkfield Attachment	95mm in diameter, attach to Darkfield Jewelry Microscope.
	GI112201	Jewel Tweezers	Mount thread: 3mm in diameter, for attaching to Darkfield Jewelry Microscope.
	GI112202	Jewel Tweezers	Mount thread: 3mm in diameter, for attaching to Darkfield Jewelry Microscope.

DUAL ILLUMINATED STEREO MICROSCOPE

Specifications

Eye tube inclined 45 ° ; Binocular head rotates at 360 °
 Optical Magnification: 10X and 30X
 (1X/3X objectives with 10X eyepieces)
 20X and 40X
 (2X/4X objectives with 10X eyepieces)
 Field of View: 6.7mm-20mm
 (1X/3X objectives with 10X eyepieces)
 5.0mm-10mm (2X/4X objectives with 10X eyepieces)
 Working Distance: 76mm
 Interpupillary Adjustment: 55mm-75mm

Eyepiece Diopter Correction: ± 5 Diopter for the left tube
 Eyepieces: 10X/20mm with locking screw
 Objectives: 1X/3X or 2X/4X,
 90 ° rotatable objectives
 Small bending-arm stand, Matte Finish
 Glass Plate (60mm)
 Illumination: 12V 10W halogen lamp for top and bottom lighting
 Input Voltage: 120V 60Hz
 (FS320351 and FS320451)
 220V 50Hz (FS320352 and FS320452)
 Weight: 3.75kg



Dual Illuminated Stereo Microscope



Picture Preview	P/N	Name	Description
	FS320351	10X/30X Dual Illuminated Stereo Microscope	10X Eyepieces, 1X/3X objectives, 12V10W halogen lamp for top and bottom lighting, 120V 60Hz.
	FS320352	10X/30X Dual Illuminated Stereo Microscope	10X Eyepieces, 1X/3X objectives, 12V10W halogen lamp for top and bottom lighting, 220V 50Hz.
	FS320451	20X/40X Dual Illuminated Stereo Microscope	10X Eyepieces, 2X/4X objectives, 12V10W halogen lamp for top and bottom lighting, 120V 60Hz.
	FS320452	20X/40X Dual Illuminated Stereo Microscope	10X Eyepieces, 2X/4X objectives, 12V10W halogen lamp for top and bottom lighting, 220V 50Hz.



MZ VIDEO ZOOM MICROSCOPE

Full Field of View
 Parallel (infinite) Optical System
 Compact, practical and cost-effective

As the parallel (infinite) optical system is adopted in the MZ Video Zoom Microscope, it can be used in high precision measurement industry, micro-electronics, automation monitor and control fields, inspection and testing industry. The coaxial illuminator, polarized light and iris diaphragm are optional and can be attached to the MZ Video Zoom Microscope. When the MZ Video Zoom Microscope is attached to the infinity objectives of a biological microscope or metallurgical microscope, 400X more magnification can be obtained. Due to the compact structure and the compatibility with different stands and illuminators, the MZ Video Zoom Microscope is more convenient and cost-effective for customers.

Specifications

Zoom Range: 0.7X-4.5X	Optional Video Couplers: 0.35X, 0.5X, 0.75X, 1.0X, 1.5X and 2.0X.
Zoom Ratio: 1: 6.5	Optional Objective Lenses: 0.3X, 0.5X, 0.75X, 1.0X, 1.5X and 2.0X.
Magnification Range: 4.65X-1080X	
Field of View: 0.3mm-77mm	
Working Distance: 46mm-331mm	

MZ Video Zoom Microscope Diagram

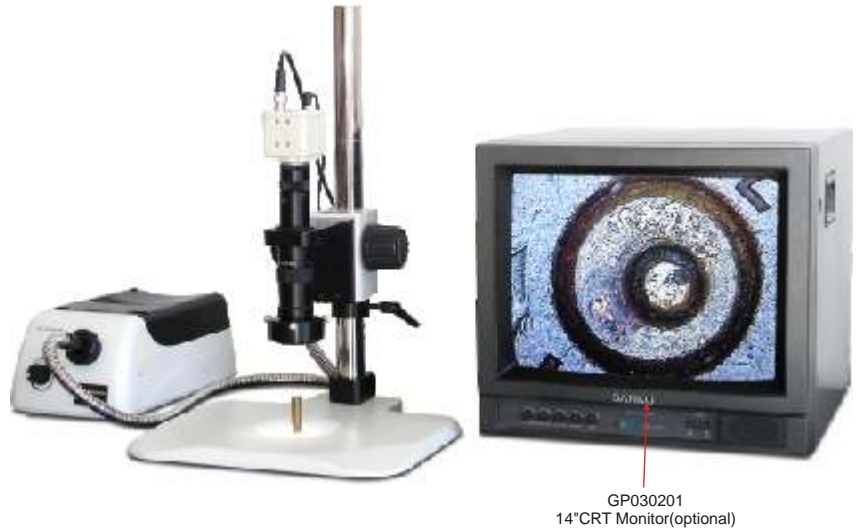


The zoom body system of MZ Video Zoom Microscope is designed by using four pieces of glass mechanical compensation structure with high resolution and clear image. When the manual zoom with detents is used in measuring systems, the magnification calibration is needed, the pre-set stops are at 0.7X, 1X, 1.5X, 2X, 2.5X, 3X, 3.5X, 4X and 4.5X.



MZ-100-AN-A Video Zoom Microscope

Includes: MZ101101 0.7-4.5X Micro Zoom Body, MZ102102 0.5X Coupler, MZ103104 1.0X Objective Lens, MA211101 76mm Post Stand, MA256102 39/76mm Donut, MA311101 Fiber Optic Illuminator, MA321301 Annular Ring Light Guide, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.










Optical Datasheet (Based on 14" Monitor and 1/3" CCD Camera)

Objective Lens	Working Distance (mm)	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
2.0X	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

Application

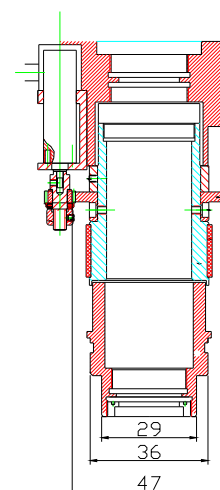
The design of 1.0X, 1.5X and 2.0X is based on infinite optical system, which reduces the length of the system. All auxiliary lenses and video couplers are optional and available. The Iris Diaphragm can control the depth of field by adjusting Numerical Aperture for obtaining a high quality image. Different types of stands and illuminators are available as options.

Picture Preview	P/N	Name	Description
	MZ101101	0.7-4.5X Micro Zoom Body	Micro Zoom Body with 0.7-4.5X zoom range
	MZ101102	Micro Zoom Body with Detents	Micro Zoom Body with 0.7-4.5X zoom range, the pre-set stops for detents are at 0.7X, 1X, 1.5X, 2X, 2.5X, 3X, 3.5X, 4X and 4.5X.
	MZ102101	0.35X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 67mm, optical length approx. 76mm, for MZ Series Micro Zoom Lens.
	MZ102102	0.5X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 90mm, optical length approx. 97mm, for MZ Series Micro Zoom Lens.
	MZ102103	0.75X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 135mm, optical length approx. 103mm, for MZ Series Micro Zoom Lens.
	MZ102104	1X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 180mm, optical length approx. 130mm, for MZ Series Micro Zoom Lens.
	MZ102105	1.5X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 270mm, optical length approx. 189mm, for MZ Series micro zoom Lens.
	MZ102106	2X Coupler	Standard C-mount design, applicable to 1/3" CCD camera, focus distance 360mm, optical length approx. 252mm, for MZ Series Micro Zoom Lens.
	MZ103101	0.3X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 331.5mm, for MZ Series Micro Zoom Lens.
	MZ103102	0.5X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 199.1mm, for MZ Series Micro Zoom Lens.
	MZ103103	0.75X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 131mm, for MZ Series Micro Zoom Lens.
	MZ103104	1X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 97.3mm, for MZ Series Micro Zoom Lens.
	MZ103105	1.5X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 60.9mm, for MZ Series Micro Zoom Lens.
	MZ103106	2X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 46.3mm, for MZ Series Micro Zoom Lens.
	MZ103201	Adapter for Infinity Objective Lens	M26 x 1/36" (55°) standard thread, for attaching to Infinity Long Working Distance Objectives.
	MZ104101	Iris Diaphragm	Increases the image of Depth of View or Resolution, for MZ Series Micro Zoom Lens.
	MZ105101	Coaxial Part of Zoom Lens	Coaxial Illuminator, for attaching to MZ Series Micro Zoom Lens and Fiber Optic Cable.
	MZ106101	Cross Hair Reticle Coupler	The Cross Hair is inside
	MZ106102	Cross Hair Reticle Coupler	With 10mm/100 Cross Reticle
	MZ106103	Cross Hair Reticle Coupler	With X Y 10mm/100 Cross Reticle



Motorized Zoom

Zoom Range of Zoom Body: 0.7-4.5X;
 Motorized zooming.
 Rotary Speed: 35 circles per minute
 Current: 150mA
 Voltage: 6V



Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)



MZ-200-LED-D Video Zoom Microscope

MZ-200-A/MZ-200-D Video Zoom Microscope

MZ101101 0.7X-4.5X Micro Zoom Body, MZ102102 0.5X Coupler, MZ103104 1.0X Objective Lens, MA221101 76mm Track Stand, MA256102 39/76mm Donut. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321301 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ-200-AN-A/MZ-200-AN-D		●	○	○
MZ-200-DPL-A/MZ-200-DPL-D		○	●	○
MZ-200-LED-A/MZ-200-LED-D		○	○	●



MZ-1000-DPL-A Video Zoom Microscope

MZ-1000-A/MZ-1000-D Video Zoom Microscope

MZ101101 0.7X-4.5X Micro Zoom Body, MZ102102 0.5X Coupler, MZ103104 1.0X Objective Lens, MA231101 Boom Stand, MA251101 76mm E-Arm, MA256102 39/76mm Donut. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321301 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ-1000-AN-A/MZ-1000-AN-D		●	○	○
MZ-1000-DPL-A/MZ-1000-DPL-D		○	●	○
MZ-1000-LED-A/MZ-1000-LED-D		○	○	●



MZ-5000-AN-A Video Zoom Microscope

MZ-5000-A/MZ-5000-D Video Zoom Microscope

MZ101101 0.7X-4.5X Micro Zoom Body, MZ102102 0.5X Coupler, MZ103104 1.0X Objective Lens, MA241102 76mm Pneumatic Arm, MA256102 39/76mm Donut. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321301 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ-5000-AN-A/MZ-5000-AN-D		●	○	○
MZ-5000-DPL-A/MZ-5000-DPL-D		○	●	○
MZ-5000-LED-A/MZ-5000-LED-D		○	○	●



MZ2 VIDEO ZOOM MICROSCOPE

MZ201101 MICRO ZOOM BODY

A newly upgraded version of the Video Zoom Microscope
High resolution and clear image
The design is based on infinite optical system

Specifications

Zoom Range: 0.8X-5X
Zoom Ratio: 1:6.3
Magnification Range: 6.85X-1185.3X
Field of View: 0.3mm-50mm
Working Distance: 35mm-175mm
Optional Video Couplers: 0.3X, 0.5X, 1.0X, 1.5X and 2.0X
Optional Objective Lenses: 0.5X, 0.75X, 1.0X and 2.0X

MZ2 Video Zoom Microscope Diagram



MZ2-200-CS-A Video Zoom Microscope

Includes: MZ201101 0.8-5X Zoom Body, MZ202102 0.5X Coupler, MZ203104 1X Objective Lens, MZ205101 Coaxial Illuminator, MA221101 76mm Track Stand, MA256103 45/76mm Donut MA311101 Fiber Optic Illuminator, MA323201 Single Pipe Light Guide, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.



Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)

MZ2-200-A/MZ2-200-D Video Zoom Microscope

MZ201101 0.8X-5X Micro Zoom Body, MZ202102 0.5X Coupler, MZ203104 1.0X Objective Lens, MA221101 76mm Track Stand, MA256103 45/76mm Donut. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.



MZ2-200-LED-D Video Zoom Microscope



MZ2-1000-AN-A Video Zoom Microscope

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321301 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ-200-AN-A/MZ-200-AN-D		●	○	○
MZ-200-DPL-A/MZ-200-DPL-D		○	●	○
MZ-200-LED-A/MZ-200-LED-D		○	○	●

MZ2-1000-A/MZ2-1000-D Video Zoom Microscope

MZ201101 0.8X-5X Micro Zoom Body, MZ202102 0.5X Coupler, MZ203104 1.0X Objective Lens, MA231101 Boom Stand, MA251101 76mm E-Arm, MA256103 45/76mm Donut. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321301 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ-1000-AN-A/MZ-1000-AN-D		●	○	○
MZ-1000-DPL-A/MZ-1000-DPL-D		○	●	○
MZ-1000-LED-A/MZ-1000-LED-D		○	○	●

Application

The zoom body system of MZ Video Zoom Microscope is designed by using a four-piece glass mechanical compensation structure to achieve resolution and clear image. When the MZ zoom with detents is used in a measuring system, magnification calibration is needed.

Picture Preview	P/N	Name	Description
	MZ201101	0.8-5X Micro Zoom Body	Micro Zoom Body with 0.8-5X Zoom Range
	MZ202101	0.3X Coupler	0.3X, Standard C-mount design, applicable to 1/3" CCD camera, for MZ2 Series Micro Zoom Lens
	MZ202102	0.5X Coupler	0.5X, Standard C-mount design, applicable to 1/3" CCD camera, for MZ2 Series Micro Zoom Lens
	MZ202104	1X Coupler	1X, Standard C-mount design, applicable to 1/3" CCD camera, for MZ2 Series Micro Zoom Lens
	MZ202105	1.5X Coupler	1.5X, Standard C-mount design, applicable to 1/3" CCD camera, for MZ2 Series Micro Zoom Lens
	MZ202106	2X Coupler	2X, Standard C-mount design, applicable to 1/3" CCD camera, for MZ2 Series Micro Zoom Lens
	MZ203102	0.5X Objective Lens	0.5X Optics, W. D. 175mm, for MZ2 Series Micro Zoom Lens.
	MZ203103	0.75X Objective Lens	0.75X Optics, W. D. 115mm, for MZ2 Series Micro Zoom Lens.
	MZ203104	1X Objective Lens	1X Optics, W. D. 82mm, for MZ2 Series Micro Zoom Lens.
	MZ203106	2X Objective Lens	2X Optics, W. D. 35mm, for MZ2 Series Micro Zoom Lens.
	MZ203201	Adapter For Infinity Objective Lens	M26 x 1/36" standard thread
	MZ203202	Ring Adapter	25/34mm Ring Adapter for MZ2 Zoom Lens
	MZ205101	Coaxial Illuminator	Coaxial Illuminator for MZ2 Series Micro Zoom Lens

Optical Datasheet(Based on 14" Monitor and 1/3" CCD Camera)

Objective Lens	Working Distance (mm)	Couplers									
		0.3X		0.5X		1X		1.5X		2X	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.5X	175	6.85X-42.87X	50-8	11.43X-71.4X	30-4.8	22.86X-142.9X	15-2.4	34.3X-214.37X	10-1.6	47.4X-296.3X	7.5-1.2
0.75X	115	10.29X-64.31X	33.33-5.33	17.15X-107.18X	20-3.2	34.3X-214.37X	10-1.6	51.45X-321.56X	6.66-1.06	71.1X-444.5X	5-0.8
1.0X	82	13.7X-85.75X	25-4	22.86X-142.91X	15-2.4	45.73X-285.83X	7.5-1.2	68.6X-428.75X	5-0.8	94.8X-592.7X	3.75-0.6
2.0X	35	27.44X-171.50X	12.5-2	45.73X-285.83X	7.5-1.2	91.46X-571.67X	3.75-0.6	137.2X-857.50X	2.5-0.4	189.7X-1185.3X	1.875-0.3

NEW!

MZ221101 Zoom Body with Coaxial Illuminator



MZ221101 Zoom Body with Coaxial Illuminator

MZ21101 ZOOM BODY WITH COAXIAL ILLUMINATOR

High contrast and better depth of field
Unique optical illuminator

MZ21101 Video Zoom Microscope is an advanced and high contrast monocular video zoom microscope with LED coaxial illuminator for applying to inspecting and testing the reflective objects, such as checking LCD, LED, semiconductor, printing products and other reflective objects. The unique design of imaging and lighting system enables it to have better contrast and depth of field. The images can be observed via both monitor and through eyepieces simultaneously, and the upright images can be obtained through eyepiece observation. Digital Camera, CCD Camera, DSLR and SLR can be attached to MZ21101 Video Zoom Microscope by using the relevant adapters.

Specifications

Zoom Range of Zoom Body: 0.7X-4.5X	Working Distance: 35mm-145mm
Zoom Ratio: 1: 6.5	Optional Auxiliary Lenses: 0.7X and 2.0X
Magnification: 8.7X-1066.8X	CCD Couplers: 0.3X, 0.5X, 1.0X, 1.5X and 2.0X
Field of View: 0.3mm-40.8mm	

MZ221101 ZOOM BODY WITH COAXIAL ILLUMINATOR

High contrast and better depth of field
Unique optical illuminator

MZ221101 Video Zoom Microscope is an advanced and high contrast zoom trinocular video microscope with LED coaxial illuminator for applying to inspecting and testing the reflective objects, such as checking LCD, LED, semiconductor, printing products and other reflective objects. The unique design of imaging and lighting system enables it to have better contrast and depth of field. The images can be observed via both monitor and through eyepieces simultaneously, and the upright images can be obtained through eyepiece observation. Digital Camera, CCD Camera, DSLR and SLR can be attached to MZ221101 Video Zoom Microscope by using the relevant adapters.

Specifications

Zoom Range of Zoom Body: 1.4X-9X	Working Distance: 35mm-145mm
Zoom Ratio: 1: 6.5	Interpupillary Adjustment: 53mm-75mm
Magnification: 9.8X-540X (observing through binocular eyepieces); 29X-533.4X (Video display)	Eyepiece Diopter Correction: ± 6 Diopter
Field of View: 0.5mm-22.4mm (observing through binocular eyepieces); 0.7mm-12.2mm (Video display)	Optional Eyepieces: 10X, 15X, 20X, 25X and 30X.
	Optional Auxiliary Lenses: 0.7X and 2.0X
	Optional CCD Coupler: 0.5X

Optical Datasheet

MZ21101 (Video Display: Based on 14" Monitor and 1/3" CCD Camera)

Auxiliary Lens	Working Distance (mm)	Couplers									
		0.3X		0.5X		1X		1.5X		2X	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.7X	145	8.7X-56X	40.8-6.3	14.5X-93.3X	24.5-3.8	29X-186.7X	12.2-1.9	43.6X-280X	8.2-1.3	58.1X-373.4X	6.1-1
Built-in(1X)	103	12.4X-80X	28.6-4.4	20.7X-133.4X	17.1-2.7	41.5X-266.7X	8.6-1.3	62.2X-400X	5.7-0.9	83X-533.4X	4.3-0.7
2.0X	35	24.9X-160X	14.3-2.2	41.5X-266.7X	8.6-1.3	83X-533.4X	4.3-0.7	124.5X-800X	2.9-0.4	166X-1066.8X	2.1-0.3

MZ221101 (Binocular eyepiece observation)




Auxiliary Lens	Working Distance (mm)	Eyepieces									
		10X(22mm)		15X(16mm)		20X(12mm)		25X(11.5mm)		30X(9mm)	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.7X	145	9.8X-63X	22.4-3.5	14.7X-94.5X	16.3-2.5	19.6X-126X	12.2-1.9	24.5X-157.5X	11.7-1.8	29.4X-189X	9.2-1.4
Built-in(1X)	103	14X-90X	15.7-2.44	21X-135X	11.4-1.8	28X-180X	8.6-1.3	35X-225X	8.2-1.3	42X-270X	6.4-1
2X	35	28X-180X	7.86-1.22	42X-270X	5.7-0.9	56X-360X	4.3-0.7	70X-450X	4.1-0.6	84X-540X	3.2-0.5

MZ221101 (Video Display: Based on 14" Monitor and 1/3" CCD Camera)

Auxiliary Lens	Working Distance (mm)	Coupler	
		0.5X	
		Mag.	FOV (mm)
0.7X	145	29X-186.7X	12.2-1.9
Built-in (1X)	103	41.5X-266.7X	8.6-1.3
2X	35	83X-533.4X	4.3-0.7

Application

When using CCD coupler, MZ2 can be connected with different digital cameras. As the images can be displayed on monitor, it eliminates the user's eye fatigue, neck and back strain. The microscope with 45mm diameter can be attached to 76mm microscope stand by using 45/76mm ring adapter. Different stands are available as options.

Picture Preview	P/N	Name	Description
	MZ211101	Zoom Body with Coaxial Illuminator	0.7-4.5X Zoom body with LED coaxial illuminator
	MZ221101	Trinocular Zoom Body with Coaxial Illuminator	1.4-9X Trinocular Zoom body with LED coaxial illuminator
	MZ213103	0.7X Auxiliary Lens	For MZ211101 and MZ221101 microscope
	MZ213106	2X Auxiliary Lens	For MZ211101 and MZ221101 microscope
	PZ206101	0.5X Coupler	0.5X Coupler for PZ2 Image Port
	SZ302101	10X Eyepieces (Pair)	High-eyepoint and Wide Field 10X Eyepieces, with 22mm field of view, the tube outside dia. 30mm.
	SZ302103	15X Eyepieces (Pair)	High-eyepoint and wide field 15X Eyepieces, 16mm field of view, the tube outside dia. 30mm.
	SZ302104	20X Eyepieces (Pair)	High-eyepoint and wide field 20X Eyepieces, 12mm field of view, the tube outside dia. 30mm.
	SZ302105	25X Eyepieces (Pair)	High-eyepoint and wide field 25X Eyepieces, 11.5mm field of view, the tube outside dia. 30mm.
	SZ302106	30X Eyepieces (Pair)	High-eyepoint and wide field 30X Eyepieces, 9mm field of view, the tube outside dia. 30mm.
	SZ302311	10X Eyepiece with Reticle	SZ302101 10X Single Eyepiece with a Reticle, single line 10mm/100 Cross Hair, 24mm Dia.

Recommendation

Note: Displayed items are optional.



MZ2-100-CS-A/MZ2-100-CS-D Video Zoom Microscope

MZ211101 0.7X-4.5X Zoom Body with Coaxial Illuminator, MZ202102 0.5X Coupler, MZ213103 0.7X Auxiliary Lens, MA211101 76mm Post Stand, MA256103 45/76mm Donut, MA311101 Fiber Optic Illuminator, MA323201 Single Pipe Light Guide. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.



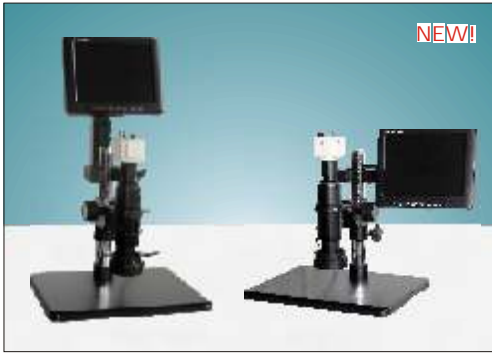
MZ2-1000-CS-A/MZ2-1000-CS-D Video Zoom Microscope

MZ211101 0.7X-4.5X Zoom Body with Coaxial Illuminator, MZ202102 0.5X Coupler, MZ213103 0.7X Auxiliary Lens, MA231101 Boom Stand, MA251101 76mm E-Arm, MA256103 45/76mm Donut, MA311101 Fiber Optic Illuminator, MA323201 Single Pipe Light Guide. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.



MZ2-100T-CS-A/MZ2-100T-CS-D Video Zoom Microscope

MZ221101 1.4X-9X Trinocular Zoom Body with Coaxial Illuminator, PZ206101 0.5X Coupler, MZ213103 0.7X Auxiliary Lens, SZ402101 10X Adjustable Eyepieces (Pair), MA211101 76mm Post Stand, MA256103 45/76mm Donut, MA311101 Fiber Optic Illuminator, MA323201 Single Pipe Light Guide. GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.



MZ3 VIDEO ZOOM MICROSCOPE

The quality optical system and the specially coated optical components adopted in MZ3 Video Zoom Microscope furnish it to deliver sharp and flat images. With the locking screw, the zoom knob of the zoom body can be operated more precisely. This product can be applied to viewing, inspecting and testing digital images in electronic components, semiconductor, laser, LED, LCD, industrial and biological fields. Digital Camera, CCD Camera, DSLR and SLR can be attached to MZ3 Video Zoom Microscope by using the relevant adapters.

MZ311101 MICRO ZOOM BODY

Based on the best optical system, MZ311101 can deliver clear, bright and flat images. The zoom knob of zoom body with lock-up equipment can reach high precision. It can apply to modern electronic equipment, semiconductor, laser, LED, LCD, industry inspection, digital observation on biology and other fields.

MZ311102 MICRO ZOOM BODY

MZ311102 Monocular Video Zoom microscope equipped with optional LED Coaxial Illuminator delivers much clearer and brighter images. Adjust CTV Adjusting Ring below the C-Mount to get the clear image. Locking the magnification screw can fix the magnification. 1/4" wavelength Polarizer Lens is used to adjust the brightness of video output and get the best contrast.



GP030303
15" LCD Color Monitor (optional)

MZ3-7001-A Video Zoom Microscope

Includes: MZ311101 0.7-5X Micro Zoom Body, MZ313104 1.0X Objective Lens, MA237102 Horizontal Big Base Stand, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.

Specifications	
MZ311101 Zoom Range: 0.7X-5X Zoom Ratio: 1: 7 Magnification: 16X-160X Field of View: 2.14mm-21.4mm Working Distance: 100mm-105mm	MZ311102 Zoom Range: 1X-7X Zoom Ratio: 1: 7 Magnification: 23.7X-232.3X Field of View: 1.53mm-15mm Working Distance: 100mm-105mm LED Coaxial Illuminator

Application

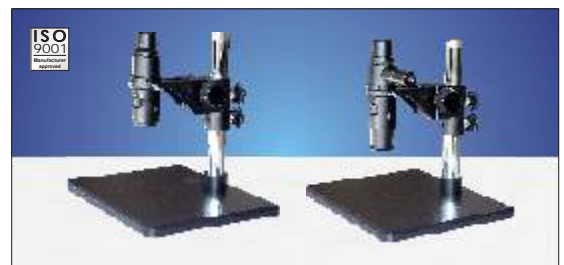
Adjusting CTV Adjusting Ring below the C-Mount will obtain a clear image. Locking the magnification screw can fix the magnification. 1/4" wavelength polarizer lens is used to adjust the brightness of video output and get the best contrast. MZ311102 Monocular Video Zoom microscope equipped with optional LED Coaxial Illuminator delivers much clearer and brighter images. Adjust CTV Adjusting Ring below the C-Mount to get the clear image. Locking the magnification screw can fix the magnification. 1/4" wavelength Polarizer Lens is used to adjust the brightness of video output and get the best contrast.

Picture Preview	P/N	Name	Description
	MZ311101	Micro Zoom Body	Zoom body with 0.7X-5X zoom range; The outside dia. of body: 48mm.
	MZ311102	Micro Zoom Body	Zoom range of zoom body 1X-7X with LED coaxial illuminator; The outside dia. of body: 48mm.
	MZ313104	1X Objective Lens	1X Objective, working distance: 105mm, for MZ3 series microscope.
	MZ313107	1.4X Objective Lens	1.4X Objective, working distance: 100mm, for MZ3 series microscope.
	MZ314101	1/4 Wavelength Polarizer Lens	For MZ313107, 1.4X objective lens

Optical Datasheet

(Based on 14" Monitor and 1/3" CCD Camera)

Objective Lens	Working Distance (mm)	MZ311101		MZ311102	
		Coupler			
		0.4X			
		Mag.	FOV (mm)	Mag.	FOV (mm)
1X	105	16X-114.3X	21.4-3	23.7X-166X	15-2.14
1.4X	100	22.4X-160X	15.3-2.14	33.2X-232.3X	10.7-1.53



MZ4 MICRO ZOOM MICROSCOPE

High resolution
Small chromatism

MZ4 Monocular microscope is a special design for CCD camera. It is designed to shoot with CCD video and can be connected with photographic system and digital camera for transmitting pictures to TVs and monitors. This series of microscope is easy to operate. It can be used extensively for semiconductor, photoelectric, images process, machine and biology, education and scientific research fields.



MZ VIDEO ZOOM MICROSCOPE

Specifications	
Zoom Range of Zoom Body: 0.7X-4.5X	Zoom Ratio: 1:6.5
Magnification: 5.2X -1066.8X	Field of View: 0.33mm -68.6mm
Working Distance: 35mm-302mm	
Optional Video Couplers: 0.5X, 0.67X, 1X and 2X	
Optional Objective Lenses: 0.25X, 0.5X, 0.75X, 1.5X and 2X	

Optical Datasheet

(Based on 14" Monitor and 1/3" CCD Camera)									
Objective Lens	Working Distance (mm)	Couplers							
		0.5X		0.67X		1X		2X	
		Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)	Mag.	FOV (mm)
0.25X	302	5.2X-33.3X	68.6-10.67	7X-44.7X	51.2-7.96	10.4X-66.7X	34.3-5.3	20.7X-133.4X	17.14-2.67
0.5X	176	10.4X-66.7X	34.3-5.33	13.9X-89.3X	25.6-3.98	20.7X-133.4X	17.14-2.7	41.5X-266.7X	8.6-1.33
0.75X	117	15.56X-100X	22.86-3.56	20.9X-134X	17-2.65	31.1X-200X	11.4-1.8	62.2X-400X	5.7-0.89
Built-in(1X)	96	20.7X-133.4X	17.14-2.67	27.8X-178.7X	12.8-2	41.5X-266.7X	8.6-1.3	83X-533.4X	4.3-0.67
1.5X	50	31.1X-200X	11.43-1.78	41.7X-268X	8.6-1.33	62.2X-400X	5.7-0.9	124.5X-800X	2.86-0.44
2X	35	41.5X-266.7X	8.6-1.33	55.6X-357.4X	6.4-1	83X-533.4X	4.3-0.7	166X-1066.8X	2.14-0.33

Picture Preview	P/N	Name	Description
	MZ411101	Micro Zoom Body with Detents	Micro Zoom Body with 0.7-4.5X zoom range, zoom ratio: 1:6.5, the pre-set stops for detents are at 0.7X, 1X, 2X, 3X, 4X and 4.5X.
	MZ412101	0.5X Video Coupler	Standard C-mount design, fitting 2/3"(max. size) CCD/CMOS, for MZ411101 zoom body.
	MZ412102	0.67X Video Coupler	Standard C-mount design, fitting 2/3"(max. size) CCD/CMOS, for MZ411101 zoom body.
	MZ412103	1X Video Coupler	Standard C-mount design, fitting 2/3"(max. size) CCD/CMOS, for MZ411101 zoom body.
	MZ412104	2X Video Coupler	Standard C-mount design, fitting 2/3"(max. size) CCD/CMOS, for MZ411101 zoom body.
	MZ413101	0.25X Objective Lens	Achromatic lens, for MZ411101 zoom body.
	MZ413102	0.5X Objective Lens	Achromatic lens, for MZ411101 zoom body.
	MZ413103	0.75X Objective Lens	Achromatic lens, for MZ411101 zoom body.
	MZ413104	1.5X Objective Lens	Achromatic lens, for MZ411101 zoom body.
	MZ413105	2X Objective Lens	Achromatic lens, for MZ411101 zoom body.
	MZ414105	Metallurgical Lens Adapter	26 x 36mm
	MZ414106	Metallurgical Lens Adapter	20.3 x 36mm

Scope Holder Size for MZ Zoom Body									
Name	MZ Series	MZ2 Series			MZ3 Series		MZ4 Series	MZ5 Series	MZ6 Series
P/N	MZ101101	MZ201101	MZ211101	MZ221101	MZ311101	MZ311102	MZ411101	MZ501101	MZ601101
Scope Holder Size	39mm	45mm			50mm		40mm	47mm	50mm



MZ5 MACRO ZOOM MICROSCOPE MZ501101 MACRO ZOOM LENS (OPTEM)

Parfocality-Maintain focus throughout the entire zoom range.
 Longer Working Distances-View a variety of specimens from 5.5 inches out through infinity.
 Magnification-With "close-up" lens = 1.0X-0.066X. Without "close-up" lens = 0.47X-0.084X
 Compatibility-Works with virtually all single chip, C-Mount video cameras.
 2/3" camera format or smaller recommended.

The new 18-108 Macro Video Zoom Lens which is designed to attach directly to a video camera. This is the ideal optical solution for those applications requiring large fields-of-view. This unique lens includes a special "close-up" lens that allows it to function with a working distance as close as 5.5-11 inches. When the "close-up" lens is removed, it will function from 11" out to infinity.

Macro Zoom lens (OPTEM) currently offers a complete line of higher-magnification Zoom Optical Systems providing the utmost in modularity and flexibility, and imaging precision. There are however, specific applications that demand larger fields-of-view, and the Macro Video Zoom Lens delivers just that and more.

Macro Zoom lens (OPTEM) is known worldwide as the leader in Zoom Technology. Regardless of your optical system requirements, Optem has your solution. Optem provides innovative microscope-type optical systems for a variety of applications, and its optical systems are typically used by industrial, medical and semiconductor manufacturers, wherever video microscopy is required.



Specifications

Working Distance: "close-up" lens: 5.5-11"; w/o "close-up" lens: 11"-
 Focal Length: 18mm - 108 mm
 Aperture: F/2.5-Closed
 Magnification w/close-up lens @Max. WD: 0.066-0.4X; @Min. WD: 0.17-1.0X
 Zoom Ratio: 6:1 (parfocal)
 Focus: External, Manual w/ locking screw
 Zoom Control: External, Manual
 Video Mount: C-Mount
 Camera Format: 2/3" or smaller
 Weight: 1 lb., 3 oz.
 Length: 159 mm
 Diameter: 62 mm maximum

Fields Of View (F.O.V.)

Working Distance	F.O.V. (mm) @ Low Mag.	F.O.V. (mm) @ High Mag.
5.5"	38 x 51	6 x 8
7"	60 x 80	10 x 14
8"	72 x 96	12 x 16
9"	83 x 110	14 x 19
10"	90 x 120	16 x 22
11"	100 x 133	17 x 23
Without Close-Up Lens		
11"	79 x 105	14 x 19
24"	198 x 264	33 x 44
36"	311 x 415	55 x 73
48"	415 x 553	70 x 93

(Based upon a 2/3" camera format. For 1/2" camera format, multiply F.O.V. x 0.72. For 1/3" camera format multiply F.O.V. x 0.54.)

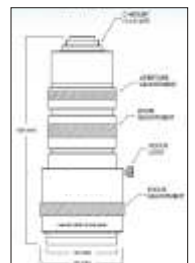


Picture Preview	P/N	Name	Description
	MZ501101	Macro Zoom Lens (OPTEM)	Designed for large field of view image, including a "close-up" lens to work from 5.5" - 11" working distance. When removing the "close-up" lens, it can provide the working distance from 11" to infinity. When working distance is 5.5", the magnification can reach up to 61.9.



MZ50-1000-DPL-A Macro Zoom Lens

Includes: MZ501101 Macro Zoom Lens, MA231101 Boom Stand, MA254201 CCD Focus Mounting Plate, MA311101 Fiber Optic Illuminator, MA322101 Dual Pipe Light Guide, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.



MZ511101 MACRO ZOOM LENS (NAVITAR)

Working distance 5" to infinity
 Parfocal over entire zoom range
 Highest mag. 1.1X at 5" (at camera)

The Macro Zoom lens (Navitar) is a close-focusing macro video lens which is versatile and specifically designed to be used in applications where objects over 1" in diameter must be imaged. It offers unsurpassed clarity and parfocal zoom capabilities and is compatible with cameras 2/3" or smaller.

The Macro Zoom lens (Navitar) is ideal for quality assurance, biomedical imaging, or assembly applications where an easy-to-view, sharp and true-to-life magnified image of your product can mean the difference between a shippable, top-quality end product and a costly manufacturing failure.


Macro Zoom lens Navistar offers a 6:1 zoom ratio or a 6X magnification power over a focal range of 18 mm to 108 mm. It comes with a close-up lens for imaging at distances from 5" to 12". When the close-up lens is removed, the working distance extends from 24" to infinity. Focus and aperture control are standard Macro Zoom lens (Navitar) features. Navitar also offers an 18-108 mm Bayonet Mount Zoom Lens (3CCD Camera) or a Macro Zoom lens (Navitar) locking sleeve.



Macro Zoom Lens (Navitar) Field of View High Magnification

W.D.	2/3"		1/2"		1/3"		1/4"	
	High Mag. (H x V)	Low Mag. (H x V)	High Mag. (H x V)	Low Mag. (H x V)	High Mag. (H x V)	Low Mag. (H x V)	High Mag. (H x V)	Low Mag. (H x V)
5"	8 x 6	48 x 36	5.8 x 4.4	35 x 26.3	4.3 x 3.2	25.9 x 19.4	2.9 x 2.2	17.5 x 13.2
6"	10 x 7.5	60 x 45	7.3 x 5.5	43.8 x 32.9	5.4 x 4.1	32.4 x 24.3	3.7 x 2.8	21.9 x 16.5
7"	12 x 9	72 x 54	8.7 x 6.6	42.6 x 39.4	6.5 x 4.9	38.9 x 29.2	4.4 x 3.3	26.3 x 19.7
8"	14 x 10.5	84 x 63	10.2 x 7.7	61.3 x 46	7.6 x 5.7	45.5 x 34	5.1 x 3.9	30.7 x 23.0
9"	16 x 12	96 x 72	11.7 x 8.8	70.1 x 52.6	8.6 x 6.5	51.8 x 38.9	5.9 x 4.4	35.1 x 26.3
10"	18 x 13.5	108 x 81	13.1 x 9.9	78.8 x 59.1	9.7 x 7.3	58.3 x 43.7	6.6 x 5.0	39.4 x 29.6
11"	20 x 15	120 x 90	14.6 x 11	87.6 x 65.7	10.8 x 8.1	64.8 x 48.6	7.3 x 5.5	43.8 x 32.9
12"	22 x 16.5	132 x 99	16.1 x 12	96.4 x 72.3	11.9 x 8.9	71.3 x 53.5	8.1 x 6.0	48.2 x 36.2
Remove the Close-Up Lens								
2'	42 x 30	252 x 180	30.7 x 21.9	184 x 131.4	22.7 x 21.1	136.1 x 97.2	15.4 x 11.0	92.0 x 65.7
2'6"	54 x 39	324 x 234	39.4 x 28.5	236.5 x 170.8	29.2 x 25.9	175 x 126.4	19.7 x 14.3	118.3 x 85.4
3'	66 x 48	396 x 288	48.2 x 35	289.1 x 210.2	35.6 x 25.9	213.8 x 155.5	24.1 x 17.5	114.6 x 105.1
3'6"	78 x 57	468 x 342	56.9 x 41.6	341.6 x 249.7	42.1 x 30.8	252.7 x 184.7	28.5 x 20.8	170.8 x 124.9
4'	90 x 66	540 x 396	65.7 x 48.2	394.2 x 289.1	48.6 x 36.5	291.6 x 213.8	32.9 x 24.1	197.1 x 144.6

(Taken from 2/3", 1/3 & 1/4" camera monitor systems with an approximate 10% overfill. All dimensions are in mm. Zoom adjustment comes with locking screw. Iris and focus adjustment can be modified for locking screws upon request.)

Picture Preview	P/N	Name	Description
	MZ511101	Macro Zoom Lens (Navitar)	Close-focusing macro video lens, 6:1 zoom ratio or a 6X magnification power over a focal range of 18 mm to 108 mm. It comes with a close-up lens for imaging at distances from 5" to 12". When the close-up lens is removed, the working distance extends from 24" to infinity. Objective size = 100 mm x 50mm, Camera format=2/3" .



MZ51-4000-A Macro Zoom Lens

MZ51-200-A Macro Zoom Lens

Includes: MZ511101 Macro Zoom Lens, MA221108 N Adapter Track Stand, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.



MZ51-200-A Macro Zoom Lens

MZ51-4000-A Macro Zoom Lens

Includes: MZ511101 Macro Zoom Lens, MA242101 Flexible Arm, MA254201 CCD Focus Mounting Plate, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.



MZ6 MONOCULAR VIDEO MICROSCOPE

This is a monocular video microscope, used with the high definition color CCD camera & TV together. It features long working distance, wide field of view, fine definition image, high performance, easy operation and complete accessories. The auxiliary lenses 0.3X, 0.5X, 0.75X, 1.5X and 2X are optional and available. MZ6 is widely used in inspecting, assembling, repair in electronic industry, biological section, jewel inspection, teaching demonstration and especially in observing the appearance of big object.

Specifications

Zoom Range of Zoom Body: 0.7X-4.5X
 Zoom Ratio: 1: 6.5
 Magnification: 3.5X-90X (observing through monocular eyepiece);
 20.7X-533.4X (Video display)
 Field of View: 2mm-51.43mm (observing through monocular eyepiece);
 0.67mm-17.14mm (Video display)
 Working Distance: 30mm-156mm
 Eyepiece Diopter Correction: ± 7 Diopter
 Eyepiece: 10X
 Auxiliary Lenses: 0.5X, 0.75X, 1.5X and 2X
 CCD Coupler: 1X

Picture Preview	P/N	Name	Description
	MZ601101	Monocular Video Microscope	0.7-4.5X Zoom body, zoom ratio: 1: 6.5. The eyepiece tube has adjustable diopter.
	MZ602101	1X Video Coupler	1X Video Coupler, C-mount design.
	MZ602111	10X Eyepiece	Wide field 10X eyepiece, 18mm field of view, the tube outside dia.: 23.2mm.
	MZ603101	0.5X Objective Lens	0.5X Objective, working distance: 156mm, for MZ6 Zoom body.
	MZ603102	0.75X Objective Lens	0.75X Objective, working distance: 102mm, for MZ6 Zoom body.
	MZ603103	1.5X Objective Lens	1.5X Objective, working distance: 44mm, for MZ6 Zoom body.
	MZ603104	2X Objective Lens	2X Objective, working distance: 30mm, for MZ6 Zoom body.

Optical Datasheet

Observing through monocular eyepieces

Objective Lens	Working Distance (mm)	Eyepiece	
		10X(18mm)	
		Mag.	FOV (mm)
0.5X	156	3.5X-22.5X	51.43-8
0.75X	102	5.25X-33.75X	34.3-5.33
Built-in(1X)	95	7X-45X	25.7-4
1.5X	44	10.5X-67.5X	17.14-2.67
2X	30	14X-90X	12.86-2

Video Display (Based on 14" Monitor and 1/3" CCD Camera)

Objective Lens	Working Distance (mm)	Coupler	
		1X	
		Mag.	FOV (mm)
0.5X	156	20.7X-133.4X	17.14-2.67
0.75X	102	31.1X-200X	11.43-1.78
Built-in(1X)	95	41.5X-266.7	8.6-1.3
1.5X	44	62.2X-400X	5.7-0.89
2X	30	83X-533.4X	4.3-0.67

Recommendation

Note: Displayed items are optional. (Inclusion; Exclusion)



MZ6-7000-A/MZ6-7000-D Monocular Video Microscope

MZ601101 0.7-4.5X Zoom Body, MZ602101 1.0X Coupler, MZ602111 10X Eyepiece, MZ603101 0.5X Objective Lens, MA237101 Big Base Post Stand, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply, GP080101 BNC-BNC Video Cable/DC133210 1.3M Color Digital Camera.

Select different Illuminator

P/N	Illuminator	MA311101 Fiber Optic Illuminator		MA342103 LED Ring Light
		MA321201 Annular Ring Light Guide	MA322101 Dual Pipe Light Guide	
MZ6-7000-AN-AMZ6-7000-AN-D		●	○	○
MZ6-7000-DPL-AMZ6-7000-DPL-D		○	●	○
MZ6-7000-LED-AMZ6-7000-LED-D		○	○	●

MS MEASUREMENT MICROSCOPE

MS Measurement Series Microscopes use 2 x 2" Manual Stage with Micrometer to measure the object.

MS742001 uses LCD microscope, and the cross line on the screen of LCD monitor.

MS741001 requires a digital camera and computer to realize the measurement function, and the cross hair is from the measurement software.

NEW!



MS4101-220
Includes: MV100411 8" LCD Video Zoom Microscope Body, MZ103104 1X Objective Lens, MA225401 76mm LED High Track Stand, MS121301 2 x 2" Manual Measurement Stage and MS742001 Micrometer Head(pair).

NEW!



MS4502-220
Includes: MV500010 Digital Video Microscope Body, MV491140 1X Objective Lens, MA225401 76mm LED High Track Stand, MS121301 2 x 2" Manual Measurement Stage, MS741001 Digimatic Micrometer Head(pair), and MS121211 Rotary Stage Attachment(optional).

MS121301 2X2" MANUAL MEASUREMENT STAGE

Specifications	
Dimensions: 50 x 50mm, on X and Y directions With accuracy of 0.005mm or above per 5mm Dimensions of Glass Window: 83 x 83mm	Dimensions of Glass: 91 x 91mm Weight: 2.5kg

NEW!



MS121301 2 x 2" Manual Measurement Stage

MS121211 ROTARY STAGE ATTACHMENT

Specifications	
The top of XY Dimensions: 150 x 150mm Diameter of Glass Window: 65mm, with 360 ° scale	For MS121301 Stage

NEW!



MS121211 Rotary Stage Attachment

MS741001 DIGIMATIC MICROMETER HEAD

Specifications	
Range: 2"/50mm Resolution: 0.00005"/0.001mm Instrumental Error: +-0.0001" Quantizing Error: +-1count Measuring Face: With carbide tip Spindle: Non-rotating type Stem Diameter: 18mm (+0 -0.02)/ 0.907" (+0 -0.0008) Display: LCD 6-digit sign	Functions: Digimatic code output; Preset; Direction changeover; ZERO->(-)ABS changeover; Inch->(-)mm conversion; Power ON->(-)OFF Operation Temperature: 5 -40 Storage Temperature: -10 -60 Battery: Silver oxide cells (SR44) 2 pcs. Weight: 0.5Kg(1.1lbs)



MS741001 Digimatic Micrometer Head





MS742001 MECHANICAL MICROMETER HEAD

Specifications	
Graduation: 0.005mm, 0.001mm or .0001" Spindle Pitch: 1mm or .025" Measuring Face: plane or carbide sphere (rigidity more than HRA90),	Polished Surface Ruler Face: white anodic alumina Precision: ± 2 μ m Stem Diameter: 18mm / .709"

NEW!



MS742001 Mechanical Micrometer Head

Picture Preview	P/N	Name	Description
	MS121301	2 x 2" Manual Measurement Stage	XY Travel range 2 x 2" (50 x 50mm) , the top of XY Dimensions: 150 x 150mm. Accuracy: 0.005mm or above per 5mm. Glass window: 83 x 83, glass size: 91 x 91, weight: 2.5KG.
	MS121211	Rotary Stage Attachment	The top of XY Dimensions: 150 x 150mm; Diameter of glass window: 65mm, with 360 ° scale, for MS121301 Stage.
	MS741001	Mitutoyo Digimatic Micrometer Head	Series 164-162; Measuring Travel 2 x 2"(50 x 50mm); Resolution: 0.00005"/0.001mm; Quantizing error: ± 0.0001".
	MS742001	Micrometer Head	Mandrel screw thread: 1mm or .025"; Precision: ± 2 μ m; Outer dia. of bushing: 18mm/.709".



M-LCD VIDEO ZOOM MICROSCOPE

0.7X-4.5X Zoom Body with detents
 16ms high definition color
 35 ° Angle 3D Attachment
 Built-in LED Ring Light

High brightness and contrast,
 low power consumption
 Independent video display
 Laser Pointer

M-LCD Video Microscope has renovated the traditional way of microscopic observation and adopted a modern way of electronic imaging. This patented microscope makes the observation more comfortable and thoroughly resolves the fatigue caused by using a traditional microscope at work for a long time. It features high performance of CCD image capturing, high resolution of LCD display and reverting genuine images. Based on 2D observation, 3D angle attachment is added to obtain 3D multi-angle observation. Laser locating function can easily identify the position of observation. This unit integrates magnification, imaging, display, LED illumination and laser locating functions. Compact design, light weight and low power consumption make the operation simple and convenient. M-LCD Video Microscope can be conveniently applied to testing and inspecting in product assembly, research and teaching fields.

Specifications

Zoom Body of Zoom Range: 0.7X-4.5X	Power Supply: AC 85-265V, 50/60Hz
Zoom Ratio: 1: 6.5	LED Ring Light: DC 12V, with adjustable brightness
Total Magnification: 2.5X-152.4X (8" LCD Microscope) ; 3.2X-198.1X (10.4" LCD Microscope)	3D Angle Attachment: 35 ° for 0.75X objective lens
Field of View: 1.3mm-81.6mm	Laser Pointer: 650nm
Working Distance: 46mm-331mm	Video Output: BNC connector/ S-Video connector
Resolution: 640 × 480 (8" LCD Microscope) ; 1024 × 768 (10.4" LCD Microscope)	Body Size: suitable for 76mm scope holder
Video Angle: 150 °	LCD Video Zoom Microscope Body with reticle function
Objective Lenses: 0.3X, 0.5X, 0.75X, 1X(standard), 1.5X, 2X	
W.B.: Manual	

Recommendation

M-LCD-100-S Video Zoom Microscope



M-LCD-100-S includes:

MV100412 10.4" LCD Video Zoom Microscope Body
 (Optional 8" LCD Screen)
 MV191101 35 ° Angle Attachment
 MA211101 76mm Post Stand

M-LCD-1000-S includes:

MV100412 10.4" LCD Video Zoom Microscope Body
 (Optional 8" LCD Screen)
 MV191101 35 ° Angle Attachment
 MA231101 Boom Stand
 MA251101 76mm E-Arm



M-LCD-2000-S includes:










MV100412 10.4" LCD Video Zoom Microscope Body
 (Optional 8" LCD Screen)
 MV191101 35 ° Angle Attachment
 MA232101 Dual Arm Boom Stand
 MA251101 76mm E-Arm

M-LCD-5000-S includes:

MV100412 10.4" LCD Video Zoom Microscope Body
 (Optional 8" LCD Screen)
 MV191101 35 ° Angle Attachment
 MA241102 Pneumatic Arm

Application

The video out connector is for connecting with the other video monitor or the signal process system when needed. When required, the LCD Video Microscope can be connected to a computer, but a frame grabber and an operation system need to be installed in the computer. The microscope's video signal is converted and transferred into a computer via video out connector and a frame grabber.

Picture Preview	P/N	Name	Description
	MV100411	8" LCD Video Zoom Microscope Body	8" LCD Monitor; PAL or NTSC Video Output; Magnification 11.9X-76.2X; 0.7-4.5X zoom body with detents; Zoom ratio 1:6.5; Built-in LED Ring Light.
	MV100412	10" LCD Video Zoom Microscope Body	10.4" LCD Monitor; PAL or NTSC Video Output; Magnification 15.4X-99.1X; 0.7-4.5X zoom body with detents; Zoom ratio 1:6.5; Built-in LED Ring Light.
	MZ103101	0.3X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 331.5mm, for MZ Series Micro Zoom Lens.
	MZ103102	0.5X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 199.1mm, for MZ Series Micro Zoom Lens.
	MZ103103	0.75X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 131mm, for MZ Series Micro Zoom Lens.
	MZ103104	1X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 97.3mm, for MZ Series Micro Zoom Lens.
	MZ103105	1.5X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 60.9mm, for MZ Series Micro Zoom Lens.
	MZ103106	2X Objective Lens	Semi-plan achromatic design, outside dia. 30mm, working distance 46.3mm, for MZ Series Micro Zoom Lens.
	MV191101	35 ° Angle Attachment	35 ° Angle Attachment with a 0.75X Objective Lens, for MV100411 or MV100412 LCD Zoom Microscope Body.
	MV191111	35 ° Angle Attachment	35 ° Angle Attachment with a 0.5X Objective Lens, for MV100411 or MV100412 LCD Zoom Microscope Body.
	MV193101	Body-BNC Video Cable	1.5m BNC Video cable, provides a Video Output to connect with another Monitor or a Frame Grabber and a computer.
	MV193102	BNC-RCA Video Cable	1.5m BNC to RCA Video Cable
	MV193103	Body-S-Video Video Cable	1.5m BNC cable, provides a S-Video Output to connect with another Monitor or a Frame Grabber and a computer.
	MV193105	S-Video Cable	1.5m S-Video cable, provides a S-Video Output to connect with another Monitor or a Frame Grabber and a computer.
	MV193106	BNC-S-Video Video Cable	1.5m BNC-S-Video Video Cable
	MV193201	Laser Pointer	Wave Length: 650nm; Input Voltage: 4.5V, for LCD microscope.

Optical Datasheet

8" LCD Video Zoom Microscope(Based on 1/3" CCD Camera)					
Objective Lens	Working Distance (mm)	Couplers			
		0.35X		0.5X(Standard)	
		Mag.	FOV (mm)	Mag.	FOV (mm)
0.3X	331.5	2.5X-16X	81.6-12.7	3.6X-22.9X	57.1-8.9
0.5X	199.1	4.2X-26.7X	49-7.6	5.9X-38.1X	34.3-5.3
0.75X	131	6.2X-40X	32.7-5.1	8.9X-57.2X	22.9-3.6
1.0X (Standard)	97.3	8.3X-53.3X	24.4-3.8	11.9X-76.2X	17.1-2.7
1.5X	60.9	12.5X-80X	16.3-2.5	17.8X-114.3X	11.4-1.8
2.0X	46.3	16.6X-106.7X	12.2-1.9	23.7X-152.4X	8.6-1.3

10.4" LCD Video Zoom Microscope(Based on 1/3" CCD Camera)					
Objective Lens	Working Distance (mm)	Couplers			
		0.35X		0.5X(Standard)	
		Mag.	FOV (mm)	Mag.	FOV (mm)
0.3X	331.5	3.2X-20.8X	81.6-12.7	4.6X-29.7X	57.1-8.9
0.5X	199.1	5.4X-34.7X	49-7.6	7.7X-49.5X	34.3-5.3
0.75X	131	8.1X-52X	32.7-5.1	11.6X-74.3X	22.9-3.6
1.0X (Standard)	97.3	10.8X-69.3X	24.5-3.8	15.4X-99.1X	17.1-2.7
1.5X	60.9	16.2X-104X	16.3-2.5	23.1X-148.6X	11.4-1.8
2.0X	46.3	21.6X-138.7X	12.2-1.9	30.8X-198.1X	8.6-1.3



Call for a Detailed Catalog

M-N3D Video Microscope



M-N3D VIDEO MICROSCOPE

- 0.7X-4.5X Zoom Body
- High resolution, large field of view and high zoom ratio
- 35 ° angle attachment with motorized control, the rotary speed is adjustable.
- Laser pointer and side light illumination
- Bright LED lights with area control
- Digital and Analog microscope video systems are optional

M-N3D Microscope features the quality optical system, high resolution, large field of view, high zoom ratio, novel design and one-up technology, easy and automatic operations. Includes: Motorized zooming, motorized observation angle for changing and optional motorized focusing. The speed can be adjusted while changing observation angle. With the angle attachment, the microscope can realize 3D image effects for observing the components and deep holes. The LED lights can generate high brightness. Theoretically the service life of LED lights can reach 20,000 hours. The LED lights with area control function can illuminate from different angles for convenient multi-angle inspections. The M-N3D Microscope can be widely used in micro-electronics, automated monitoring and testing industries. By selecting the appropriate objectives and video couplers, different magnification, field of view and depth of field can be acquired. Digital and Analog video systems can meet the different users' demands.

Specifications

Analog Microscope Video System: 1/3" color camera, 470 lines scanning, BNC video connector. NTSC/PAL is optional
 Digital Microscope Video System: 1/2" CMOS, 1.3M pixels, USB2.0, 22f/s, with cross line and image acquisition functions.
 Zoom Range of Zoom Body: 0.7X-4.5X
 Zoom Ratio: 1:6.5
 Optical Magnification: 4.65X-1080X
 Field of View: 0.3mm-77mm
 Working Distance: 46mm-331mm

Video Couplers: 0.35X/0.5X(Standard)/0.75X/1X/1.5X/2X(optional)
 Semi-plan Achromatic Objectives: 0.3X/0.5X/0.75X/1X/1.5X/2X(optional)
 Infinity Objectives: 5X/10X/20X/50X(optional)
 Rotary Observation: 35 ° Angle
 Attachment with a 0.75X Objective Lens(Standard)
 Illumination: High bright LED lights with area control
 Laser Pointer: wavelength 650nm
 Input Voltage: 85-240V, 50/60HZ

Recommendation



M-N3D-200-A Analog Video Microscope

- M-N3D-200-A includes:**
 MV400010 Microscope Body
 Track Stand (with M-N3D focusing control)



M-N3D-220-XY-D Digital Video Microscope



- M-N3D-220-XY-D includes:**
 MV400020 M-N3D Digital Microscope Head
 Stage LED High Track Stand (with M-N3D focusing control)



M-N3D-5000-A Analog Video Microscope

- M-N3D-5000-A includes:**
 MV400010 Microscope Body
 Pneumatic Arm Stand (with M-N3D focusing control)

















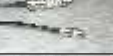


M-N3D-1000-DPL-D Digital Video Microscope

- M-N3D-1000-DPL-D includes:**
 MV400020 Microscope Body
 Boom Stand (with M-N3D focusing control)
 MA311101 Fiber Optic Illuminator
 MA322101 Dual Pipe Light Guide



Optical Datasheet (Based on 14" Monitor and 1/3" CCD Camera)

Objective Lens	Working Distance (mm)	Couplers											
		0.35X		0.5X(Standard)		0.75X		1X		1.5X		2X	
		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
1X	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
5X	44.5	77.5X-510X	4.8-0.75	100X-680X	3.4-0.53	150X-965X	2.29-0.36	200X-1360X	1.7-0.26	300X-1930X	1.14-0.18	400X-2720X	0.9-0.13
10X	34	155X-1020X	2.4-0.37	200X-1350X	1.7-0.26	300X-1930X	1.14-0.18	400X-2700X	0.9-0.13	600X-3860X	0.57-0.09	800X-5400X	0.4-0.07
20X	31	310X-2050X	1.2-0.19	400X-2700X	0.9-0.13	600X-3860X	0.57-0.09	800X-5400X	0.4-0.07	1200X-7720X	0.28-0.04	1600X-10800X	0.2-0.03
50X	20.5	775X-5100X	0.48-0.07	1000X-6800X	0.34-0.05	1500X-9650X	0.23-0.04	2000X-13600X	0.17-0.03	3000X-19300X	0.12-0.02	4000X-27200X	0.09-0.01

Picture Preview	P/N	Name	Description
	MV400010	M-N3D Analog Microscope Head	Zoom range of zoom body: 0.7X-4.5X; 470 TV lines horizontal resolution, LED light illuminator with multi-angle functions lighting from different angles to the inspected area, electrically controlled ; Power supply: 85-256V, 50/60Hz; With observation function of angle rotation.
	MV400020	M-N3D Digital Microscope Head	Zoom range: 0.7X-4.5X; 1.3M pixel digital camera; LED light illuminator with multi-angle functions lighting from different angles to the inspected area, electrically controlled ; Power supply: 85-256V, 50/60Hz; With observation function of angle rotation.
	MV491120	0.3X Objective Lens	Semi-plan achromatic objective, outer diameter 30mm, working distance 331mm.
	MV491130	0.5X Objective Lens	Semi-plan achromatic objective, outer diameter 30mm, working distance 198mm.
	MV491110	0.75X Objective Lens	Semi-plan achromatic objective, outer diameter 30mm, working distance 131mm.
	MV491140	1X Objective Lens	Semi-plan achromatic objective, outer diameter 30mm, working distance 96mm.
	MV491150	1.5X Objective Lens	Semi-plan achromatic objective, outer diameter 32.5mm, working distance 63mm.
	MV491160	2X Objective Lens	Semi-plan achromatic objective, outer diameter 32.5mm, working distance 46mm.
	MA121102	10X Infinity Corrected Long Working Distance Objective	10X Plan achromatic objective, parfocal distance 95mm, working distance 34mm, focal length 21mm, N.A. 0.28.
	MA121201	5X Infinity Corrected Long Working Distance Objective	5X Plan achromatic objective, parfocal distance 95mm, working distance 44.5mm, focal length 40mm, N.A. 0.13.
	MA121203	20X Infinity Corrected Long Working Distance Objective	20X Plan achromatic objective, parfocal distance 95mm, working distance 31mm, focal length 10mm, N.A. 0.29.
	MA121204	50X Infinity Corrected Long Working Distance Objective	50X Plan achromatic objective, parfocal distance 95mm, working distance 20.5mm, focal length 4mm, N.A. 0.42.
	MV491111	35° Angle Attachment	35° Angle Attachment with a 0.75X Objective Lens, for 3D observation.
	MV493101	LED Incident Light	High bright LED incident light, power consumption: 1W.
	MV193102	BNC-RCA Video Cable	1.5m BNC to RCA Video Cable
	MV193106	BNC-S-Video Video Cable	1.5m BNC-S-Video video Cable
	GP080101	BNC-BNC Video Cable	Length 2M (6.56ft.)
	GP080102	BNC-BNC Video Cable	Length 1M (3.28ft.)

NEW!



Call for a Detailed Catalog

DM-220-XY Digital Video Microscope

DM DIGITAL VIDEO MICROSCOPE

Combined the traditional optical technology and digital imaging technology, this updated product can offer high quality video images and solve the problem by using a traditional microscope which requests a strict working environment. With the functions of real-time photography and video, it can meet various needs.

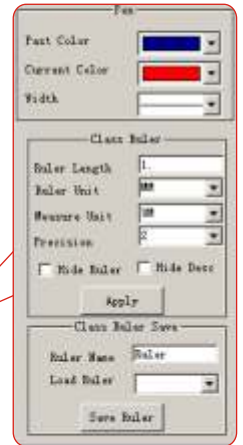
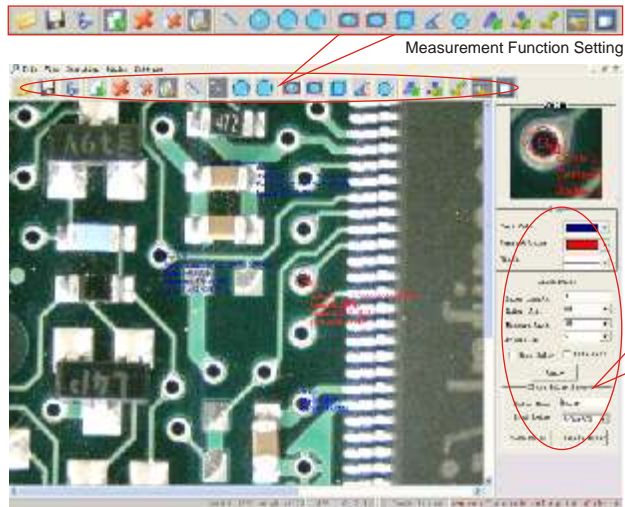
Specifications

- Zoom Range of Zoom Body: 0.7-4.5X
- Zoom Ratio: 1: 6.5
- The pre-set stops for detents are at 0.7X, 1X, 2X, 3X, 4X and 4.5X
- Semi-plan Achromatic Objectives: 0.3X, 0.5X, 0.75X, 1X and 2X
- Metallurgical Objective Lenses: 5X, 10X
- Image Sensor: 1.3M pixel 1 / 2" Color CMOS
- Pixel Size: 5.2 μm × 2 μm
- Spectrum Response: 400nm-1000nm
- Scanning Type: Progressive scanning
- Exposal Type: ERS
- Resolution: 1280 × 1024
- Transmission Rate: 16f/s@1280 × 1024 30f/s@640 × 480 30f/s@320 × 240
- White Balance: Manual operation supported
- Exposal Control: Manual operation supported
- Image Output: USB2.0, 480Mb/s.
- Supporting image capture, kinescope and measuring
- Can provide dual illuminated LED light
- Laser point orientation can help to indicate object observed exactly
- Working Temperature: 0 -50
- Dimensions of Body: 212 × 90 × 148mm
- Weight: 1.35kg

DM-220-XY Digital Video Microscope
Includes: MV500010 Digital Video Microscope Body,
 MA225601 76mm Stage LED High Track Stand



Measurement Functions



Ruler Setting

DM-220 Digital Video Microscope



DM-220 includes:
 MV500010 Digital Video Microscope Body
 MA225401 LED High Track Stand



DM-1000-DPL Digital Video Microscope

DM-1000-DPL includes:
 MV500010 Digital Video Microscope Body
 MA231101 Boom Stand
 MA251101 E-Arm
 MA311101 Fiber Optic Illuminator
 MA322101 Dual Pipe Light Guide
 MA239405 Fiber Optic Illuminator Holder(optional)



Optical Datasheet (Based on 14" Monitor)

Objective Lens	Working Distance (mm)	Mag.	FOV (mm)
0.3X	331	4.7X-30X	76.2-11.9
0.5X	199	7.8X-50X	45.7-7.1
0.75X	131	11.7X-75X	30.5-4.7
1X	97	15.6X-100X	22.9-3.6
1.5X	61	23.3X-150X	15.2-2.4
2X	46	31.1X-200X	11.4-1.8
5X	44.5	77.8X-500X	4.6-0.7
10X	34	155.6X-1000X	2.3-0.4



DM-9000-DPL Digital Video Microscope



DM Digital Video Microscope Carrying Case



DM-9000 Digital Video Microscope



DM-9000-DPL includes:

- MV500010 Digital Video Microscope Body
- MA205111 Tripod
- MA205112 Tilt Ball Head
- MA205113 Super Mag Slider
- MA205114 Extension Bar
- MA311101 Fiber Optic Illuminator
- MA322302 Dual Pipe Light Guide

DM-9000 includes:

- MV500010 Digital Video Microscope Body
- MA205111 Tripod
- MA205112 Tilt Ball Head
- MA205113 Super Mag Slider
- MA205114 Extension Bar

Picture Preview	P/N	Name	Description
	MV500010	Digital Video Microscope Body	0.7-4.5X Zoom body, zoom ratio 1:6.5, provides a USB2.0 Video output. White paint.
	MV500011	Digital Video Microscope Body	0.7-4.5X Zoom body, zoom ratio 1:6.5, provides a USB2.0 Video output. Dark Gray paint.
	MV501111	5X Metallurgical Objective Lens	5X Plan achromatic objective, parfocal distance 95mm, working distance 44.5mm, focal length 40mm, N.A. 0.13. Depth of View: 14 μm; Field of View: 4.8mm(24lens); Resolution: 2 μm, for DM microscope body.
	MV501112	10X Metallurgical Objective Lens	10X Plan achromatic objective, parfocal distance 95mm, working distance 34mm, focal length 21mm, N.A. 0.28. Depth of View: 3.5 μm; Field of View: 2.4mm(24lens), Resolution: 1 μm, for DM microscope body.
	MV501122	Polarizer	For DM Video Zoom Microscope
	MV591110	LED Side Light	Voltage: 3.3V; Power consumption: 1W.
	MV591120	Rechargeable Battery	4.8V 2200mA/h Nickel hydrogen battery
	MV591121	Battery Charger	Input Voltage: 100-240V 50/60HZ; Output Voltage: 6.0-6.5V; Current: 250-350mA.
	MV591131	Carrying Case	Case Dimensions: 390mm(L) x 260mm(W) x 140mm(H)



CMOS COLOR CAMERA

This Digital Camera utilizes the USB 2.0 interface and can be connected to a computer without a power supply. Adopts 1.30 (or 3.0) mega pixels 1/2" industry grade color CMOS image sensor, and the output images have high signal-to-noise ratio. Enhanced AWB arithmetic, and the color is real and flamboyant.

This innovative USB 2.0 digital camera can be directly connected to a computer through the USB 2.0 interface. It can make observation, photography, video recording, measurement, storage and output printing of high-resolution images in any area of the image on the screen. It has unique measurement function and can measure the points, beeline, diameter of a circle, angle and arc of the image; It can conduct secondary editing, saving and printing, and meet the different demands of different customers. It can be applied to biological observation, medical analysis, family education, inspecting electronic components and identification.

	DC133210/DC133511	DC135210/DC135511
Image Sensor	1/2" Color CMOS Image Sensor	
Pixel Size	5.2 μm × 5.2 μm	3.2 μm × 3.2 μm
Spectrum Response	400 -1000nm	
Sensitivity	1.8V/lux-sec@550nm	>1.0 V/lux-sec@550nm
Scan Method	Progressive scanning	
Exposal Type	ERS (Electronic Rolling Shutter)	
Resolutions	1280 × 1024	2048 × 1536
Transmission Rate	16f/s @1280 × 1024	6f/s @2048 × 1536
White Balance	Supports Automatic/Manual Operation	
Automatic Exposure Control	Supports Automatic/ Manual Operation	
Image Output	USB2.0, 480 Mb/s	
Power Supply	USB2.0 power supply, 192mA	
Dynamic Range	62 dB	
Working Temperature	0 -50	
Programmable Control	Sizes, quality, luminance, gain, exposal time, contrast, saturation, resolution and Gamma of image	

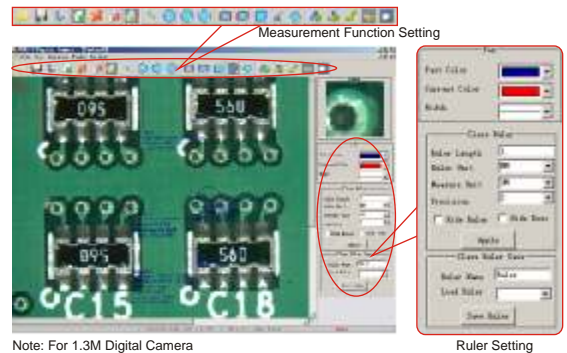


1.3M Digital Camera

Measurement Functions

Professional non-contact measurement tool, making the micro measurement simple and convenient.

- AOI function: AOI provides the user with a function of high-speed, sectional and consecutive video display in real time. It can trace the detail of the image flexibly.
- Image measurement: changing the traditional measurement method- Contact measurement. Can provide multiple measurement methods and make the measurement results more scientific and accurate.
- Image Capture: instant capture and Time capture.
- Video Capture: dynamic image recording. Can record the slight changes of the Image in real time.



Picture Preview	P/N	Name	Description
	DC133100	1.3M CMOS Color Board Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 1280 × 1024, metal housing, with capturing software.
	DC135100	3.0M CMOS Color Board Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 2048 × 1536, metal housing, with capturing software.
	DC133210	1.3M CMOS Color Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 1280 × 1024, with measurement software.
	DC135210	3.0M CMOS Color Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 2048 × 1536, with capturing software.
	DC133511	1.3M CMOS Color Eyepiece Camera	USB2.0, 1/2" CMOS; Max. Resolution: 1280 × 1024; 0.5X lens, lens diameter 23.2mm; Eyepiece adapter 23.2mm/30mm; With measurement software.
	DC135511	3.0M CMOS Color Eyepiece Camera	USB2.0, 1/2" CMOS; Max. Resolution: 2048 × 1536; 0.5X lens, lens diameter 23.2mm; Eyepiece Adapter: 23.2mm/30mm; With software.
	DC123200	1.3M CMOS Black/White Camera	Black and White Camera, USB2.0 1/2" CMOS; Max. Resolution: 1280 × 1024; 0.5X lens, lens diameter 23.2mm; with 23.2mm/30mm eyepiece adapter.

COLOR DIGITAL CAMERA

This Digital Camera utilizes the USB 2.0 interface and can be connected to a computer without a power supply. Adopts 1.30 (or 3.0) mega pixels 1/2" industry CMOS image sensor, and the output images have high signal-to-noise ratio. The high-resolution image can be previewed at the speed of more than 25 f/s, and the image preview can realize synchronized operation under the lens. Enhanced AWB arithmetic, and the color is real and flamboyant



This series of USB2.0 digital camera consists of high-speed USB2.0 adapter and CMOS sensor, and has different models from black and white to color. It can be used widely in different fields such as pattern recognition, industry test, medical microscopic image, traffic control, machine vision and etc.

Specifications

	DC113200/DC113210	DC115200
Image Sensor	1/2" Color CMOS Sensor	
CCD Total Pixels	5.2 μm × 5.2 μm	3.2 μm × 3.2 μm
Spectrum Response	400nm -1000nm	
Sensitivity	1.8V/lux-sec@550nm	>1.0 V/lux-sec@550nm
Scanning System	Interlace scan	
Exposure System	ERS (Electronic Rolling Shutter)	
Resolution	1280 × 1024	2048 × 1536
Transmission Rate	16f /s@1280 × 1024	5f /s@2048 × 1536
White Balance	Auto/Manual	
Exposure Control	Auto/Manual	
Output Mode	USB2.0, 480Mb/s	
Power	USB2.0, 5V	
Dynamic Range	61dB	
Dimensions	57.20 × 50.50 × 46.2mm	
Operation Temperature	0 - 50	

DC531110 HIGH SPEED CMOS COLOR DIGITAL CAMERA

Specifications

	DC531110
Description	High speed USB2.0 Digital Camera
Image Sensor	1/2" 1.3 mega pixels CMOS
Pixel Size	5.2 μm × 5.2 μm
Spectrum Response	400nm-1000nm
Sensitivity	1.8V/lux-sec@550nm
Scanning Type	Progressive Scanning
Exposal Type	ERS (Electronic Rolling Shutter)
Resolution	1280 × 1024
Transmission Rate	30f/s@1280 × 1024, 107f/s@640 × 480, 350f/s@320 × 240
White Balance	Automatic/Manual Operations Supported
Exposal Control	Automatic/Manual Operations Supported
Image Output	USB2.0, 480Mb/s
Power Supply	USB2.0 power supply
Dynamic Range	62dB
Programmable Control	Image size, brightness, gain, exposal time
Software Function	Image display, image processing, kinescope
Working Temperature	0 -50
Dimensions	84 × 73 × 38mm
Optional Lens	High resolution micro lens or standard C/CS industrial lens
Application Scope	Real time image capture, acquisition of biological identification, industrial test and inspection, traffic administration, machinery vision and etc.



It features high speed USB2.0 Digital Camera with USB2.0 interface and CMOS sensor. Users can capture real time high definition image, and the highest velocity is up to 30FPS@1280 × 1024, 107FPS@640 × 480 and 350FPS@320 × 240 with real-time image interface control. It can be widely used in high speed image capture, acquisition of biological identification, industrial test and inspection, traffic administration, machinery vision and etc.

Picture Preview	P/N	Name	Description
	DC113200	1.3M Color Digital Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 1280 × 1024, metal housing, with capturing software.
	DC113210	1.3M Color Digital Camera with Measurement Software	DC113200 With Measurement Software VS 1.0 Version
	DC115200	3.0M Color Digital Camera	USB 2.0, 1/2" CMOS, Max. Resolution: 2048 × 1536, metal housing, with capturing software.
	DC531110	High Speed CMOS Color Digital Camera	USB2.0, 1/2" CMOS; Max. Resolution: 1280 × 1024; 22 frames per second (22f/s) .

NEW!



DC413101 VGA CMOS COLOR DIGITAL CAMERA

DC413101 VGA 1.3M CMOS Color Digital Camera is newly developed. VGA 1.3M CMOS Color Digital Camera can realize the functions of viewing the progressive scanning and high definition images in real time without connecting to PC. DC413101 VGA 1.3M CMOS color digital camera has built-in industry grade 1.3M color 1/2" CMOS image sensor and standard VGA signal output. Users can view the video images by directly connecting to VGA monitor, projector and etc. Comparing with images captured by analog camera with 740 × 576 resolution (480 lines), the quality of VGA 1.3M CMOS images equals to 1280 × 1024 resolution (750 lines), with maximum frame rate at 25 fps. Users can superpose cross hair, freeze the frame on the video images, and control exposure speed, adjust the parameters of red, green, and blue gains by operating the buttons on the camera, and the images have no jitter and noises. VGA 1.3M CMOS color digital camera provides users a perfect solution to view high-resolution video images without PC.

Application Fields: Can be applied in upgrading high-definition video microscope, analog video display station, video microscope, and in the other fields requiring high definition real time display, comparison and capture.

Specifications



	DC413101
Image Sensor	1/2" 1.3M Color CMOS
Max. Resolutions	1280 × 1024
Pixel Size	5.2 μm × 5.2 μm
Video Output	Standard VGA Adapter
Max. Frame Rate	25fps
Shutter Speed	1/1.6 to 1/2, 500 sec.
Sensitivity	1.8V/lux-sec@550nm
Dynamic Range	61dB
SNR	45dB
Lens Interface	C/CS
Control Functions	Shutter pace; Red/blue/green gain; Manual white balance; Superposing cross hair; Freezing images and etc.
Working Temperature	0 -60
Power Consumption	2.1W
Dimensions	96 × 72 × 47mm

DC442101 VGA CMOS COLOR DIGITAL CAMERA

VGA high definition digital camera with high-performance digital image engine can realize image acquisition, image processing, image output display, image data output and etc. which are usually accomplished by high-performance camera with high-speed image acquisition card and high-performance computer. VGA CMOS Color Digital Camera can be widely used in optical precision instrument, industrial inspection, precise monitoring and the collection of verification on criminal investigation.

Specifications



	DC442101
Image Sensor	1/2.5" 0.8M Color CMOS
Resolutions	1024 × 768
Pixel Size	5.2 μm × 5.2 μm
Max. Frame rate	60fps
Color Adjustment	RGB three-color independent adjustment
Output Color	24bit RGB output
Low Light Mode	Low Light Mode can enhance the sensitivity automatically
Exposal Control	Manual
Lens Interface	C-Mount
Output	Computer graphics card standard: D-sub, 15 pin analog signal
Voltage	DC 5V
Working Temperature	0 -60
Working Humidity	20%-80%
Dimensions	70 × 52 × 51mm

Picture Preview	P/N	Name	Description
	DC413101	VGA 1.3M CMOS Color Digital Camera	1/2" CMOS; Max. Resolution: 1280 × 1024; Frame Rate 25fps; VGA Output; Lens Mount: C-Mount.
	DC442101	VGA Color Digital Camera	1/2.5" CMOS; Max. Resolution: 1024 × 768; Frame Rate 60fps; VGA Output; Lens Mount: C-Mount.

COLOR CCD CAMERA



Specifications

	GP020101	GP020111	GP020201	GP020211
TV System	NTSC	PAL	NTSC	PAL
Image Sensor	1/3" CCD Image Sensor		1/2" CCD Image Sensor	
CCD Total Pixels	816(H) x 495 (V)	798(H) x 548(V)	811(H) x 508(V)	795(H) x 596(V)
Scanning System	525 lines, 60 Frames/sec	625 lines, 50 Frames/sec	525 lines, 60 Frames/sec	625 lines, 50 Frames/sec
Sync System	Internal			
Minimum Illumination	0.8Lux F1.2 5600 °K		0.4Lux F1.2 5600 ° K	
Resolution	470/580 TVL (Enhanced)			
S/N Ratio Typical (MAX)	52dB (MIN) / 60dB (TYP) (AGC OFF)			
White Balance	Mode	ATW / AWB (Zero color rolling)		
	Range	3200-10000 ° K (2200-15000 °K/with S Filter)		
Mirror Function	ON/OFF			
B.L.C. Function	ON/OFF			
Zoom Function	ON/OFF			
Auto Iris	A.E.S. / VIDEO-IRIS /DC-IRIS			
Electronic Shutter (A.E.S.)	1/60-1/120,000 sec	1/50-1/120,000 sec	1/60-1/120,000 sec	1/50-1/120,000 sec
Video Output	1.0V p-p Composite video at 75			
Gamma Correction	0.45			
Gain Control	ON /OFF			
Operation Temperature	-20 - 50			
Operational Humidity	Within 85% RH			
Power Supply	DC12V ± 1V / 110mA			
Dimensions	40 x 50 x 58mm		38.33 x 38.33 x 56.66mm	

COLOR CCD CAMERA



Specifications

	GP020104	GP020114
TV System	NTSC	PAL
Image Sensor	1/3" CCD Image Sensor	
Sync System	Internal	
Scanning System	2:1	
Video Output	1.0V p-p Composite video at 75	
Resolution(H)	450Lines(Y/C480Lines)	
Minimum Illumination	1.0Lux F1.2 (AGC:H)	
Gain Control	ON=8-36 (HI) 8-24 (LO) OFF-12	
SNR	50dB	
Gamma Correction	0.45/1.0	
BLC	ON /OFF	
Electronic Shutter (A.E.S.)	EI 1/50-1/100,00 sec FL 1/120 sec	
Electronic Shutter (M.E.S.)	OFF/(1/250,1/500,1/1000,1/2000,1/4000)	
White Balance	Auto, P.W.B, 3200 °K, 4200 °K, 5100 °K, 6300 ° K	
Auto Iris	VIDEO	
Lens Interface	CS	
Power Supply	DC12V ± 10% / 190mA	
Operation Temperature	-10 -40	
Storage Temperature	-30 -70	
Dimensions	35.5 x 44 x 64.5mm	
Weight	160g	



COLOR CCD CAMERA

It features high resolution with 1/3" color CCD board level camera that offers 480 TV Lines and 10-Bit DSP in a very compact board configuration (32 x 32mm). These low cost cameras offer, as an option, user programmable DSP and setup. Available in NTSC and PAL format.

Specifications












	GP020105	GP020115
Image Sensor	1/3" Color IT CCD	
Formats	NTSC	PAL
Scanning System:	2:1 Interlace	
Effective Picture Element	768 (H) x 494 (V)	752 (H) x 582 (V)
Horizontal Resolution	480 TV Lines	
Horizontal Frequency	15.734 kHz	15.625KHz
Vertical Frequency	59.94 Hz	50.00Hz
Sync System	Internal	
Minimum Illumination	0.19 Lux @ F1.2, 50 IRE (AGC On)	
S/N Ratio	>48dB (AGC Off)	
Gamma	0.45	
DSP	10-Bit DSP	
White Balance	Auto	
Mirror Function	Normal Mirror Selectable	
Serial Port	RS-232C Serial I/O Port (On Select Models)	
Electronic Shutter	1/60-1/100,000 Sec.	1/50-1/100,000 Sec.
Fixed Shutter	1/60 Fixed	
Flicker Compensation Mode	On/Off	
Electronic Iris	1/60(1/50)-1/100,000 Sec.	
Auto Iris	Direct Drive Control	
BLC	On/Off	
Lenses	CS Mount Lens Mount (C-Mount with an Adapter)	
Video Output	Composite Video or Y/C Out (On Select Models)	
Power Supply	DC 12V	
Power Consumption	150mA	
Operating Temperature	-10 -45 (14 -113)	
Storage Temperature	-30 -60 (-22 -140)	
Weight	65g	
Dimensions	36 (W) x 36 (H) x 37.35 (D) mm (1.44" x 1.44" x 1.49 ")	

COLOR CCD CAMERA

Specifications

	GP020106	GP020116	GP020107	GP020117
TV System	NTSC	PAL	NTSC	PAL
Image Sensor	1/3" CCD Image Sensor			
Total Pixels	768(H) X 494(V)	752(H) X 582(V)	510(H) X 492(V)	500(H) X 582(V)
Horizontal Frequency	15.736KHz	15.625KHz	15.7343KHz	15.625KHz
Vertical Frequency	60Hz	50Hz	60Hz	50Hz
Horizontal Resolution	480 TV Lines		420 TV Lines	
Minimum Illumination	0.8Lux @ F1.2		0.5Lux @ F1.2	
Video Output	1.0V p-p Composite Video at 75			
Automatic Gain Control	On/Off			
S/N Ratio	>48db			
Back light Compensation	On/Off			
Electronic Shutter Control	EE/AI			
Automatic Aperture Lens	VIDEO/DC			



Picture Preview	P/N	Name	Description
	GP020101	1/3" Color CCD Camera	1/3" format, 470 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC.
	GP020111	1/3" Color CCD Camera	1/3" format, 470 TV Lines horizontal resolution, BNC video connector. Signal format: PAL.
	GP020104	1/3" Color CCD Camera (Watec)	Watec1/3" format color CCD camera, 470 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC
	GP020114	1/3" Color CCD Camera (Watec)	Watec1/3" format color CCD camera, 470 TV Lines horizontal resolution, BNC video connector. Signal format: PAL
	GP020105	1/3" Color CCD Camera	1/3" format, with Manual Control. 480 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC
	GP020115	1/3" Color CCD Camera	1/3" format, with Manual Control. 480 TV Lines horizontal resolution, BNC video connector. Signal format: PAL
	GP020106	1/3" Color CCD Camera	1/3" format, with Manual Control. 480 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC
	GP020116	1/3" Color CCD Camera	1/3" format, with Manual Control. 480 TV Lines horizontal resolution, BNC video connector. Signal format: PAL
	GP020107	1/3" Color CCD Camera	1/3" format, with Manual Control. 420 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC
	GP020117	1/3" Color CCD Camera	1/3" format, with Manual Control. 420 TV Lines horizontal resolution, BNC video connector. Signal format: PAL
	GP020201	1/2" Color CCD Camera	1/2" format, 470 TV Lines horizontal resolution, BNC video connector. Signal format: NTSC.
	GP020211	1/2" Color CCD Camera	1/2" format, 470 TV Lines horizontal resolution, BNC video connector. Signal format: PAL.
	GP020901	C-Mount Spacer	Standard thread, 5mm in height
	GP070101	Power Supply	Input: AC 100/240V 50/60Hz; Output: DC 12V, 500mA.
	GP070102	Power Supply	Input: AC 100/240V 47/60Hz; Output: DC 12V, 4.0A.
	GP080101	BNC-BNC Video Cable	Length 2m (6.56ft.)
	GP080102	BNC-BNC Video Cable	Length 1m (3.28ft.)
	GP080103	BNC-LCD Monitor Video Cable	1.5m BNC cable, provides a AV Output to connect with the LCD Monitor.
	GP080104	BNC- RCA Video Cable	1.5m BNC-RCA video Cable

GP050102 DMP1000 IMAGE PROCESSING SOFTWARE

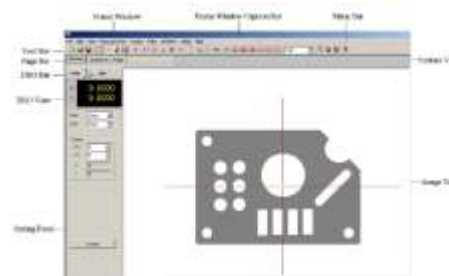
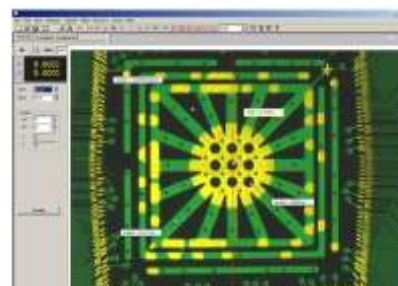
The Image processing software is designed as a software accessory for the video systems. The software provides functions for the daily usage, such as image documentation, image annotation, measurement and visual inspection. The software is very easy to use and provides a low cost solution to improve the productivity.


The software acquires images from different sources, such as frame grabber, FireWire (IEEE 1394) digital camera, TWAIN, files and clipboard, and displays them on the computer screen. The software reads and writes images in many file formats and handles standard size to large size of images. In live mode with selected frame grabber or digital camera, the software shows image in real time. Users can view, analyze, process or measure the image, compare archived images to a live image or other archived images and save, print or output image, or image with results.

The software uses built-in advanced edge-detection technology and gives you sub-pixel accuracy for the measurement. If the edge detection is enabled, the user doesn't need to select a point exactly on the edge. The software will automatically search the edge for the user and will deliver fast, reliable and repeatable measurement results. The user can format measurement results and send them to spreadsheet in real-time. The calibration is simple, easy and automatic.

Supports FireWire digital camera or frame grabber for live display, measurement and annotation.
Image processing and comparison.
Handles large size of color or monochrome images.
Saves images with annotation in many popular formats.
Automatic edge detection.

High precision measurement.
Flexible data formatting.
Direct DRO measurement.
Sends Data to Spreadsheet.
International Language Support.
On-line Help.



Picture Preview	P/N	Name	Description
	GP050102	DMP1000 Image Processing Software	Supports FireWire digital camera or frame grabber for live display, measurement and annotation; Image processing and comparison. Handles large size of color or monochrome images. Saves images with annotation in many popular formats.



GP030101 VIDEO FRAME GRABBER

PCI color/monochrome video capture card
 9-bit video A/D
 Two channel composite and one channel S-video input
 NTSC (640 × 480) and PAL (768 × 576)
 Software control hue, saturation, contrast and sharpness
 Software text and graphics overlay

Hardware image scaling
 Hardware image mirror and flip
 Captures single frame, single field or continuous multiple-frame
 Supports RGB32, RGB24, RGB16, RGB15, RGB8, YUV422 and BW image format
 Power Consumption: 0.3W
 Compatible with Windows XP and Vista



GP030102 VIDEO FRAME GRABBER

High performance frame grabber with integrated VGA display. Video can be acquired from up to three composite or monochrome cameras and displayed at non-destructive overlay resolutions up to 1280 × 1024.

High performance PCI bus frame grabber
 Integrated 143 MHz, 128 bit, S3 graphics accelerator
 16 MBytes SGRAM video frame buffer
 Display resolutions up to 1600 × 1200
 High quality video capture and display of NTSC and PAL video
 Up to 3 composite and RS-170 video inputs
 Non-destructive color key overlay of graphics on live video

Progressive scan camera support
 YUV 4:2:2 color and 8 bit RS-170 monochrome video digitizing
 Programmable offset and gain on video input
 Optically isolated output trigger, strobe interface
 General purpose TTL input and output triggers
 Chroma Key for live video graphics underlay
 PCI and AGP form factors
 Dimensions: 3.75" H × 6.50" W



GP030201 14" CRT MONITOR

Photoelectricity kinescope displaying with analog signals input can be widely used in industry video system

TV System NTSC/PAL(3.58/4.43MHz)
 Kinescope: 37mm(14") color
 Audio Output: 1.2W
 Level Resolving Rate: 430 TV lines
 Consume Power: 60W
 Input Signal: Video: BNC standard VS:1Vp-p, 75; Audio: BNC standard 350mVrms
 Weight: 15kg
 Dimensions: 352 × 375 × 326mm



GP030202 15" CRT MONITOR

Color Standard: PAL and NTSC
 Scanning Frequency: H: 15.625KHz(PAL)/15.734KHz(NTSC); V: 50Hz(PAL)/59.94Hz(NTSC)
 Kinescope: 15" (0.27mm)dot pitch
 Horizontal Definition: >750TVL(Y/C input mode)
 Power Supply: AC 120V, AC 220-240V, 50/60Hz
 Power Consumption: 1.2A/120V, 0.8A/220-240V
 Color Temperature: 6500 ° and 9300 ° are optional
 Input Port: channel A with complex signals input: channel 1 BNC × 2 1.0V(p-p)75 ;
 Channel B with complex signals input: channel 1 BNC × 2 1.0V(p-p)75
 Y/C Signal: channel 1 4-pin mount × 2
 Input Socket: 1 slot, can insert a composite video card or SDI card
 Audio Port: RCA × 4
 Control Port: D-Sub 15-pin × 1
 Speaker Cell: 8cm × 1, 1W output
 Dimensions: (width)360 × (height)310 × (depth)418mm
 Weight: 16Kg

Picture Preview	P/N	Name	Description
	GP030101	Video Frame Grabber	Resolution NTSC (640 × 480) and PAL (768 × 576) Support RGB32, RGB24, RGB16, RGB15, RGB8, YUV422 and BW image format; Compatible with Windows XP and Vista
	GP030102	Video Frame Grabber	Resolution1280 × 1024, supports windows 9X, ME, NT 4.0, 2000, XP and Linux operating systems.
	GP030201	14" CRT Monitor	14" , 430TV lines horizontal resolution. Video Signal: NTSC/PAL. Audio Output: 1.2W.
	GP030202	15" CRT Monitor	15" , 750TV lines horizontal resolution. Video Signal: NTSC/PAL, Y-C. Audio Output: 1.2W.

8" AND 10.4" LCD MONITOR

	GP030311	GP030302
Name	8" Monitors	10.4" Monitors
Display Size	640 x 480	1024 x 768
Pixel Pitch	0.213	0.253
Viewing Angle	170/170 (H/V)	
Horizontal	30-61KHz	
Vertical	60-75Hz	
Display Color	16, 777, 216 colors	
Maximum Mode	1024X 768@75Hz	
Sync. Video Signal	H/V Separate, TTL,P or N.0.7Vp-p@75	
Color System	PAL/NTSC4.43/NTSC3.58/SECAM	
Sound System	BG/DK/I/M	
Video Input	1.0Vp-p@75	
Audio Input	500mVrms	
Power Input	DC 12V	
Power Consumption	9W11W	
Power Saving	< 1.0W	
Operating Temperature	10 -40 (50 -104)	
Operating Humidity	10%-80%	
Storage Temperature	-25 -45 (-13 -113)	
Storage Humidity	5%-95%	
Audio Input	3.5 Stereo Jack, 0.5Vrms (-9dB)	
Headphone Output	Max. 10mW Output (3.5 Stereo Jack, 32)	
Frequency Response	RF: 80Hz-15KHz (at-3dB) A/V: 80Hz-20KHz (at-3dB)	



GP030303 15" LCD COLOR MONITOR

Panel Type: 15.1" Color LCD panel
 Dot Pitch: 0.297mm
 Brightness: 300cd/
 Contrast: 450:1
 Resolution: 1024 x 768
 Response Speed: 16ms
 Horizontal Angle of View: 170 °
 Vertical Angle of View: 150 °
 Power Consumption: maximum 20W, minimum 5W
 3C FC CE certified
 Signal Format: VGA/SVGA/XGA



GP030304 15" LCD COLOR MONITOR

Panel Type: 15" TFT color LCD panel
 Viewable Size: 304mm (H) x 228mm(V)
 Dot Pitch: 0.297mm x 0.297mm
 View Angle (h/v): -70 ° , +70 ° / -60 ° , +65 °
 Contrast Ratio: 500:1
 Brightness: 400 cd /
 Resolution: 1024 x 768 (XGA)
 Response Time: 16ms
 Display Colors: 16.2 million







Video Input/Output

Component Video: N/A
 Composite Video: 1 BNC input, 1BNC output
 S-video: 1 S-video input, 1 S-Video output
 DVI: N/A
 VGA: 1 analog in (D-sub 15 pin)

Audio

Input: 2 RCA inputs
 Output: 2 RCA loop through outputs
 Speaker: 1W x 2 embedded
 Scanning Frequency NTSC: 15,750 Hz +/- 500Hz / 60Hz
 PAL: 15,625Hz +/- 500Hz/ 50Hz
 Operating Temperature: 0 -40
 Storage Temperature: -20 -60
 Dimensions: 15.8"(W) x 13.0" (H) x 2.5"(D) (w/o base); 15.8"(W) x 16.1" (H) x 7.3"(D) (w/base)
 Net Weight: 11.0 lbs. W/base
 Shipping Weight: 14.0 lbs.
 Power Supply: AC 100-240 V



Picture Preview	P/N	Name	Description
	GP030311	8" LCD Color Monitor	8" Diagonal. Resolution 640 x 480. Video Signal: NTSC/PAL. Power consumption 9W. Input 12V. Brightness: 300 cd/ . Contrast: 350:1.
	GP030302	10" LCD Color Monitor	10.4" Diagonal. Resolution 1024 x 768. Video Signal: NTSC/PAL. Power consumption 11W. Input 12V. Brightness: 300 cd/ . Contrast: 350:1.
	GP030303	15" LCD Color Monitor	15" Diagonal. Resolution 1024 x 768. Display Mode: VGA/SVGA/XGA , PC inputs. Brightness:400 cd/ . Contrast: 500:1, Input: AC 100-240V/1.8A, 50-60Hz.
	GP030304	15" LCD Color Monitor	15" Diagonal. Resolution 1024 x 768. Display Mode: VGA, Video / S-Video. Brightness: 400 cd/ . Contrast: 500:1, Input: AC 100-240V/1.8A, 50-60Hz.
	GP030314	Pole Mount Kit	For GP030304
	GP030324	Wall Mount Kit	For GP030304



GP030401 ANALOG TO DIGITAL VIDEO CONVERTER

Converts analog video signal into digital video signal
 With digital frequency, the max. resolution: 1280 x 1024@60
 Supports LCD and CRT monitor
 3D Motion adaptive de-interlace,
 Supports PAL and NTSC 3.58/4.43, with Video and S-Video adapter
 Input Voltage: 5V
 Input Port: Video in and S-video in; Output Port: VGA



GP110101 CROSS-HAIR GENERATOR

The cross-hair generator is digital electron generator which adopts SCM technology. With high definition video conversion, this product can deliver analog signal outputted from CCD into VGA signal on display and show OSD pictures (including horizontal line, cross-hair and coordinate line) on screen.
 Dimensions: 203 x 100 x 50mm
 Input Signal: AV / S-VIDEO
 Output: VGA
 Input Voltage: 5V
 X direction can show four lines, and Y direction can show four lines.
 One grid that the cross-hair moves is one pixel dot.
 Color of line is adjustable






GP110201 CROSS-HAIR GENERATOR

Easy operation—Button control, knob control and mouse control.
 High work efficiency—Real-time data updated, without waiting, work stability.
 The Cross-hair generator with built-in video conversion can show analog signal with folding cross-hair and coordinate outputted from CCD on screen.
 It can provide adjustable cross-hair observation when observing. For VGA LCD, it can convert analog signal into VGA signal, output resolution of VGA: 1024 x 768 and 1280 x 1024, power supply: 5V 1A. Can be used for measurement of high-precision, realizing data processing of video signal, measurement of distance and angle. When installed in microscope, observation, inspection and measurement functions can be realized. This product can be widely used in biology, medical treatment and chemistry.



TV System: NTSC: 1.0V p-p; PAL: 1.0V p-p 75
 Resolution: horizontal 500; vertical 230
 Measuring Accuracy: Max. electric signal processing accuracy: horizontal 1/500 vertical 1/230 angle 0.1 ° (calculation accuracy)
 Display Modes: two data display modes
 Power Input: DC12V 1.5A please use the special switch
 Working Temperature: -10 -70
 Dimensions: 170 x 120 x 56mm
 Weight: 0.5kg

Picture Preview	P/N	Name	Description
	GP030401	Analog to Digital Video Converter	1280 x 1024 Pixel, S-Video Output.
	GP110101	Cross-hair Generator	For VGA LCD, input mount (interface) AV/S-VIDEO, output mount (interface) VGA, input voltage: 5V.
	GP110201	Cross-hair Generator	Input & output mount (interface)BNC, for analog (simulated) monitor.

MA201201 76mm TRACK STAND

Scope Holder I.D.: 76mm
 Travel Distance: 117mm
 Base Dimensions: 228 x 178 x 22mm
 Black and White Plate Size: Dia.: 100mm; Thickness: 6mm.
 Applicable to SZ Series Stereo Microscope



MA202201 76mm TRACK STAND

Scope Holder I.D.: 76mm
 Travel Distance: 105mm
 Base Dimensions: 280 x 240 x 25mm
 Black and White Plate Size: Dia.: 140mm; Thickness: 6mm.
 MA202201 Track Stand applicable to SZ2/SZ5 Series Stereo Microscope
 MA202202 Track Stand applicable to SZ2/SZ5 Series Stereo Microscope, with ESD Safe
 MA202203 Track Stand applicable to SZ2/SZ5 Series Stereo Microscope



MA203101 76mm POST STAND

Scope Holder I.D.: 76mm
 Max. Size from Vertical Post to the Front of the Base: 205mm
 Base Dimensions: 252 x 200 x 24mm
 Black and White Plate Size: Dia.: 95mm; Thickness: 5mm.
 Applicable to SZ and FS Series Stereo Microscopes



MA204111 LED DUAL ILLUMINATED LIGHT TRACK STAND

Scope Holder I.D.: 76mm
 Travel Distance: 100mm
 Base Dimensions: 285 x 240 x 40mm
 Height: 340mm
 Size of the Black and White Plate: Dia.: 100mm; Thickness: 5mm
 Size of the Clear Glass Plate: Dia.: 100mm; Thickness: 2mm
 Power Supply: AC 100-240V 50/60 Hz
 Illumination: LED Light
 Applicable to SZ/PZ2/FS Series Stereo Microscopes



Picture Preview	P/N	Name	Description
	MA201201	76mm Track Stand	76mm scope holder, travel distance 117mm. The base size is 228 x 178 x 22mm, with a 100 x 6mm Black and White Plate, applicable to SZ Series microscope.
	MA201911	Transmitted Mirror Base (Halogen Light Adapter)	Used with MA201201 76mm Track Stand, with a MA201923 Clear Glass Plate. It has a built-in 70mm mirror, with adjustable angle. The adapter is for MA351101 Halogen Light use only.
	MA201921	100mm Black and White Plate	Matte Finish Plastic Plate. Dia. 100mm, 6mm thickness, for MA201201 76mm track stand.
	MA201922	100mm Matte Finish Glass Plate	Matte Finish Glass Plate. Dia. 100mm, 6mm thickness, for MA201201 76mm track stand.
	MA201923	100mm Clear Glass Plate	Clear glass, Dia. 100mm, thickness 6mm, for MA201201 76mm track stand.
	MA201931	Fiber Adapter	Internal dia. of fiber tube: 15.1mm; Max. Outside dia.: 48mm; Minimum Outside dia.: 22mm; Total length: 85mm.
	MA202201	76mm Track Stand	76mm scope holder, 105mm travel distance. The base size is 280 x 240 x 25mm, with a 140 x 6mm plate, applicable to SZ2/SZ5 Series Stereo Microscopes.
	MA202202	76mm Track Stand	MA202201 76mm Track Stand with ESD Safe
	MA202203	76mm Track Stand	76mm scope holder, 105mm travel distance. The base size is 280 x 240 x 25mm, with a 140 x 6mm plate, applicable to SZ2/SZ5 Series Stereo Microscopes.
	MA202921	140mm Black and White Plate	Matte Finish Plastic Plate, Dia.140mm, 6.5mm thickness, for MA202201 76mm Track Stand.
	MA202923	140mm Clear Glass Plate	Clear Glass Plate, Dia.140mm, 6.5mm thickness, for MA202201 76mm Track Stand.
	MA203101	76mm Post Stand	76mm scope holder, Max. size from the vertical post to the front of base is 205mm with square base. The base size is 252 x 200 x 24mm, with a 95 x 5mm Black and White Plate and applicable to SZ and FS Series microscopes.
	MA204111	LED Dual Illuminated Light Track Stand	76mm scope holder. Travel distance: 100mm; Size of the base: 285 x 240 x 40mm; Vertical Length: 340mm; Power Supply: AC 100-240V 50/60 Hz; Illumination: LED light; Applicable to SZ, PZ2 and FS Series microscopes.
	MA204911	100mm Black and White Plate	Size of the Black and White Plate: Dia. 100mm, thickness 5mm.
	MA204912	100mm Clear Glass Plate	Size of the Clear Glass Plate: Dia. 100mm, thickness 2mm.



MA205111 Tripod



NEW!

MA205111 TRIPOD

Made from super alloy A.M.T.

Heavy duty tripod, for medium format camera, 35mm SLR with long telephoto lenses. This tripod's material, alloy, offers an exceptional strength-to-weight ratio more than 40% greater than similar tripods.

Specifications

Top Section Leg Diameter: 30.2mm
 Length Folded: 760mm (29.9")
 Max. Operating Height: 1,900mm (74.8")
 Max. Center Column Ext.: 380mm (15.0")
 Min. Operating Height: 620mm (24.4")

Min. Operating Height with Optional Short Center Column: 400mm (15.7")
 Number of Leg Section: 3
 Weight: 3.5kg

Lever Lock, the easiest to use leg lock
 Grooved tubular legs
 3-position leg angle adjustment
 Gearless Center Column
 Super low camera height of 40cm with use of optional short center column.

Rubber leg tips
 Pan Head with 4 independent movements
 Dual axis bubble level
 Reversible head attachment screw

MA205112 TILT BALL HEAD

- Very low at minimum working height
- High load capacity
- Easy and intuitive to use
- Very flexible camera positioning

A friction control wheel lets the user regulate the power of the blocking mechanism to match the weight of the camera/lens. Suitable for use with 35mm or medium format cameras.



NEW!

MA205113 SUPER MAG SLIDER

Made from Magnesium alloy. Light weight, and smooth action for adjusting focus in macro-photography. A MF-screw driver is included to remove the bottom screw adapter. Once removed, the base will accept a 3/8 inch tripod screw.

Dimensions: 8.3 x 4.7 x 2.8" (210 x 120 x 70 mm) W x D x H.
 Net Weight: 0.47kg
 Slide stroke (Forward: 60mm, Side: 30mm)



NEW!

MA205114 EXTENSION BAR

Can connect with digital microscope. It is convenient to adjust observation distance when carrying through field observation.



NEW!

MA205115 LAPTOP TRAY

For holding laptop computer on the tripod; Applicable to outdoor inspection and image acquisition.



NEW!

Picture Preview	P/N	Name	Description
	MA205111	Tripod	Light, full size tripod weighing 3.5kgs with panhead. Suitable for use with most telephoto and zoom lenses, medium format cameras, and some (portable 4X5) field cameras. Top section leg diameter 30.2mm; Max. Operating height 1,900mm (74.8"); Min. operating height 620mm (24.4"); Bearing load 5.0kg.
	MA205112	Tilt Ball Head	Working height: 103mm, the maximum bearing load: 5kg, contour design: Magnesium alloy, weight: 0.7kg.
	MA205113	Super Mag Slider	Made from Magnesium alloy. Light weight, and smooth action for adjusting focus in macro-photography. A MF-screw driver is included to remove the bottom screw adapter. Once removed, the base will accept a 3/8 inch tripod screw. (L)210mm x (W)120mm x (H)70mm; Net weight: 0.47kg, Slide stroke (Forward: 60mm, Side: 30mm)
	MA205114	Extension Bar	Total length: 600mm, with four 1/4-20 Mount adapters.
	MA205115	Laptop Tray	For holding laptop computer on the tripod. Applicable to outdoor inspection and image acquisition.

POST STAND



MA211101 76mm POST STAND

76mm Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63" (320 x 305 x 16mm)
 Max. Size from vertical post to the front of base: 10.75" (273mm)
 Vertical Post: diameter 1.26" (32mm), height 12.01" (305mm)
 Extension Post: 5.9" (150mm)
 95 x 5mm Black and White Plate
 Applicable to all of the 76mm Body Series Microscopes



MA212111 76mm HF DUAL ILLUMINATED POST STAND

76mm Scope Holder
 Weight: 11.24lbs (5.1kg)
 Size of the Base: 12.6 x 12.01 x 2.36" (320 x 305 x 60mm)
 Power Supply: AC 85-265V 50/60Hz
 Top Lighting: 12V 15W halogen bulb
 Bottom Lighting: 9W 2U fluorescent lamp
 Max. Size from vertical post to the front of base: 10.75" (273mm)
 Vertical Post: diameter 1.26" (32mm), height 12.01" (305mm)
 95 x 5mm Glass Plate
 Applicable to all of the 76mm Body Series Microscopes



MA211103 39mm POST STAND

39mm Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63" (320 x 305 x 16mm)
 Max. Size from vertical post to the front of base: 10.75" (273mm)
 Vertical Post: diameter 1.26" (32mm), height 12.01" (305mm)
 Extension Post: 5.9" (150mm)
 95 x 5mm Black and White Plate
 Applicable to MZ Series Microscope



MA214111 76mm HH DUAL ILLUMINATED POST STAND

76mm Scope Holder
 Weight: 11.24lbs (5.1kg)
 Size of the Base: 12.6 x 12.01 x 2.36" (320 x 305 x 60mm)
 Power Supply: AC 85-265V 50/60Hz
 Top Lighting: 12V 15W halogen bulb
 Bottom Lighting: 12V 15W halogen bulb
 Max. Size from vertical post to the front of base: 10.75" (273mm)
 Vertical Post: diameter 1.26" (32mm), height 12.01" (305mm)
 95 x 5mm Glass Plate
 Applicable to all of the 76mm Body Series Microscopes



MA211108 N ADAPTER POST STAND

N Type Adapter
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63" (320 x 305 x 16mm)
 Max. Size from vertical post to the front of base: 10.75" (273mm)
 Vertical Post: diameter 1.26" (32mm), height 12.01" (305mm)
 Extension Post: 5.9" (150mm)
 95 x 5mm Black and White Plate
 Applicable to all of the CCD Camera



MA228101 Transmitted Mirror Base (Fiber Optic Cable Adapter)



MA228102 HH Dual Illuminated Base



MA228106 HF Dual Illuminated Base

Picture Preview	P/N	Name	Description
	MA211101	76mm Post Stand	76mm scope holder, Max. size from vertical post to the front of base is 10.75"(273mm). Vertical post diameter 1.26"(32mm), vertical post height 12" (305mm). The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the 76mm Body Series Microscopes.
	MA211103	39mm Post Stand	39mm scope holder, Max. size from vertical post to the front of base is 10.75"(273mm). Vertical post diameter 1.26"(32mm), vertical post height 12" (305mm). The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to MZ Series Microscope.
	MA211108	N Adapter Post Stand	N Type Adapter, Max. size from vertical post to the front of base is 10.75"(273mm). Vertical post diameter 1.26"(32mm), vertical post height 12" (305mm). The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the CCD Cameras.
	MA212111	76mm HF Dual Illuminated Post Stand	76mm scope holder, 12V 15W halogen bulb for top lighting, 9W 2U fluorescent lamp for bottom lighting. AC 85-265V 50/60Hz. Max. size from vertical post to the front of base is 10.75"(273mm). Vertical post diameter 1.26"(32mm), vertical post height 12" (305mm). The base size is 320 x 305 x 60mm, with a 95 x 5mm Glass Plate, applicable to all of the 76mm Body Series Microscopes.
	MA214111	76mm HH Dual Illuminated Post Stand	76mm scope holder, 12V 15W halogen bulb for top lighting and bottom lighting, AC 85-265V 50/60Hz. Max. size from vertical post to the front of base is 10.75"(273mm). Vertical post diameter 1.26"(32mm), vertical post height 12" (305mm). The base size is 320 x 305 x 60mm, with a 95 x 5mm Glass Plate, applicable to all of the 76mm Body Series Microscopes.
	MA228101	Transmitted Mirror Base (Fiber Optic Cable Adapter)	Used with MA211101 Post Stand and 76mm MA221101 Track Stand, including MA229103 Clear Glass Plate and MA229201 Iris. It has a built-in 70mm mirror, and the angle is adjustable. The adapter is for connect the Fiber Optic Cable (MA323203 Single Pipe Light Guide) and Illuminator.
	MA228102	HH Dual Illuminated Base	For MA211101 Post Stand and 76mm MA221101 76mm Track Stand, with MA229103 Clear Glass Plate and MA229201 Iris. It has a built-in mirror, and the angle is adjustable. Brightness of halogen light is adjustable; Power Supply: AC90-240V 50/60Hz; The top lighting is halogen light; Voltage of halogen light: 12V 15W.
	MA228106	HF Dual Illuminated Base	For MA211101 Post Stand and 76mm MA221101 Track Stand, including MA229102 Matte Finish Glass Plate and MA229201 Iris. It has a built-in fluorescent light with adjustable brightness. Power Supply: AC 90-240V 50/60Hz; The top lighting is halogen light; Voltage of halogen light: 12V15W.

TRACK STAND



MA221101 76mm TRACK STAND

76mm Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 95 x 5mm Black and White Plate
 Applicable to all of the 76mm
 Body Series Microscopes



MA222111 76mm HF DUAL ILLUMINATED TRACK STAND

76mm Scope Holder
 Weight: 11.24lbs (5.1kg)
 Size of the Base: 12.6 x 12.01 x 2.36"
 (320 x 305 x 60mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 Power Supply: AC 85-265V 50/60Hz
 Top Lighting: 12V 15W halogen bulb
 Bottom Lighting: 9W 2U fluorescent lamp
 95 x 5mm Glass Plate
 Applicable to all of the 76mm Body
 Series Microscopes



MA221103 39mm TRACK STAND

39mm Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 95 x 5mm Black and White Plate
 Applicable to MZ Series Microscope



MA224111 76mm HH DUAL ILLUMINATED TRACK STAND

76mm Scope Holder
 Weight: 11.24lbs (5.1kg)
 Size of the Base: 12.6 x 12.01 x 2.36"
 (320 x 305 x 60mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 Power Supply: AC 85-265V 50/60Hz
 Top Lighting: 12V 15W halogen bulb
 Bottom Lighting: 12V 15W halogen bulb
 95 x 5mm Glass Plate
 Applicable to all of the 76mm Body
 Series Microscopes



MA221106 B&L TRACK STAND

B&L Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 95 x 5mm Black and White Plate
 Applicable to B&L Series Microscope



MA225101 76mm HIGH TRACK STAND

76mm Scope Holder
 Weight: 8.82lbs (4kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 460mm
 Vertical Length: 500mm
 95 x 5mm Black and White Plate
 Applicable to all of the 76mm Body
 Series Microscopes



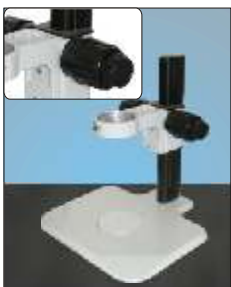
MA221108 N ADAPTER TRACK STAND

N Type Adapter
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 95 x 5mm Black and White Plate
 Applicable to attach CCD camera with
 1/4-20" standard screw



MA225103 39mm HIGH TRACK STAND

39mm Scope Holder
 Weight: 8.82lbs (4kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 460mm
 Vertical Length: 500mm
 95 x 5mm Black and White Plate
 Applicable to MZ Series Microscope



MA221201 76mm FINE FOCUS TRACK STAND

















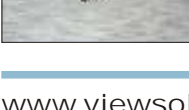
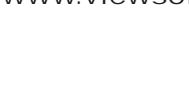
76mm Scope Holder
 Weight: 6.6lbs (3kg)
 Size of the Base: 12.6 x 12.01 x 0.63"
 (320 x 305 x 16mm)
 Travel Distance: 250mm
 Vertical Length: 325mm
 Coaxial Focus: 23mm /circle
 Fine Focus: 0.56mm /circle
 95 x 5mm Black and White Plate
 Applicable to all of the 76mm Body
 Series Microscopes



MA225905 SAFETY CLAMP

Can protect stage and microscope
 effectively in the course of adjusting.
 Opening Size: 31mm



Picture Preview	P/N	Name	Description
	MA221101	76mm Track Stand	76mm scope holder, travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the 76mm Body Series Microscopes.
	MA221103	39mm Track Stand	39mm scope holder, travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to MZ Series Microscope.
	MA221106	B&L Track Stand	B&L scope holder, travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to B&L Series Microscope.
	MA221108	N Adapter Track Stand	N-Type to attach CCD camera with 1/4-20" standard screw, travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate.
	MA221201	76mm Fine Focus Track Stand	76mm scope holder, coaxial focus 23mm/circle, fine focus 0.56mm/circle, travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the 76mm Body Series Microscopes.
	MA222111	76mm HF Dual Illuminated Track Stand	76mm scope holder, 12V 15W halogen bulb for top lighting, 9W 2U fluorescent lamp for bottom lighting. AC 85-265V 50/60Hz. Travel distance 250mm, vertical length 325mm. The base size is 320 x 305 x 60mm, with a 95 x 5mm Glass Plate, applicable to all of the 76mm Body Series Microscopes.
	MA224111	76mm HH Dual Illuminated Track Stand	76mm scope holder, 12V 15W halogen bulb for top and bottom lighting. AC 85-265V 50/60Hz. Adjustable Mirror; Travel Distance: 250mm; Vertical Length: 325mm. The base size is 320 x 305 x 60mm, with a 95 x 5mm Glass Plate, applicable to all of the 76mm Body Series Microscopes.
	MA225101	76mm High Track Stand	76mm scope holder, vertical length 500mm. Travel distance 460mm; The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the 76mm Body Series Microscopes.
	MA225103	39mm High Track Stand	High Track Stand with 39mm Scope holder
	MA225108	N-Type High Track Stand	High Track Stand with N-Type Adapter
	MA225201	76mm Fine Focus High Track Stand	76mm scope holder, vertical length 500mm. Travel distance 460mm, coaxial focus 23mm/circle, fine focus 0.56mm/circle. The base size is 320 x 305 x 16mm, with a 95 x 5mm Black and White Plate, applicable to all of the 76mm dia. Body Series Microscopes.
	MA229101	95mm Black And White Matte Finish Plate	Dia. 95mm, 5mm thickness, applicable to MA203101, MA211101 and MA221101 Track Stands.
	MA229102	95mm Matte Finish Glass Plate	Dia. 95mm, 5mm thickness, applicable to MA203101, MA211101 and MA221101 Lighting Stands.
	MA229103	95mm Clear Glass Plate	Dia. 95mm, 5mm thickness, applicable to MA228101 Transmitted Mirror Base.
	MA229201	Transmitted Illumination Iris	95mm Dia, for all MA211101 and MA221101 of the Lighting Stand.
	GP090301	Fluorescent Bulb	5W, for Fluorescent Base.
	GP090302	Fluorescent Bulb	9W-2U Fluorescent Bulb, for MA222111 Light Stand.
	GP090202	Halogen Bulb	12V 15W Halogen Bulb, for MA212111, MA222111 HF Stand, MA214111 and MA224111 HH Stands.
	GP100103	1A Fuse	For MA222111, MA223141 and MA224111 Light Stands.



MA225401 76mm LED HIGH TRACK STAND

76mm Scope Holder
 Track Length: 500mm
 Travel Distance: 460mm
 Coaxial Focus: 23mm/circle
 Fine Focus: 0.56mm/circle
 LED Transmitted Lighting Base Size: 320 x 316 x 21mm
 With a 95 x 5mm Glass Plate
 Voltage Input: AC 90-240V, 50/60Hz
 Applicable to all of the 76mm Body Series Microscopes

MA225601 76mm STAGE LED HIGH TRACK STAND

With a Manual Stage
 Manual Stage Size: 217 x 155mm
 Travel Distance: X: 80mm, Y: 90mm



MA225403
39mm LED High Track Stand



MA225408
N-Type LED High Track Stand



MA225901
Rotation Stage



MA225902
Adjusting Level Stage



MA225903
Horizontal Object Holder



MA225904
Vertical Object Holder

Picture Preview	P/N	Name	Description
	MA225401	76mm LED High Track Stand	76mm scope holder, vertical length 500mm. Travel distance 460mm, The LED Light Base size is 320 x 316 x 21mm, with a 95 x 5mm Class Plate. Input voltage: AC 90-240V 50/60Hz, applicable to all of the 76mm Body Series Microscopes.
	MA225403	39mm LED High Track Stand	LED High Track Stand with 39mm Scope holder
	MA225408	N-Type LED High Track Stand	LED High Track Stand with N-Type Adapter
	MA225601	76mm Stage LED High Track Stand	76mm scope holder, vertical length 500mm. Travel distance 460mm; Manual Stage size: 217mm x 155mm; Travel distance: X80mm Y90mm; The LED Light Base size is 320 x 316 x 21mm, with a 95 x 5mm Class Plate. Input voltage: AC 90-240V 50/60Hz, applicable to all of the 76mm Body Series Microscopes.
	MA225603	39mm Stage LED High Track Stand	Stage LED High Track Stand with 39mm Scope Holder
	MA225608	N-Type Stage LED High Track Stand	Stage LED High Track Stand with N-Type Adapter
	MA225901	Rotation Stage	Rotatable Stage; The dimension of bottom mount: 95mm; Dia. of stage: 120mm; Dimension of glass plate: 95mm; 360° rotation.
	MA225902	Adjusting Level Stage	For adjusting the level of the Rotatable Stage. Dimension of bottom mount: 95mm; Dia. of stage: 120mm; Dia. of Glass Plate: 95mm, adjustable range of level on X and Y directions: 0° -3°.
	MA225903	Horizontal Object Holder	Objects can be fixed for observing horizontally. Dia. of bottom mount: 95mm; Maximum opening size of clamp: 20mm.
	MA225904	Vertical Object Holder	Objects can be fixed for observing vertically. Dia. of bottom mount: 95mm; Maximum opening size of clamp: 50mm.
	MA225905	Safety Clamp	A limiting clamp for the column of the Track Stand. Max. opening: 31mm

BOOM STAND



MA231101 BOOM STAND

Weight: 39.57lbs (17.95kg)
 Size of the Base: 11.22(L) x 10.236(W) x 0.709(H)" (285 x 260 x 18mm)
 Maximal Size from vertical post to the front of base: 9.38" (238.25mm)
 Horizontal Bar: 19" (483mm)
 Vertical Post: 15.1" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 The Size can be extended up to 25" (634mm) with extension post
 Diameter of mounting holes in the front of horizontal bar: 5/8" (15.875mm)
 Maximal bearing load on the front of horizontal bar: 21lbs (9.526kg)



MA231108 THREE HOLES BIG BASE BOOM STAND

Weight: 88.18lbs (40kg)
 Size of the Base: 15.512 x 14.96 x 0.472" (394 x 380 x 12mm)
 Vertical Post: 15.1" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 With a MA239403 Three Holes Adapter
 The adapter has 2 of 5/8" (15.875mm) holes, for connecting E-Arm



MA231102 CLAMP STAND

Weight: 22.49lbs (10.2kg)
 Maximum Opening Size of Clamp: 1.575" (40mm)
 Horizontal Bar: 19" (483mm)
 Vertical Post: 15.1" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 Diameter of mounting holes in the front of horizontal bar: 5/8" (15.875mm)
 Maximal bearing load on the front of horizontal bar: 21lbs (9.526kg)



MA237101 BIG BASE POST STAND

Base Size: 320 x 260 x 16mm
 Vertical Post Height: 280mm
 Vertical Post Diameter: 32mm
 Travel Distance in Vertical Direction: 42mm
 Dia. of Scope Holder: 50mm
 Center to Center Distance (From the center of post to the center of holder): 150mm



MA231104 U-TYPE BASE STAND

Weight: 38.03lbs (17.25kg)
 Size of the Base: 17.716 x 14.173 x 1.181" (450 x 360 x 30mm)
 Horizontal Bar: 19" (483mm)
 Vertical Post: 15.1" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 Diameter of mounting holes in the front of horizontal bar: 5/8" (15.875mm)
 Maximal bearing load on the front of horizontal bar: 15lbs (6.9kg)



MA237102 HORIZONTAL BIG BASE STAND

Base Size: 380 x 260 x 30mm
 Dia. of Scope Holder: 50mm
 Travel Distance in Vertical Direction: 44mm
 Stage Size: 200 x 110mm
 Adjustable Travel of Stage: X: 70mm, Y: 30mm
 Weight: 7.4lbs (3.35kg)



MA231105 BIG BASE BOOM STAND

Weight: 40.67lbs (18.45kg)
 Size of the Base: 15.512 x 14.96 x 0.472" (394 x 380 x 12mm)
 Horizontal Bar: 19" (483mm)
 Vertical Post: 15.1" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 Diameter of mounting holes in the front of horizontal bar: 5/8" (15.875mm)
 Maximal bearing load on the front of horizontal bar: 28lbs (12.7kg)



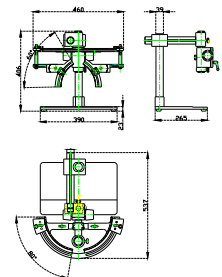
MA239301 CENTER HOLE POST HEAVY BASE STAND

Weight: 88.18lbs (40kg)
 Size of the Base: 13 x 13 x 1.5" (330 x 330 x 38mm)
 Vertical Post: 15" (384mm)
 The Post Diameter: 1.465" (37.2mm)
 The size can be extended up to 25" (634mm) with extension post
 Maximal bearing load on the front of horizontal bar: 25lbs (11.34kg)
 The diameter of the hole for the flexible arm adapter is 22.2mm. Applicable to the flexible arm.



MA236101 MULTI-ANGLE LIGHTING HOLDER STAND

Dimensions: 537 x 460 x 406mm
 Dia. of Holder: 39mm
 Horizontal Adjusting Range of Angle: 80 °
 Vertical Adjusting Range of Angle: 60 °
 The stand can rotate freely for 360 °



DUAL ARM BOOM STAND



MA232101 DUAL ARM BOOM STAND

Weight: 38.25lbs (17.35kg)
 Size of the Base: 11.22(L) x 10.236(W) x 0.709(H)" (285 x 260 x 18mm)
 Maximal Size from vertical post to the front of base: 9.38" (238.25mm)
 Horizontal Bar: 20.866" (530mm); Diameter: 0.787" (20mm)
 Vertical Post: 15.1" (384mm); Diameter: 1.465" (37.2mm)
 Diameter of mounting holes in the front of horizontal bar: 5/8" (15.875mm)
 Maximal bearing load on the front of horizontal bar: 21lbs (9.526kg)

MA232102 DUAL ARM BOOM STAND with CLAMP

Weight: 21.17lbs (9.6kg)
 Maximum Opening of Clamp: 1.575"(40mm)
 Maximal bearing load on the front of horizontal bar: 20lbs (9.072kg)

MA232105 DUAL ARM BIG BASE STAND

Weight: 41.78lbs (18.95kg)
 Size of the Base: 15.512 x 14.96 x 0.472" (394 x 380 x 12mm)
 Maximal bearing load on the front of horizontal bar: 31lbs (14.0616kg)

Picture Preview	P/N	Name	Description
	MA231101	Boom Stand	39.5lbs Heavy Boom Stand, with a base size 285 x 260 x 18mm. The length of horizontal bar is 19"(483mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 21lbs(9.5kg).
	MA231102	Clamp Stand	22.49lbs Clamp Base Stand. Maximum opening of clamp is 1.575"(40mm). The length of horizontal bar is 19"(483mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 21lbs(9.5kg).
	MA231103	Heavy Base Stand	83.99lbs Heavy Boom Stand, with a base size 13 x 13 x 1.5"(330 x 330 x 38mm). The length of horizontal bar is 19"(483mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm).
	MA231104	U-Type Base Stand	38.03lbs U-Type Base Stand, with a base size 450X360X30mm. The length of horizontal bar is 19"(483mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 15 lbs(6.9kg).
	MA231105	Big Base Boom Stand	40.67lbs Heavy Boom Stand, with a base size 394 x 380 x 12mm. The length of horizontal bar is 19"(483mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 28lbs(12.7kg).
	MA231108	Three Holes Big Base Boom Stand	88.18lbs Boom Stand, with a MA239403 Three Holes Adapter. The base size is 394 x 380 x 12mm; Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). The adapter has 2 of 5/8"(15.875mm) holes, for attaching to an E-Arm.
	MA232101	Dual Arm Boom Stand	38.25lbs The base size is 285 x 260 x 18mm; The length of horizontal bar is 20.866"(530mm); The bar diameter is 0.787"(20mm). Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 21lbs(9.5kg).
	MA232102	Dual Arm Boom Stand with Clamp	21.17lbs Maximum open size of clamp is 1.575"(40mm); The length of horizontal bar is 20.866"(530mm); The bar diameter is 0.787"(20mm). Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 20lbs(9.072kg).
	MA232105	Dual Arm Big Base Stand	41.78lbs Big Base Stand, the base size is 394 x 380 x 12mm, the length of horizontal bar is 20.866"(530mm); The bar diameter is 0.787"(20mm). Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). Diameter of mounting holes in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 31lbs(14.0616kg).
	MA233302	Clamp Stand with Dual Holes Adapter	Maximum opening of clamp is 1.575"(40mm); Vertical post is 15"(384mm); The post diameter is 1.465"(37.2mm). The diameter of the post through hole for fitting vertical post is 38.4mm; The diameter of front hole adapter is 22.2mm.
	MA236101	Multi-angle Lighting Holder Stand	Dimensions: 537 x 460 x 406mm; Dia. of holder: 39mm; Adjustable range of angle in the horizontal direction: 80 ° ; Adjustable range of angle in the vertical direction: 60 ° ; The Light holder of stand is rotatable for 360 °
	MA237101	Big Base Post Stand	Base Size: 320 x 260 x 16mm; Vertical Post Height: 280mm; Vertical Post Diameter: 32mm; Travel Distance in vertical direction: 42mm; Dia. of Scope Holder: 50mm; Center to Center Distance (From the center of post to the center of holder): 150mm.
	MA237102	Horizontal Big Base Stand	Base Size: 380 x 260 x 30mm; Dia. of Scope holder: 50mm; Travel distance in vertical direction: 44mm; Stage Size: 200 x 110mm; Adjustable Travel of stage: X-axis 70mm, Y-axis 30mm.

PNEUMATIC ARM

MA241102 76mm PNEUMATIC ARM

76mm Scope Holder
 Revolution Degree: 360 ° free revolution in horizontal direction
 Weight: 13.89lbs (6.3kg)
 Size of Stand Clamp: 5.52 x 5.12" (140 x 130mm)
 Max. Open Size of Clamp: 9.38" (238.25mm)
 Length of Horizontal Arm: 9.85" (250mm)
 Length of Gradient Arm: 14.96" (380mm)
 Maximum Radius: 14.96" (380mm)
 Minimum Radius: 10.83" (275mm)
 Rising and Lowering Range in Vertical Direction: 21.46" (545mm)
 Max. Opening of Angle in Vertical Direction: 6.7" (170mm)
 Max. Bearing Load on the Horizontal Arm: 11.82lbs(5.36kg)



MA241104
39mm Pneumatic Arm



MA241107
B&L Pneumatic Arm



MA241108
Pneumatic Arm with
CCD Focusing Mount



MA241109
Pneumatic Arm
with N Adapter



MA241100
Pneumatic Arm with
LCD Monitor Adapter
(w/o Monitor)

Picture Preview	P/N	Name	Description
	MA241100	Pneumatic Arm with LCD Monitor Adapter (w/o Monitor)	With a LCD Monitor Mounting Plate, 360 ° free revolution in horizontal direction. Max. Opening of clamp is 9.38"(238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm).
	MA241102	76mm Pneumatic Arm	76mm scope holder, 360 ° free revolution in horizontal direction. Max. Opening of clamp is 9.38" (238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm). Weight:13.89lbs(6.3kg).
	MA241104	39mm Pneumatic Arm	39mm scope holder, 360 ° free revolution in horizontal direction. Max. Opening of clamp is 9.38" (238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm).
	MA241107	B&L Pneumatic Arm	B&L scope holder, 360 ° free revolution in horizontal direction. Max. Opening of clamp is 9.38" (238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm).
	MA241108	Pneumatic Arm with CCD Focusing Mount	CCD Mounting Plate, 360 ° free revolution in horizontal direction. Max. Opening of clamp is 9.38" (238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm).
	MA241109	Pneumatic Arm with N Adapter	N Adapter, 360 ° free revolution in horizontal direction. Max. opening of clamp is 9.38"(238.25mm). Length of horizontal arm is 9.8"(250mm); Length of gradient arm is 15"(380mm). Maximum Radius: 15"(380mm); Minimum Radius: 10.83"(275mm).
	MA241912	Wall Mount	Applicable to Pneumatic Arm, fixed on the wall with four screws. Size: 153 x 153mm; Dia. of the hole: 20.02mm.
	MA241913	Table Mount	Applicable to Pneumatic Arm, fixed on the table with four screws. Size: 153 x 153mm; Dia. of the hole: 20.02mm.



FLEXIBLE ARM

MA242101 FLEXIBLE ARM

Weight: 12.78lbs (5.8kg)
 Size of Stand Clamp: 3.94 x 2.95 x 4.53" (100 x 75 x 115mm)
 Maximal Opening of Clamp: 1.575" (40mm)
 Length of Horizontal Arm: 13" (330mm)
 Length of Front Arm: 6.7" (170mm)
 Revolution Degree: 360 ° free revolution in horizontal direction
 Maximal Radius: 31.89" (810mm); Minimal Radius: 13" (330 mm)
 Raising and Lowering range in vertical direction: 19.685" (500mm)
 Maximal Opening Angle in vertical direction: 19.7" (500mm)
 Diameter of Mounting hole in the front of horizontal bar: 5/8" (15.875mm)
 Diameter of the mounting hole at the end of the base: 0.87" (22.2mm)
 Maximal bearing load on the front of horizontal bar: 21lbs (9.526kg)
 With a table clamp

MA242201 FLEXIBLE ARM with CENTER HOLE HEAVY BASE STAND

MA242101 Flexible Arm (No Clamp) on the MA239301 Center Hole Post Heavy Base Stand

MA242301 FLEXIBLE ARM with CLAMP STAND

MA242101 Flexible Arm (No Clamp) on the MA233302 Clamp Stand with Dual Holes Adapter

Picture Preview	P/N	Name	Description
	MA242101	Flexible Arm	With a table clamp. Max. Opening size of clamp is 1.575"(40mm). 360 ° free revolution in horizontal direction. Diameter of mounting hole in the front of horizontal bar is 5/8"(15.875mm). Maximum bearing load on the front of horizontal bar is 21lbs(9.5kg). Weight:12.78lbs.
	MA242201	Flexible Arm with Center Hole Heavy Base Stand	MA242101 Flexible Arm (No Clamp) on the MA239301 Center Hole Post Heavy Base Stand
	MA242301	Flexible Arm with Clamp Stand	MA242101 Flexible Arm (No Clamp) on the MA233302 Clamp Stand with Dual Holes Adapter
	MA242911	Clamp for Flexible Arm	Max. opening of clamp is 1.575"(40mm). The dimensions of the clamp: 102.20 x 76.05 x 114.68mm.
	MA242912	Wall Mount	Applicable to Flexible Arm, fixed on the wall with four screws. Size: 153 x 153mm. Dia. of the hole: 22.2mm.
	MA242913	Table Mount	Applicable to Flexible Arm, fixed on the table with four screws. Size: 153 x 153mm. Dia. of the hole: 22.2mm.



MA243501 LONG FLEXIBLE ARM STAND

The Long Flexible Arm Stand has a large vertical travel adjustment, and the horizontal arm can extend freely. A microscope equipped onto MA243501 Long Flexible Arm Stand can be rotated freely for 360 ° and can be used in an inclined observation. The power sockets on the base and horizontal arm can meet the requirements of using the multi-equipments. The truckle with locking functions can be moved or fastened freely.

Specifications

Length of Horizontal Arm: 1400mm
 Weight of Horizontal Arm: 19kg
 Weight of Vertical Post: 100kg
 Weight of Base: 50kg
 Overall Height of the Unit: 1670mm
 Vertical Adjustment: 794mm
 Optional Accessories: MA253101 32mm Arbor, MA252101 Through Hole Focus Rack and Fiber optic illuminator tray.



Picture Preview	P/N	Name	Description
	MA243501	Long Flexible Arm Stand	360 ° free revolution in horizontal direction. Length of horizontal arm is 1400mm; Vertical post is 1670mm; Raising and lowering range in vertical direction is 794mm.

E-ARM

	MA251101	MA251301	MA251401	MA251501	MA251601
Name	76mm E-Arm	39mm E-Arm	83mm E-Arm	85mm E-Arm	B&L E-Arm
Microscope holder	76mm	39mm	83mm	85mm	B&L
Rotatable mount dia.	5/8" (15.875mm)				
Vertical Focusing Adjustment	50mm				



Picture Preview	P/N	Name	Description
	MA251101	76mm E-Arm	76mm holder, with 5/8"(15.875mm) end adapter, focusing distance in vertical direction: 50mm, for holding SZ Series Microscope.
	MA251301	39mm E-Arm	39mm holder, with 5/8"(15.875mm) end adapter, focusing distance in vertical direction: 50mm, for holding MZ Series Microscope.
	MA251401	83mm E-Arm	83mm holder, with 5/8"(15.875mm) end adapter, focusing distance in vertical direction: 50mm, for holding SZ Series Microscope.
	MA251501	85mm E-Arm	85mm holder, with 5/8"(15.875mm) end adapter, focusing distance in vertical direction: 50mm, for holding SZ Series Microscope.
	MA251601	B&L E-Arm	B&L Microscope holder, with 5/8"(15.875mm) end adapter, focusing distance in vertical direction: 50mm, for holding B&L series microscope.

INCLINABLE FOCUS DRIVE

	MA251111	MA251112	MA251115
Name	76mm Inclined Focus Drive	39mm Inclined Focus Drive	N-Type Inclined Focus Drive
(whole) Length	270mm		
Mount Size	16mm		
Rotatable Angle Range of Mount	0 ° -180 °		
Fixed Tightening Model	Manual		
Travel Distance	160mm		
Distance for One Manual Circle	23mm		
Rotatable Mount Dia.	5/8" (15.875mm)		
Net Weight	2.1kg		



Picture Preview	P/N	Name	Description
	MA251111	76mm Inclined Focus Drive	76mm scope holder, track length 270mm, travel distance 160mm. 180 ° rotatable, 5/8" mount.
	MA251121	76mm Coarse Focus Inclined Focus Drive	MA251111 with Fine-Focus, coaxial coarse focus 23mm/circle, fine focus 0.56mm/circle.
	MA251112	39mm Inclined Focus Drive	39mm scope holder, track length 270mm, travel distance 160mm. 180 ° rotatable, 5/8" mount.
	MA251122	39mm Coarse Focus Inclined Focus Drive	MA251112 with Fine-Focus, coaxial coarse focus 23mm/circle, fine focus 0.56mm/circle.
	MA251115	N-Type Inclined Focus Drive	N-Type holder, track length 270mm, travel distance 160mm. 180 ° rotatable, 5/8" mount.
	MA251125	N-Type Coarse Focus Inclined Focus Drive	MA251115 with Fine-Focus, coaxial coarse focus 23mm/circle, fine focus 0.56mm/circle.

THROUGH HOLE FOCUS RACK

	MA252101	MA252103	MA252104	MA252105
Name	76/32mm Through Hole Focus Rack	39/32mm Through Hole Focus Rack	83/32mm Through Hole Focus Rack	85/32mm Through Hole Focus Rack
Microscope Holder	76mm	39mm	83mm	85mm
Dia. of Opening	32mm			
Vertical Focusing Adjustment	48mm			
Remarks	For post stand microscopes			



Picture Preview	P/N	Name	Description
	MA252101	Through Hole Focus Rack	76mm holder, 32mm end hole adapter; Focusing distance in vertical direction: 48mm.
	MA252103	Through Hole Focus Rack	39mm holder, 32mm end hole adapter; Focusing distance in vertical direction: 48mm.
	MA252104	Through Hole Focus Rack	83mm holder, 32mm end hole adapter; Focusing distance in vertical direction: 48mm.
	MA252105	Through Hole Focus Rack	85mm holder, 32mm end hole adapter; Focusing distance in vertical direction: 48mm.



ARBOR

Arbors are designed for extending working range of boom stands, and can meet microscope requirements of different direction and working distance.



	MA253101	MA253201	MA253102	MA253202
Name	Tiltable Arbor	Arbor	Tiltable Arbor	Arbor
Diameter of Arbor	32mm		25mm	
Length of Arbor	11"(280mm)		9.65" (245mm)	
Remarks	With a 5/8" (15.875mm) tilting end adapter	With a 5/8" (15.875mm) end adapter	With a 5/8" (15.875mm) tilting end adapter	With a 5/8" (15.875mm) end adapter

Picture Preview	P/N	Name	Description
	MA253101	Tiltable Arbor	Dia. 32mm; With a 5/8"(15.875mm) tilting end adapter; Length of arbor: 11"(280mm).
	MA253102	Tiltable Arbor	Dia. 25mm; With a 5/8"(15.875mm) tilting end adapter; Length of arbor: 9.65" (245mm).
	MA253201	Arbor	Dia. 32mm; With a 5/8"(15.875mm) end adapter; Length of arbor: 11"(280mm).
	MA253202	Arbor	Dia. 25mm; With a 5/8"(15.875mm) end adapter; Length of arbor: 9.65" (245mm).



MOUNTING PLATE



Picture Preview	P/N	Name	Description
	MA254101	CCD Mounting Plate	5/8" Tilting end adapter; One 1/4-20" standard screw is used to hold the CCD Camera.
	MA254201	CCD Focus Mounting Plate	50mm Focus travel distance, 5/8" Tilting end adapter; One 1/4-20" standard screw is used to hold the CCD Camera.
	MA254202	N Type Mounting Plate	N-Type to attach CCD camera with 1/4-20" standard screw, 50mm focus travel distance, 5/8" tilting end adapter.



MA255101 LCD MONITOR HOLDER

This product is designed for 8" and 10" LCD Monitor. Maximum opening of holder is 35mm; Maximum length size of holder is 88mm; The upper angle control can rotate in multi-direction; The holder can attach the monitor to different stands.



Picture Preview	P/N	Name	Description
	MA255101	LCD Monitor Holder	For attaching 8" and 10" LCD Monitor to the Boom Stand, Track Stand and Post Stand. The monitor can be fixed by rotating knob or M3 x 14 screws.

DONUT

	MA256101	MA256102	MA256103	MA256104
Name	32/76mm Donut	39/76mm Donut	45/76mm Donut	47/76mm Donut
Diameter of Donut (Within)	32mm	39mm	45mm	47mm
Remarks	Connects 76mm holder and I.D. 32mm Micro Zoom Lens	Connects 76mm holder and I.D. 39mm Micro Zoom Lens	Connects 76mm holder and 45mm Micro Zoom Lens body	Connects 76mm Holder and MZ501101 Macro Zoom Lens



Picture Preview	P/N	Name	Description
	MA256101	32/76mm Donut	For connecting 76mm holder and I.D. 32mm Micro Zoom Lens
	MA256102	39/76mm Donut	For connecting 76mm holder and I.D. 39mm Micro Zoom Lens
	MA256103	45/76mm Donut	For connecting 76mm holder and 45mm Micro Zoom Lens body
	MA256104	47/76mm Donut	For connecting 76mm Holder and MZ501101 Macro Zoom Lens
	MA256105	76/76mm Stand Extension Adapter	Adds 56mm in height



ILLUMINATOR HOLDER

This Illuminator Holder can hold an illuminator very conveniently, save space and make observation more flexible. For MA311101, MA311102, MA312101 and MA312102 illuminators.



Picture Preview	P/N	Name	Description
	MA239101	Boom Stand Extension Post	The length is 10"(254mm); The post diameter is 1.465"(37.2mm). Fits Boom Stand, Clamp Stand and Heavy Base Stand.
	MA239401	Double Holes Adapter	The diameter for fitting vertical post is 38.4mm; The diameter of Pneumatic Arm adapter is 20mm.
	MA239402	Double Holes Adapter	The diameter for fitting vertical post is 38.4mm; The diameter of Flexible Arm adapter is 22.2mm.
	MA239403	Three Holes Adapter	Attaches to the Vertical Post of Boom Stand for holding an E-Arm
	MA239405	Fiber Optic Illuminator Holder	For holding MA311101/MA311102/MA312101/MA312102 Fiber Optic Illuminators
	MA239406	LED Power Supply Holder	For holding LED Power Supply

MANUAL INSPECTION STAGES



MA261101 MANUAL STAGE

75 x 56mm travel, with 116 x 96mm back light window. 95mm adapter is for stand base.



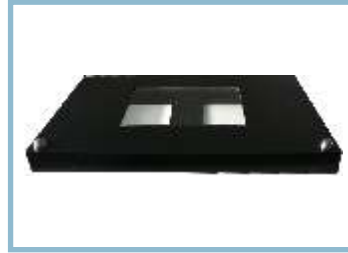
MA261201 MANUAL STAGE

Manual Stage, dimensions: 180 x 150mm, XY 90 x 60mm travel, the clamp opening is from 25mm(10") to 37.2mm(15.1").



MA262101 MANUAL INSPECTION STAGE

Manual Stage, dimensions: 440 x 290 x 36mm, XY 300 x 250mm travel.



MA262202 MANUAL INSPECTION STAGE

Manual Stage, dimensions: 380 x 230 x 36mm, XY 200 x 200mm travel, with 19 x 14.5cm back light window.

Picture Preview	P/N	Name	Description
	MA261101	Manual Stage	75 x 56mm travel, with 116 x 96mm back light window. 95mm adapter is for stand base.
	MA261102	Rotating Manual Stage	Dimensions: 180 x 155 x 34mm; Working Size: 180 x 155 x 26mm; Travel Distance: 75 x 55mm; Dia. of Glass: 95mm (360 ° free revolution).
	MA261201	Manual Stage	Manual Stage, dimensions 180 x 150mm, XY 90 x 60mm travel. The clamp opening is from 25mm(10") to 37.2mm(15.1").
	MA262101	Manual Inspection Stage	Manual Stage, dimensions 440 x 290 x 36mm, XY 300 x 250mm travel.
	MA262201	Manual Inspection Stage	Manual Stage, dimensions 440 x 290 x 36mm, XY 300 x 250mm travel, with 19 x 14.5cm back light window.
	MA262102	Manual Inspection Stage	Manual Stage, dimensions 380 x 230 x 36mm, XY 300 x 200mm travel.
	MA262202	Manual Inspection Stage	Manual Stage, dimensions 380 x 230 x 36mm, XY 200 x 200mm travel, with 19 x 14.5cm back light window.



MA271101 PCB HOLDER

40mm height for holding PCB, PCB minimum size 5mm



Picture Preview	P/N	Name	Description
	MA262301	ESD Safe Rubber Cover	400 x 290mm ESD Safe Rubber Cover, for MA262101 and MA262201 Manual Stage.
	MA271101	PCB Holder	40mm height for holding PCB, PCB minimum size 5mm; 4 pcs for one set; For MA262101 Manual Inspection Stage.

FIBER OPTIC ILLUMINATOR

View Solutions offers different types of illuminators for various applications. Options include fiber optic, LED and Fluorescent illuminators.

MA311101/MA311102 FIBER OPTIC ILLUMINATOR

The design of broad-voltage input of this power supply makes it suitable in different countries and regions, and the over-voltage and over-loading protective and delay devices designed in the circuits make the use of this illuminator safe and sound.

	MA311101	MA311102
Power Supply	AC 120V 60Hz	AC 240V 50Hz
Power Consumption	150W	
Input Current	1.5A	
Output Current	1.5-7.5A	
Fuse	2A	
Startup Time	2s (Full Load)	
Efficiency	85-95%	
Operating Temperature	0-45	
Storage Temperature	-25-85	
Relative Humidity	85%	
Illumination	100000 Lux	
Color Temperature	3000K	
Spectrum Range	450-700nm	
Dimensions(L x W x H)	8.19" x 4.13" x 4.88" (208mm x 105mm x 124mm)	
Lamp	21V 150W halogen bulb	
Service Life of Lamp	Approx. 200 hours at full load	
Weight	3kg (6.6 lbs.)	
Adapter	With a 5/8" Fiber Optic Cable Adapter	



Filters



MA312101/MA312102 FIBER OPTIC ILLUMINATORS

The Fiber Optic Illuminators are fully assembled and packed in a foam container for maximum protection.

	MA312101	MA312102
Power Supply	AC 120V 60Hz	AC 240V 50Hz
Lamp Type	150W Halogen / 21V EKE	
Fuse	2A Dia. 5 x 20mm(L)	
Startup Time	50ms (Full Load)	
Efficiency	65% (Full load)	
Operating Temperature	0 -45 (32 -113)	
Storage Temperature	-25-85 (-13 -185)	
Relative Humidity	85%	
Illumination	100000 Lux	
Color Temperature	3000K	
Service Life of Lamp	Approx. 200 hours at full load	
Dimensions	7.48" x 7.09" x 6.30" (203mm x 180mm x 160mm)	
Weight	4.25Kg (9.37 lbs.)	
Adapter	With a 5/8" Fiber Optic Cable Adapter	





MA314101 FIBER OPTIC ILLUMINATOR

After the MA314101 illuminator is combined with fibers, it can provide a disposable and reliable light source with high-intensity, adjustable illumination and high evenness, so it is more widely suitable for the industries like electronics, high-precision machinery, biology, agriculture and clinical medical studies than common light sources.

	MA314101
Power Supply	AC 90-240V 50/60Hz
Power Consumption	150W
Fuse	2A Dia. 0.20" x 0.79"(5 x 20mm)(L)
Startup Time	50ms (Full Load)
Filter	Red, Yellow, Blue, Green
Efficiency	65%
Operating Temperature	0-45
Storage Temperature	-25-85
Relative Humidity	85%
Illumination	100000 Lux
Color Temperature	3200K
Dimensions(L x W x H)	8.26" x 6.69" x 5.119" (210mm x 170mm x 130mm)
Lamp	21V 150W halogen reflector bulb
Service Life of Lamp	Approx. 200 hours at full load
Weight	3kg (6.6 lbs.)
Adapter	With a 5/8" Fiber Optic Cable Adapter



MA314102 FIBER OPTIC ILLUMINATOR

This series of product constitutes the cold-light illumination, and the power supply is specially designed for the industries like image processing, medical instruments, microscope illumination and industrial measurement. The halogen lamp cover is adopted for the power supply of this series of product.

	MA314102
Power Supply	AC 110V 60Hz
Power Consumption	150W
Output Current	10AMax
Intensity of Illumination and Stability	When the input voltage ranges between $\pm 15\%$, the variation of output voltage should be below 0.1% and that of illumination intensity should be below 0.8%.
Ripple Voltage	60mV
Operating Temperature	-10 -40
Color Temperature	3500K
Dimensions(L x W x H)	8.9" x 4.6" x 5.433" (226mm x 117mm x 138mm)
Protection	Output short-circuit protection; overheating protection (Cut-off at 95 and automatic restoration at 65)
MTBF	>10000h
Safety Rules	In line with UL, TUV and CCC
Lamp	21V 150W halogen light bulb
Weight	2.2kg (4.85 lbs.)
Adapter	With a 5/8" Fiber Optic Cable Adapter



MA314108/MA314309 FIBER OPTIC ILLUMINATOR

This updated fiber optic illuminator offers a variety of features for many machine vision requirements. By using innovative optical designs, the lamp-to-fiber coupling efficiency has been dramatically increased.

	MA314108	MA314309
Power Supply	AC 110/220V 50/60Hz	
Power Consumption	150W	250W
Fuse	3A	
Startup Time	50ms (Full Load)	
Efficiency	65%	
Operating Temperature	0-45	
Storage Temperature	-25-85	
Relative Humidity	85%	
Illumination	100000 Lux	
Color Temperature	3200K	
Spectrum Range	450-700nm	
Dimensions(L x W x H)	11.02" x 3.94" x 6.69" (280mm x 100mm x 170mm)	12.71" x 10.79" x 4.84" (323mm x 274mm x 123mm)
Lamp	24V 150W halogen reflector bulb	24V 250W halogen reflector bulb
Service Life of Lamp	Approx. 200 hours at full load	
Weight	3kg (6.6 lbs.)	5.5kg (12.13 lbs.)
Adapter	With a 5/8" Fiber Optic Cable Adapter	



Picture Preview	P/N	Name	Description
	MA311101	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 120V 60Hz, color temperature 3000K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 208 x 105 x 124mm. Weight: 3kg.
	MA311102	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 240V 50Hz, color temperature 3000K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 208 x 105 x 124mm. Weight: 3kg.
	MA311310	Filter Kit	For MA311101 Fiber Optic Illuminator, includes Red, Green and Blue Filters. The daylight filter is included in the package of light source.
	MA311311	Light Blue Filter	For MA311101, MA311102 and MA311103 Fiber Optic Illuminators.
	MA311312	Red Filter	For MA311101, MA311102 and MA311103 Fiber Optic Illuminators.
	MA311313	Green Filter	For MA311101, MA311102 and MA311103 Fiber Optic Illuminators.
	MA311314	Blue Filter	For MA311101, MA311102 and MA311103 Fiber Optic Illuminators.
	MA312101	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 120V 60Hz, with a 5/8" Fiber Optic Cable adapter with metal housing. The color temperature is 3000K.
	MA312102	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 240V 50Hz, with a 5/8" Fiber Optic Cable adapter with metal housing. The color temperature is 3000K.
	MA313101	HID Fiber Optic Illuminator	21V 150W Halogen light bulb, input 240V 50Hz, with a 5/8" Fiber Optic Cable adapter. The color temperature is 6000K, dimensions: 208 x 105 x 124mm
	MA314101	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 90-240V, color temperature 3000K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 210 x 170 x 130mm. Weight: 3kg.
	MA314102	Fiber Optic Illuminator	21V 150W Halogen light bulb, input 110V, color temperature 3500K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 226 x 117 x 138mm. Weight: 2.2kg.
	MA314108	Fiber Optic Illuminator	24V 150W Halogen light bulb, input 110/220 50/60Hz, color temperature 3200K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 280 x 100 x 170mm. Weight: 3kg.
	MA314309	Fiber Optic Illuminator	24V 250W Halogen light bulb, input 110/220 50/60Hz, color temperature 3200K, with a 5/8" Fiber Optic Cable Adapter. Dimensions: 323 x 274 x 123mm. Net weight: 5.5kg.
	GP090201	Halogen Bulb	21V 150W Halogen Bulb, for MA311101, MA312101, MA314101 and MA314102 Fiber Optic Illuminators.
	GP090203	Halogen Bulb	24V 150W Halogen Bulb, for MA314108 Fiber Optic Illuminator.
	GP090204	Halogen Bulb	24V 250W Halogen Bulb, for MA314309 Fiber Optic Illuminator.
	GP100101	2A Fuse	For MA311101 and MA312101 Fiber Optic Illuminators

FIBER OPTIC LIGHT GUIDE

Fiber Optic Material: Glass optical fiber
 Light Transmission Rate: T 50%/m
 Flexural Property: Min. bending radius 30D (D: Diameter of bushing)
 High Temperature Property: (1).40 -150 .(2). special high temperature resistance 250 , instant high temperature resistance 400
 Pressure Proof Property: 1 0.1MPa; Special 0.3MPa

Diameter of Optic Fiber Guide: MZ series: 8mm;
 Dual series: 7.1mm, SZ series: 10mm, Back light: 6.4mm
 Aperture in Numerical Value: 0.60
 Attenuation of Fiber: 300-600dB/km
 Intensity of Optical Fiber: > 150kg/mm
 Spectrum Transmission Range: 380-1300nm
 Tubing Material: SS, PVC (black)



ANNULAR RING LIGHT GUIDE

360 ° Shadow-Free, Cool, Uniform Illumination
 Accepts Polarizer Accessories
 PVC-Covered Metal Sheathing
 Black Anodized Aluminum Housing
 70% Typical Illuminator Coupling Efficiency
 Glass Fibers with Ground & Polished End-Faces



DUAL PIPE LIGHT GUIDE

Two separate illuminator specific series are available, and they are not interchangeable. Longer light guides tend not to be self-supporting.



Picture Preview	P/N	Name	Description
	MA321101	Annular Ring Light Guide	Ring's I.D.: 58mm; fiber dia.: 10mm, with PVC tubing at 1m in length, fitting most major brand microscopes. 5/8" standard adapter is for attaching to Fiber Optic Illuminator.
	MA321301	Annular Ring Light Guide	Ring's I.D.: 34mm; fiber dia.: 8mm, with PVC tubing at 1m in length, fitting most major brand microscopes. 5/8" standard adapter is for attaching to Fiber Optic Illuminator
	MA321401	Annular Ring Light Guide	Ring's I.D.: 65mm; fiber dia.: 11mm, with PVC tubing at 1m in length, fitting most major brand microscopes. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA322101	Dual Pipe Light Guide	Fiber Optic Goose Neck Dual Pipe with focusing lens, fiber dia.: 7.1mm; 18"(460mm) in length. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA322102	Dual Pipe Light Guide	Fiber Optic Goose Neck Dual Pipe without focusing lens, fiber dia.: 7.1mm; 18"(460mm) in length. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA322112	Dual Pipe Light Guide	Fiber Optic Goose Neck Dual Pipe without focusing lens, fiber dia.: 7.1mm; 800mm in length. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA322121	Dual Pipe Light Guide	Fiber Optic Goose Neck Dual Pipe with focusing lens, fiber dia.: 1/4 "; 18"(460mm) in length. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA322301	Dual Pipe Light Guide	Dual Pipe Light Guides. 510mm in length for soft cable, 910mm for Stay-Put gooseneck. 5/8" standard adapter for attaching to the Fiber Optic Illuminator.
	MA322302	Dual Pipe Light Guide	Dual Pipe Light Guides, with a clamp to attach on track stand. The soft cable is 510mm in length, 910mm for Stay-Put gooseneck. 5/8" standard adapter for attaching to the Fiber Optic Illuminator.

SINGLE PIPE LIGHT GUIDE

Gooseneck design, can be adjusted with different angles for illumination, with big light flux.



BACK LIGHT GUIDE

LED Back Light Guide can be used under the glass window of the Manual Stage.



LINE LIGHT GUIDE

Fiber optic light guides provide intense and cold illumination in a small delivery package. Line light sources are perfect for a variety of applications from machine vision systems using line scan cameras to parts inspection.



Picture Preview	P/N	Name	Description
	MA323101	Single Pipe Light Guide	With focusing lens, fiber dia.: 6mm; 18" (460mm) gooseneck. 5/8" standard adapter is for attaching the Fiber Optic Illuminator.
	MA323201	Single Pipe Light Guide	Fiber Optic Cable: 6 x 800mm, with 9mm Adapter, for MZ Coaxial Illuminator, MA201912 and MA228101 Fiber Optic Mirror Bases.
	MA324101	Back Light Guide	4" x 4" active area, 178 x 110 x 20mm dimension, fiber dia.: 10mm. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA324102	Back Light Guide	2" x 2" active area, 86 x 52 x 16mm dimension, fiber dia. 6.5mm. 5/8" standard adapter is for attaching to the Fiber Optic Illuminator. Applicable to MA262201 Manual Inspection Stage.
	MA325101	Line Light Guide	Fiber Optic Cable: 10mm, output 1 x 71mm, 1m in Length, 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA325102	Line Light Guide	Fiber Optic Cable: 6mm, output 1 x 38mm, 1m in Length, 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.
	MA325103	Line Light Guide	Fiber Optic Cable: 12mm, output 1 x 253mm, 910mm in Length, 5/8" standard adapter is for attaching to the Fiber Optic Illuminator.

FLUORESCENT RING LIGHT

Fluorescent Ring Lights feature tri-band phosphor bulbs with many different color options and easy lamp replacement. Staying cool to the touch, the polycarbonate plastic housing does not radiate heat that can affect samples. Ring configuration allows 360 ° diffuse illumination with strong intensity even at long distances (see the specifications). These Fluorescent Ring Lights are useful in inspection and assembly environments. They are also especially well suited for video and machine vision applications, providing flicker-free, high frequency output. When illuminating reflective objects, our Polarizer/Analyzer Accessory Kits are easily integrated and can improve image quality by reducing glare. Variable intensity option allows for 10%-100% adjustment.



MA331101/MA331102 FLUORESCENT RING LIGHT

	MA331101	MA331102
Power Supply	120V 60Hz	240V 50Hz
Power Consumption	12W	
Lamp Inner Dia.	53.3mm	
Inner Opening	I.D. 55mm	
Luminous Efficiency	48Lm/W	
Color Temperature	5600K ± 100K	
Service Life	2000 hours	
Remarks	Applicable to Stereo Microscopes	



MA331103 FLUORESCENT RING LIGHT

	MA331103
Power Supply	120V 60Hz
Input Power	8W
Max. Opening	62mm
Operating Frequency	25 KHz
Color Temperature	6400K
Lamp Output Power	7W
Lamp Life	Minimum 3000 hours
Operating Temperature	32-104 F (0-40 °C)
Humidity Range	0-80%
Remarks	Applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes



MA331105 ADJUSTABLE FLUORESCENT RING LIGHT

	MA331105
Power Supply	120V 60Hz
Input Power	12W
Max. Opening	62mm
Operating Frequency	25 KHz
Color Temperature	6400K
Lamp Output Power	8-10W
Lamp Life	Minimum 3000 hours
Operating Temperature	32-104 F (0-40 °C)
Humidity Range	0-80%
Remarks	Adjustable brightness; Applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes

Picture Preview	P/N	Name	Description
	MA331101	Fluorescent Ring Light	120V 60Hz, 12W fluorescent ring light bulb. Max. Opening 55mm, for Stereo Microscopes.
	MA331102	Fluorescent Ring Light	240V 50Hz, 12W fluorescent ring light bulb. Max. Opening 55mm, for Stereo Microscopes.
	MA331103	Fluorescent Ring Light	120V 60Hz, 7W fluorescent ring light bulb. Max. Opening 62mm, for SZ, SZ2, SZ3 and FS Series Stereo Microscopes.
	MA331105	Adjustable Fluorescent Ring Light	120V 60Hz, 12W fluorescent ring light bulb. Max. Opening 62mm, adjustable brightness, for SZ, SZ2, SZ3 and FS Series Stereo Microscopes.
	GP090101	Fluorescent Ring Light Bulb	12W Fluorescent Bulb, for MA331101 Fluorescent Ring Light.
	GP090105	Fluorescent Ring Light Bulb	7W Fluorescent Bulb, for MA331103 Fluorescent Ring Light.
	GP090106	Fluorescent Ring Light Bulb	10W Fluorescent Bulb, for MA331105 Adjustable Fluorescent Ring Light.

LED LIGHT

MA341101/ MA341111 LED Ring Light

	MA341101	MA341111
Power Supply	AC 90-240V 50/60Hz	
Output Voltage	DC 18-24V	
Current	0.5A Max.	
Power Consumption	6W Max.	
Diameter	I.D.: 54mm; O.D.: 104mm	
Height	26mm	
Remarks	Metal housing	Plastic housing
	78 LED Bulbs, adjustable brightness, applicable to SZ Series Stereo Microscopes	



MA341103 LED RING LIGHT

Power Supply: AC 90-265V, 50/60Hz
 Output: 24V 6W
 Color Temperature: 6400K
 Lamp Life: Minimum 10,000 hours
 Operating Temperature: 32-104 F(0-40)
 Humidity Range: 0-80%
 Max. Opening: 62mm
 Fuse: 1A
 The Power Box Dimensions: 103 x 61 x 32mm
 60 LED Bulbs, adjustable brightness.
 Applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes



MA341104 LED RING LIGHT

Power Supply: AC 90-240V, 50/60Hz
 Max. Opening: 61mm
 144 LED Bulbs, Black Cover.
 Adjustable brightness, applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes



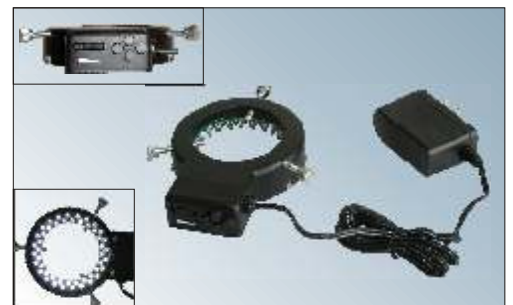
MA341105 LED RING LIGHT

Power Supply: AC 90-240V, 50/60Hz
 Max. Opening: 61mm
 48 LED Bulbs, White Cover.
 Adjustable brightness, applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes



MA341303 LED RING LIGHT

Power Supply: AC 90-240V, 50/60Hz
 Max. Opening: 61mm
 48 LED Bulbs, Black Cover. Ring light is divided into 4 areas and each area is turned on and off separately.
 Adjustable brightness, applicable to SZ Series Stereo Microscopes.





MA341305 LED RING LIGHT with AREA CONTROL

Power Supply: AC 90-240V, 50/60Hz
 Max. Opening: 61mm
 144 LED Bulbs, Black Cover. Ring light is divided into 4 areas and each area is turned on and off separately.
 Adjustable brightness, applicable to SZ, SZ2, SZ3 and FS Series Stereo Microscopes



MA342103 LED RING LIGHT for VIDEO ZOOM MICROSCOPE

Power Supply: AC 90-265V 50/60Hz
 Power Consumption: 4W
 Diameter: I.D.:50mm; O.D.:68mm
 Height: 35mm
 96 LED Bulbs, adjustable brightness
 Applicable to MZ, MZ2, MZ3 Series Video Zoom Microscopes.



MA344101 LED BACK LIGHT

Power Supply: AC 90-240V 50/60Hz
 Output Voltage: DC 18-24V
 Current: 0.5A Max.
 Power Consumption: 6W Max.
 Dimensions: 86 x 52 x 16mm
 Active Area: 2 x 2" (50.8 x 50.8mm)
 Adjustable brightness



MA345101 LED POINT LIGHT

Power Supply: AC 90-240V 50/60Hz
 Output Voltage: DC 18-24V
 Current: 0.5A Max.
 Power Consumption: 2W Max.
 O.D.: 50mm
 2W spot light, adjustable brightness, plastic housing.
 Designed for track stand and post stand



NEW!

MA345102 LED POINT LIGHT

Power Supply: AC 90-240V 50/60Hz
 Output Voltage: DC 24V
 30 LED Bulbs . 2.5W spot light, adjustable brightness.
 Designed for track stand and post stand



MA345201 LED DUAL SPOTS LIGHT

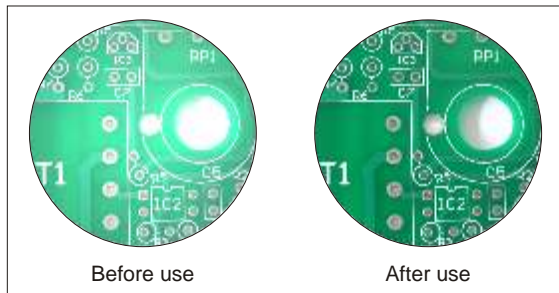
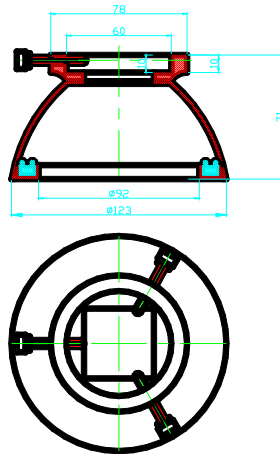
Power Supply: AC 90-240V 50/60Hz
 Output Voltage: DC 24V
 Power Consumption: 4W
 Gooseneck Length: 240mm
 Can be attached on track stand, post stand and boom stand.
 The clamp opening is from 25mm (10") to 37.2mm (15.1").



MA347101 LED DIFFUSE ILLUMINATOR

The product features excellence of low power consumption, low heat, long service life, small size and adjustable brightness. It has 48 LED bulbs with four switches to control 8 LED areas for choosing different illumination angles.

Power Supply: AC 100V-240V, 50/60Hz
 Maximum Power Consumption: 5W
 Output: DC 24V
 Brightness Range: 0-100%
 Current Range: 0-180mA,
 Environment Temperature/ Humidity: 0-40 /20-80%RH
 Dimensions: the top mount (outer)78mm x (inner)60mm;
 The top caliber of light flux 40mm;
 The bottom mount (outer)123mm x (inner)92mm
 Service Life: 20000 hours



Picture Preview	P/N	Name	Description
	MA341101	LED Ring Light	AC 90-240V 50/60Hz, 6W Max, 78LED Bulbs, I.D.:54mm; O.D.:104mm, Height:26mm, brightness is adjustable, metal housing, for SZ Series Stereo Microscopes.
	MA341111	LED Ring Light	AC 90-240V 50/60Hz, 6W Max, 78LED Bulbs, I.D.:54mm; O.D.:104mm, Height:26mm, brightness is adjustable, plastic housing, for SZ Series Stereo Microscopes.
	MA341103	LED Ring Light	60 LED Bulbs, input: 90-265V 50/60Hz; output: 24V6W; color temperature: 6400K; ring of Max. Opening: 62mm. The brightness is adjustable. for SZ. SZ2, SZ3 and FS Series Stereo Microscopes.
	MA341104	LED Ring Light	AC 90-240V 50/60Hz, 144 LED Bulbs, Max. Opening: 61mm, brightness is adjustable, for SZ. SZ2, Sz3 and FS Series Stereo Microscopes.
	MA341105	LED Ring Light	AC 90-240V 50/60Hz, 48 LED Bulbs, Max. Opening: 61mm, brightness is adjustable, for SZ. SZ2, Sz3 and FS Series Stereo Microscopes.
	MA341303	LED Ring Light with Area Control	AC 100-240V 50/60Hz, 48LED Bulbs, Max. Opening: 61mm, ring light is divided into 4 areas and each area is turned on and off separately, brightness is adjustable, for SZ. SZ2, SZ3 and FS Series Stereo Microscopes.
	MA341305	LED Ring Light with Area Control	AC 90-240V 50/60Hz, 144LED Bulbs, Max. Opening: 61mm, ring light is divided into 4 areas and each area is turned on and off separately, brightness is adjustable, for SZ. SZ2, SZ3 and FS Series Stereo Microscopes.
	MA341904	LED Ring Light Adapter for MZ Zoom Lens	44mm Adapter, connect MZ Series of Microscope and MA341103 LED Ring Light.
	MA342103	LED Ring Light for Video Zoom Microscope	AC 90-265V 50/60Hz, 96LED Bulbs, 4W I.D.:50mm; O.D.:68mm, Height: 35mm, brightness is adjustable, for MZ, MZ2, MZ3 Series Video Zoom Microscopes.
	MA344101	LED Back Light	2 x 2" active area, 86 x 52 x 16mm dimension, AC 90-240V 50/60Hz, output: DC 18-24V, 6W Max, brightness is adjustable.
	MA345101	LED Point Light	2W spot light, AC 90-240V 50/60Hz, output: DC 18-24V, 6W Max, brightness is adjustable, for track stand and post stand.
	MA345102	LED Point Light	30 LED Bulbs, 2.5W Spot Light, AC 90-240V 50/60Hz, output: DC 24V, brightness is adjustable, for track stand and post stand.
	MA345201	LED Dual Spots Light	Power Supply: AC 90-240V 50/60Hz, output: DC 24V, 4W; Gooseneck length 240m, can be attached on track stand and boom stand, the clamp open size is from 25mm (10") to 37.2mm (15.1").
	MA347101	LED Diffuse Illuminator	Power Supply: AC 100-240V, 50/60Hz, output: DC 24V, top mount: 78mm(outer) x 60mm (inner), top caliber: 40mm, bottom opening size: 123mm(outer) x 92mm(inner).



MA351101 HALOGEN LIGHT

Weight: 1.7kg
 12V 15W halogen bulb, brightness is adjustable
 Designed for MA201201 Track Stand and MA201911 Transmitted Mirror Base



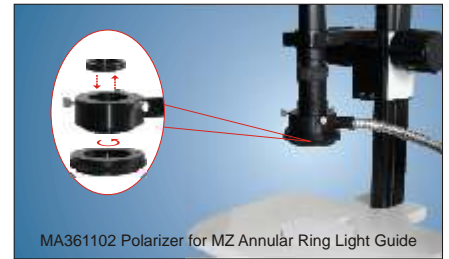
Picture Preview	P/N	Name	Description
	MA351101	Halogen Light	12V 15W halogen bulb. The brightness is adjustable. For MA201201 Track Stand and MA201911 Transmitted Mirror Base.



NEW!

POLARIZER

Reduces glare from highly reflective surfaces
 Analyzer sits in counterbore
 Extreme low profile design does not inhibit placement of lens or object viewed
 Easy adjustment



MA361102 Polarizer for MZ Annular Ring Light Guide



Before use



After use



MA361103 Polarizer for LED Ring Light



MA361104 Polarizer for LCD Microscope

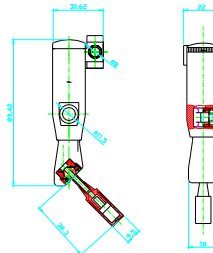
Picture Preview	P/N	Name	Description
	MA361101	Polarizer for SZ Annular Ring Light Guide	Polarizer size: outside dia.: 63mm, inner dia.: 46mm, dia. of receiver: 46mm.
	MA361102	Polarizer for MZ Annular Ring Light Guide	Polarizer size: outside dia.: 48mm, inner dia.: 28mm, dia. of receiver: 28mm
	MA361103	Polarizer for LED Ring Light	Polarizer size: outside dia.: 83.5mm, inner dia.: 47mm, dia. of receiver: 36mm, screw thread size: M38 x 0.75.
	MA361104	Polarizer for LCD Microscope	Polarizer size: outside dia.: 68mm, inner dia.: 39mm, dia. of receiver: 28mm, screw thread size: M30 x 0.75.



NEW!

MA371101 LASER POINTER

Length: 128mm
 Max. Diameter: 20
 Size of Fixing Mount: M4 or M5
 Wavelength: 650nm
 Type of Battery: 3.6V 1200mA



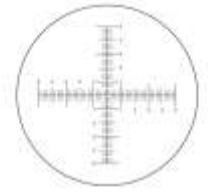
Picture Preview	P/N	Name	Description
	MA371101	Laser Pointer	Wavelength: 650nm; Input voltage: 3-4.5V; For LCD microscopes.

RETICLE

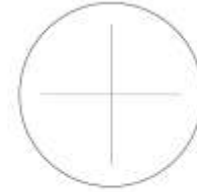
CROSSHAIR RETICLE



MA112101/MA112201



MA112102/MA112202

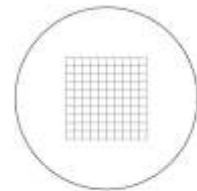


MA112103/MA112203

P/N	Diameter (mm)	Thickness (mm)	Remarks	
MA112101	24	1.5	X axis Crosshair Scale	10mm/100 Div.
MA112102			Crossed Scale	12mm/120 Div.
MA112201	20		X axis Crosshair Scale	10mm/100 Div.
MA112202			Crossed Scale	
MA112103	24	1.5	Crosshair /	
MA112203	20			

CROSSHAIR RETICLE

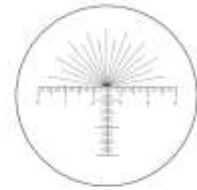
P/N	Diameter (mm)	Thickness (mm)	Remarks
MA112104	24	1.5	Net Grid 10 x 10mm / 10 x 10mm
MA112204	20		



MA112104/MA112204

MA112105 MULTI-SCALE

P/N	Diameter (mm)	Thickness (mm)	Remarks
MA112105	24	1.5	Linear Scales 10mm/100/0.5mm 0-180 ° /10 ° Half Protractor



MA112105

SCALED RETICLE

P/N	Diameter (mm)	Thickness (mm)	Remarks
MA112301	18	1.2	Straight Line 5mm/100 Div.
MA112302			Single Line 10mm/200 Div.



MA112301/MA112302

MICROMETER

SCALE MICROMETER



P/N	Diameter (mm)	Remarks
MA751301	75 x 35 x 2mm	Dual Axis Linear 1mm/100/0.01mm
MA751302		Linear 1mm/100/0.01mm
MA751303		Linear 1inch/100/0.001inch



MA751301



MA751302



MA751303

MULTI-FUNCTION SCALE MICROMETER

P/N	Diameter (mm)	Remarks
MA751304	75 x 35 x 2mm	Dual Axis (1mm/100/0.01mm); Linear(50mm/500/0.1mm)
MA751305		Linear (10mm/100/0.1mm), Linear (1mm/100/0.01mm); Linear (10mm/200/0.05mm)

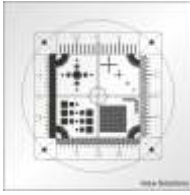


MA751304



MA751305

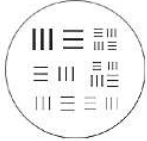
NEW!



MA751309

MA751309 MULTI-FUNCTION SCALE MICROMETER

Size: 45 × 45mm; Minimum measurability scale: 0.1mm; Minimum measurability angle: 1 ° ; Maximum measurability length: 15mm with built-in crosshair, net grid hair, circle and square.



MA751401



MA751402

RESOLUTION TARGET

P/N	Diameter (mm)	Remarks
MA751401	35 × 2mm	Positive 25-160 lp/mm
MA751402		Negative 25-160 lp/mm

Picture Preview	P/N	Name	Description
	MA112101	Crosshair Reticle	24mm, thickness 1.5mm. Crosshair Scale 10mm/100 Div.
	MA112102	Crosshair Reticle	24mm, thickness 1.5mm. Crossed Scale 12mm/120 Div.
	MA112103	Crossline Reticle	24mm, thickness 1.5mm. Plain Crosshair.
	MA112104	Net Grid Reticle	24mm, thickness 1.5mm. Net Grid 10 × 10mm/10 × 10mm
	MA112105	Multi-Scale	24mm, thickness 1.5mm. 0-180 ° /10 ° Half Protractor. Linear Scales: 10mm/100/0.5mm.
	MA112201	Crosshair Reticle	20mm. Crosshair Scale 10mm/100 Div.
	MA112202	Crosshair Reticle	20mm, Crossed Scales 10mm/100 Div.
	MA112203	Crosshair Reticle	20mm, Plain Crosshair.
	MA112204	Net Grid Reticle	20mm, Net Grid 10 × 10mm/10 × 10mm.
	MA112301	Scaled Reticle	18mm, thickness 1.2mm. Straight Line 5mm/100 Div.
	MA112302	Scaled Reticle	18mm, thickness 1.2mm. Single Line 10mm/200 Div.
	MA751301	Scale Micrometer	Dual Axis Linear (1mm/100/0.01mm); Dimensions: 75 × 35 × 2mm.
	MA751302	Scale Micrometer	Linear (1mm/100/0.01mm); Dimensions: 75 × 35 × 2mm.
	MA751303	Scale Micrometer	Linear (1inch/100/0.001inch); Dimensions: 75 × 35 × 2mm.
	MA751304	Multi-Function Scale Micrometer	Dual Axis (1mm/100/0.01mm); Linear(50mm/500/0.1mm); Dimensions: 75 × 35 × 2mm.
	MA751305	Multi-Function Scale Micrometer	Linear (10mm/100/0.1mm); Linear (1mm/100/0.01mm); Linear (10mm/200/0.05mm); Dimensions: 75 × 35 × 2mm.
	MA751309	Multi-Function Scale Micrometer	Size: 45 × 45mm; Minimum measurability scale: 0.1mm; Minimum measurability angle: 1 ° ; Maximum measurability length: 15mm with built-in crosshair, net grid hair, circle and square.
	MA751401	Resolution Target	Positive 25-160 lp/mm; Diameter: 35 × 2mm.
	MA751402	Resolution Target	Negative 25-160 lp/mm; Diameter: 35 × 2mm.

INFINITY CORRECTED LONG WORKING DISTANCE OBJECTIVES

High resolution, high magnification. 5X, 10X, 20X and 50X infinity corrected objectives are available. The objectives are designed for Metallurgical Microscope, Zoom Tube, and measurement system. If connected with 0.7X-4.5X MZ zoom microscope, the maximum optical magnification can reach 450X, and the comprehensive magnification can reach 27,000X. The long working distance is more convenient for examining and operating under various conditions. Different lighting can be utilized for different applications. Widely applied to inspection and measurement in metallurgical, semiconductor and biological applications.



P/N	Name	N.A.	W.D.(mm)	Focal Length (mm)	Resolution (μm)	Depth of Focus (μm)	Field of View (mm) (24 Eyepiece)
MA121102	10X Plan Achromatic Objective	0.28	34	21	1	3.5	2.4
MA121201	5X Plan Achromatic Objective	0.13	44.5	40	2	14	4.8
MA121203	20X Plan Achromatic Objective	0.29	31	10	1	3.5	1.2
MA121204	50X Plan Achromatic Objective	0.42	20.5	4	0.7	1.6	0.48



MZ-200-CS-A Video Zoom Microscope

Includes: MZ101101 0.7-4.5X Micro Zoom Body, MZ102102 0.5X Coupler, MZ103201 Adapter for Infinity Objective Lens, MA121102 10X Infinity Corrected Long Working Distance Objective, MA221103 39mm Track Stand, MA311101 Fiber Optic Illuminator, MA323201 Single Pipe Light Guide, GP020101 1/3" Color CCD Camera, GP070101 12V Power Supply and GP080101 BNC-BNC Video Cable.



Can be installed in industrial measuring instrument, provide quality optical image, and reduce the unnecessary visual error greatly in optical measurement process.

Picture Preview	P/N	Name	Description
	MA121102	10X Infinity Corrected Long Working Distance Objective	10X Plan achromatic objective, parfocal distance 95mm, working distance 34mm, focal length 21mm, N.A. 0.28.
	MA121201	5X Infinity Corrected Long Working Distance Objective	5X Plan achromatic objective, parfocal distance 95mm, working distance 44.5mm, focal length 40mm, N.A. 0.13.
	MA121203	20X Infinity Corrected Long Working Distance Objective	20X Plan achromatic objective, parfocal distance 95mm, working distance 31mm, focal length 10mm, N.A. 0.29.
	MA121204	50X Infinity Corrected Long Working Distance Objective	50X Plan achromatic objective, parfocal distance 95mm, working distance 20.5mm, focal length 4mm, N.A. 0.42.

THE MICROSCOPE LENS ACCESSORIES

The Digital Camera Adapter can be connected to the digital camera for micro image photography. It is designed to get a sharper image through the zoom lens of a digital camera and different magnification of microscope.



MA411101 10X DIGITAL CAMERA ADAPTER KIT

10X Optical Lens, applicable to 23.2mm and 30mm Eyepiece Adapter, or C-mount of Trinocular Microscope. The adapters with 28mm, 37mm and 43mm thread rings fit different Digital Cameras.



Attach to C-Mount

Use the C-Mount Adapter to attach to standard Trinocular C-Mount



MA421101 DIGITAL SLR CAMERA ADAPTER KIT

With a 2X optical lens, for DSLR camera. The adapter of the lens has 42 x 0.75mm thread, and a T-mount adapter is used to connect the adapter of the lens with the Digital SLR Camera.



Attach to Eyepiece

The camera Lens Adapter has a 23.2mm tube. 23.2/30mm or 23.2/30.5mm Eyepiece Adapter can be used to connect with the microscope.

Picture Preview	P/N	Name	Description
	MA411101	10X Digital Camera Adapter Kit	10X Optical Lens, applicable to 23.2mm and 30mm Eyepiece Adapter, or C-mount of Trinocular Microscope. The adapters with 28mm, 37mm and 43mm thread rings fit different Digital Cameras.
	MA412101	C-mount Adapter	Standard C-Mount Adapter, connects with Trinocular and 10X Digital Camera Lens Adapter.
	MA412201	Eyepiece Adapter	23.2/30mm Adapter, connects with 30mm Eyepiece Tube of Stereo Microscope and 10X Digital Camera Lens Adapter.
	MA413101	Digital Camera Adapter Clamp	Holds the 10X Digital Camera Lens Adapter and C-Mount Adapter
	MA413102	Digital Camera Eyepiece Tube Clamp	Holds the 10X Digital Camera Lens Adapter and Eyepiece Tube of Stereo Microscope
	MA414101	Digital Camera Lens Adapter	10X Body for the Digital Camera Lens Adapter
	MA415101	37/28mm Camera Adapter	Applicable to 37mm Digital Camera
	MA415102	43/28mm Camera Adapter	Applicable to 43mm Digital Camera
	MA415103	52/28mm Camera Adapter	Applicable to 52mm Digital Camera
	MA421101	Digital SLR Camera Adapter Kit	With a 2X optical lens, for DSLR camera. The adapter of the lens has 42 x 0.75mm thread, and a T-mount adapter is used to connect the adapter of the lens with the Digital SLR Camera.
	MA422101	C-mount Adapter	Connector for standard C mount adapter
	MA423101	Eyepiece Adapter	The camera Lens Adapter has a 23.2mm tube. Use a 23.2/30mm Eyepiece Adapter to connect to a microscope.
	MA423102	Eyepiece Adapter	The camera Lens Adapter has a 23.2mm tube. Use a 23.2/30.5mm Eyepiece Adapter to connect to a microscope.
	MA424101	DSLR Camera 2X Lens Adapter	With a 2X optical lens, for DSLR camera. The adapter of the lens has 42 x 0.75mm thread, and a T-mount adapter is used to connect the adapter of the lens with the Digital DSLR Camera.
	MA425101	Nikon T-Mount Adapter	For Nikon type DSLR Camera
	MA512103	0.5X Video Coupler	0.5X Standard Video Coupler, for attaching the CCD Camera to Microscope Eyepiece Tube or Trinocular.

MICROSCOPE COVER

Protects microscopes from dust.
For most types of microscopes.



Picture Preview	P/N	Name	Description
	MA711101	ESD SAFE Microscope Cover	ESD SAFE, 350mm in height.
	MA711102	ESD SAFE Microscope Cover	ESD SAFE, 450mm in height.
	MA711213	Plastic Microscope Cover	19 1/2" x 19 1/2" , color is light green.

SCREEN PROTECTION FILM

This screen film improves the images on the screen and makes them look much clearer and has anti-UV function. It is safe to use and has no side-effect on the user' s equipment, with high performance of tolerating high and low temperatures and 99.5% transparency. It can be removed and reused without using any adhesive. Applicable to LCD TV monitor, computer monitor, plasm crystal monitor, industry and machine touch screens.



Picture Preview	P/N	Name	Description
	MA721101	8" Screen Protection Film	Taking electrostatic ion adsorbed layer as the adhesive agent for the film, bubbles will not be generated when the film is applied to the screen, and the light transmittance is 99.5%. This screen film has anti-UV function, with high performance of tolerating high and low temperatures, and can prevent the screen from wearing down of direct contact.
	MA721102	10.4" Screen Protection Film	
	MA721103	15" Screen Protection Film	

MA761101 MICROSCOPE CLEANING KIT

Provides you with all the necessary supplies to clean your microscopes.
Includes: Soft Lens Brush, Cotton Tipped Swab, Cleaning Cloth, Lens Wiping Cloth, Instrument Body Cleaner, Lens Cleaner and Blower.



Microscopes



LCD Monitors



Cameras



Optic Lenses

Picture Preview	P/N	Name	Description
	MA761101	Microscope Cleaning Kit	Provides you with all the necessary supplies to clean your microscopes.
	MA761111	Soft Lens Brush	Keeps fragile lenses from dust. This gentle brush can remove dust and clint from lenses effectively.
	MA761121	Cotton Tipped Swab	These lint-free swabs are ideal for cleaning optical instruments
	MA761131	Cleaning Cloth	This product is highly absorbent in water, grease and oil, excellent for cleaning lenses and all types of optical components, as well as many other items and surfaces.
	MA761141	Lens Wiping Cloth	This cloth can effectively remove the dirt and oil from the surface of lenses to realize the cleaning purpose
	MA761151	Instrument Body Cleaner	It is safe, fast and effevtive with antistatic function for cleaning the instrument bodies without leaving residue, and has no annoying odor.
	MA761161	Lens Cleaner	It can remove frost and fog, keep fragile lenses from dust, clean dirt and oil from optics with antistatic function. It can form a protecting film while cleaning the dust.
	MA761171	Blower	It can remove the surface dust and prevent scratches resulting from contact cleaning.



MAGNIFIER LAMP

ML1000 SERIES

New illuminated desktop magnifier lamp
Great for hobbyists, stamp collectors, jewelers, watch repairers, and etc.
General use for home and office
With a stainless steel handle on the circular head
Includes a circular Fluorescent Bulb
3 Diopter /5 Diopter Magnification Lens
The clamp can be open up to approximately 2 5/8" (67 mm)
The extension arm can bend and rotate. The length of extension arm is approx. 40" (101.6cm).
The dia. of viewing lens is approx. 5" (127mm).
ESD model is available upon request
CE, GS, EMC, UL and CUL certified
Due to manufacturers' updates, photos may vary from the displayed items or items received.



ML2000 SERIES

This is a new illuminated desk magnifier lamp
Great for hobbyists, stamp collectors, jewelers, watch repairers, and etc.
Has a protective cover for the lens
Includes circular Fluorescent Bulb
Electrical specifications: 22 Watt AC, 120 Volt, 60 Hz
The opening of clamp is approx. 25/8" (67mm).
The extension arm can bend and rotate. The length of extension arm is approx. 40" (101.6cm).
The dia. of viewing lens is approx. 5" (127mm).
CE, GS, EMC, UL and CUL certified.



ML3000 SERIES

For professionals such as technicians, engineers in the electronic and other various industries; designers in laboratories; craftsmen, artists, beauticians and salesmen at workshops and jewelry stores; doctors and dentists in the hospitals and clinics; hobbyists, DIYers and people with impaired eyesight at home.
High quality, and large size (7" x 5.2") crystal clear glass lens
Gentle to eyes for easing eye fatigue
The energy saving fluorescent lamps generate low heat with more comfortable feelings as well as saving energy
CE, GS, UL, CUL certified
On/Off Switch
With electronic ballast
Adjustable swing arm (16" x 16")
Adjustable height
ESD model is available upon request



	ML1000 Series		ML2000 Series			ML3000 Series	
Diopter	3-Diopter	5-Diopter	3-Diopter	5-Diopter	8-Diopter	3-Diopter	5-Diopter
Magnification	1.75X	2.25X	1.75X	2.25X	3X	1.75X	2.25X
Head Appearance	Circular, with handle of stainless steel						
Glass	Diameter 5" (127 mm), clear glass					Lens Size: 7.2" x 4.5" (185 x 115mm), clear glass	
Length of the Arm	40 "						
Structure of the Arm	Spring, with ballast inside						
Surface Treatment	General spray-painting (white) or ESD spray-painting (black)						
Plug and Power Cord	American and European types are optional and available.						
Input Voltage and Frequency	120V 60Hz or 240V 50Hz						
Illuminating Light Source	22W Fluorescent Bulb (For ML1000 and ML2000); 13W-2U Fluorescent Bulb (For ML3000)						
Service Life	5000h						
Stand Clamp	Square clamp-type stand Color: white Maximum overall dimensions: depth (distance from left to right) x width (distance from front to back) x height=74mm x 83mm x 211mm Clamp Opening: 0-67mm Diameter of inserting hole in the arm: 13mm Net weight: 0.5kg						
Package	60cm(Depth) x 28cm(width) x 18.8 cm(height) Weight of single set: 4 kg/set		External package for single set: neutral carton. 56.2cm(Depth) x 30.4cm(width) x 13.3cm(height) Weight of single set: 4 kg/set Quantity per carton in shipping package: 4 sets/carton			External package for single set: neutral carton. 81cm(Depth) x 35cm(width) x 16cm(height) Weight of single set: 4 kg/set	
Environment Temperature	-20 -40						
Humidity	95%						

MLM110003 DESKTOP ILLUMINATED MAGNIFIER

This magnifier lamp has high quality glass lens, and the lamp produces a cool-white light rendering colors perfectly to the user's eyes and reduces eye fatigue. Flexible gooseneck design allows the user to adjust the lamp to various heights and positions. Easy on-off switch and flip-down cover to keep the magnifier free from dust. Excellent for scientific applications, printing, stamp collecting, arts and crafts, detailed painting, hobby, modeling, and etc..

Diopter: 3D
 Magnification: 1.75X
 Plug and Power Cord: American, European and Chinese power plugs and power cords are optional and available.
 Power Supply: 120V 60Hz
 Illumination: 12W
 Service Life: 5000 hours



Picture Preview	P/N	Name	Description	
	ML100003	Magnifier 1000 Series 3D	3 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 120V 60Hz, crown glass, 40" arm, big clamp.	
	ML100005	Magnifier 1000 Series 5D	5 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 120V 60Hz, crown glass, 40" arm, big clamp.	
	ML100013	Magnifier 1000 Series 3D	3 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 240V 50Hz, crown glass, 40" arm, big clamp.	
	ML100015	Magnifier 1000 Series 5D	5 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 240V 50Hz, crown glass, 40" arm, big clamp.	
	ML100103	Magnifier 1000 Series 3D with ESD SAFE	3 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 120V 60Hz, crown glass, 40" arm, big clamp, ESD safe.	
	ML100105	Magnifier 1000 Series 5D with ESD SAFE	5 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 120V 60Hz, crown glass, 40" arm, big clamp, ESD safe.	
	ML100113	Magnifier 1000 Series 3D with ESD SAFE	3 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 240V 50Hz, crown glass, 40" arm, big clamp, ESD safe.	
	ML100115	Magnifier 1000 Series 5D with ESD SAFE	5 diopter, lens Dia. 5" (127mm), 22W circular fluorescent, with metal handgrip, 240V 50Hz, crown glass, 40" arm, big clamp, ESD safe.	
	ML200003	Magnifier 2000 Series 3D	3D, 22W, with lens shield, 120V 60Hz.	
	ML200005	Magnifier 2000 Series 5D	5D, 22W, with lens shield, 120V 60Hz.	
	ML200008	Magnifier 2000 Series 8D	8D, 22W, with lens shield, 120V 60Hz.	
	ML200013	Magnifier 2000 Series 3D	3D, 22W, with lens shield, 240V 50Hz.	
	ML200015	Magnifier 2000 Series 8D	5D, 22W, with lens shield, 240V 50Hz.	
	ML200018	Magnifier 2000 Series 5D	8D, 22W, with lens shield, 240V 50Hz.	
		ML300003	Magnifier 3000 Series 3D	3 diopter, 13W-2U fluorescent lights, 120V 60Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp.
		ML300005	Magnifier 3000 Series 5D	5 diopter, 13W-2U fluorescent lights, 120V 60Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp.
		ML300013	Magnifier 3000 Series 3D	3 diopter, 13W-2U fluorescent lights, 240V 50Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp.
		ML300015	Magnifier 3000 Series 5D	5 diopter, 13W-2U fluorescent lights, 240V 50Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp.
	ML300103	Magnifier 3000 Series 3D with ESD SAFE	3 diopter, 13W-2U fluorescent lights, 120V 60Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp, ESD safe.	
	ML300105	Magnifier 3000 Series 5D with ESD SAFE	5 diopter, 13W-2U fluorescent lights, 120V 60Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp, ESD safe.	
	ML300113	Magnifier 3000 Series 3D with ESD SAFE	3 diopter, 13W-2U fluorescent lights, 240V 50Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp, ESD safe.	
	ML300115	Magnifier 3000 Series 5D with ESD SAFE	5 diopter, 13W-2U fluorescent lights, 240V 50Hz, 7.3" x 4.5" (185 x 115mm) crown glass lens, 40" arm, big clamp, ESD safe.	
	MLM110003	MLM1000 Series Desktop Illuminated Magnifier 3D	Adjustable arm, with lens shield, 120V 60Hz, 3D, 12W.	
	GP090102	Fluorescent Ring Light Bulb	22W circle bulb, for Magnifier 1000 and 2000 series.	
	GP090103	Fluorescent Bulb	12W circle bulb, for MLM1000 series.	
	GP090303	Fluorescent Bulb	13W-2U Fluorescent Bulb, for Magnifier 3000 Series.	



PORTABLE MEASURING MICROSCOPE

PORTABLE MEASURING MICROSCOPE with PENLIGHT

A brand new portable microscope with a wide field of view for general applications. Provides a bright, clear and undistorted image with high quality optics and a rack focusing system. Can be used in low light areas with a penlight attachment and an alloy base. Widely applied to biology, archaeology, botany, forensics, geology, entomology horticulture, numismatics and philately, quality control, textiles and electronic industries. An excellent introductory microscope for a beginner.

	PM112231	PM113231	PM114231	PM117231
Magnification	20X	40X	50X	100X
Eyepiece	10X	10X	10X	10X
Objective	2X	4X	5X	10X
Numerical Aperture	0.05	0.10	0.12	0.25
Minimum Readable Division	0.002" (0.05mm)	0.001" (0.025mm)	0.001" (0.02mm)	0.0004" (0.01mm)
Working Distance	0.68" (17.2mm)	0.71" (18mm)	0.69" (17.6mm)	0.27" (6.93mm)
Focus Range	0.65" (16.5mm)			
Battery	2 AAA Batteries			
Height of Microscope	5" (127mm)			

Picture Preview	P/N	Name	Description
	PM112231	20X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 2X Objective Lens, Total Mag. 20X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	PM113231	40X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 4X Objective Lens, Total Mag. 40X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	PM114231	50X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 5X Objective Lens, Total Mag. 50X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	PM117231	100X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 10X Objective Lens, Total Mag. 100X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).



PORTABLE MEASURING MICROSCOPE with PENLIGHT

Compact and light weight with a wide field of view. It allows not only to provide magnified view of fine pattern and contour of objects, but also to measure length and compare dimensions by using a scale included in the eyepiece. It is useful not only for the general observation but also for improving accuracy in precision machining and securing uniform quality in the inspection process. The pen illumination system provides a high intensity source but is removable if not needed.

	PM121021	PM121041	PM121061	PM121101
Magnification	20X	40X	60X	100X
Eyepiece	10X	10X	10X	10X
Objective	2X	4X	6X	10X
Numerical Aperture	0.05	0.10	0.15	0.25
Minimum Readable Division	0.005" (0.1mm)	0.002" (0.05mm)	0.0012" (0.02mm)	0.0005" (0.01mm)
Working Distance	0.63" (16mm)	0.59" (15mm)	0.39" (10mm)	0.22" (5.5mm)
Focus Range	1.42" (36mm)			
Battery	2 AAA Batteries			
Height of Microscope	7.4" (188mm)			

Picture Preview	P/N	Name	Description
	PM121021	20X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 2X Objective Lens, Total Mag. 20X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	Pm121041	40X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 4X Objective Lens, Total Mag. 40X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	PM121061	60X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 6X Objective Lens, Total Mag. 60X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).
	PM121101	100X Portable Measuring Microscope with Penlight	With 10X Eyepiece and 10X Objective Lens, Total Mag. 100X, Measurement Reticle, battery-powered Lighting (2 AAA Batteries).

ENDOSCOPE

ES101101 HANDY FIBERSCOPE

Handy Fiberscopes are new types of endoscopes, offering economy and versatility with ease of built-in illumination for field deploy ability, and can be used to easily and quickly check mechanical equipment, automobile, electronic equipment, electrical equipment and some residential tubes without dismantling and disrupting the facilities.

High resolution image bundle and optical system enable the fiberscope to see objects within the distance of 3/4" to 1" . Viewing scope is 45 ° .
 Ergonomic handle with focusing capability allows one-hand operation.
 Semi-obedient "gooseneck" tubing holds its configured shape.
 Illumination: Service life of built-in light is 100,000 hours.
 Side viewing adaptor can rotate 360 ° .
 Customized lengths are available.
 Can be tested and inspected for exposure to water, diesel, gasoline, brake fluid, gas, anti-freezing fluid, motor oil, gear oil and kerosene.
 Battery: 3AAA batteries.



Optical System	Viewing Direction	0 °
	Viewing Angle	45 °
	Depth of Observation	30mm-150mm
Tip Diameter		7mm
Shaft Diameter		7mm
Working Length		850mm
Overall Length		1000mm
Net Weight		370g
Carrying Case		300mm x 220mm x 70mm
Side Viewing Adaptor		
Viewing Direction		90 °
Viewing Angle		45 °
Depth of Observation		30mm-150mm
Tip Diameter		7mm

ES101102 VIDEO ENDOSCOPE

Monitor		5" LCD
Lamp		Cold light source with metal halide lamp (Low power, high illuminance, high color temperature and long life)
Power		24W
Bulb Life		500hrs
Color Temperature		5460K
Max. Intensity		755lm
Working Period		4hrs
Pixel		440,000 (PAL), 380,000 (NTSC)
Optical System	Viewing Direction	Direct View
	Viewing Angle	80 ° -120 °
	Depth of Observation	20mm-
	Focal Length	fixed
Horizontal Resolution		480TVLINES
Outer Diameter		6.9/8.5/15/16mm
Working Length		1.5/2.2/3.5/8/10/12m
Bending Angle		4 ways: up/down 120 ° , left/right 120 °



Picture Preview	P/N	Name	Description
	ES101101	Handy Fiberscope	Tip dia. 7mm, shaft dia.7mm. Working length (distance): 850mm. Overall length: 1000mm; Weight: 370g, built-in illumination for field deploy ability; Effective observation distance: 3/4" to 1" . Viewing scope is 45 ° one-hand operation available, 360 ° rotatable, with 3AAA batteries.
	ES101102	Video Endoscope	Viewing direction: Direct View; Viewing angle 80 ° -120 ° ; Depth of observation 20mm- ; Focal length: fixed; Horizontal resolution: 480TVLINES; O.D.:6.9/8.5/15/16mm; Working length: 1.5m/ 2.2m/3.5m/8m/10m/12m. Bending angle: up/down 120 ° , left/right 120 ° , 5" LCD; Cold light source with metal halide lamp.



We reserve the right to change specifications and prices without notice.



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