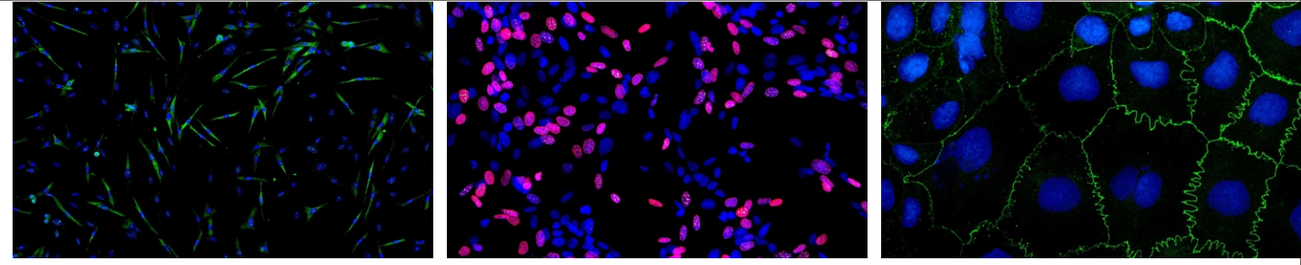
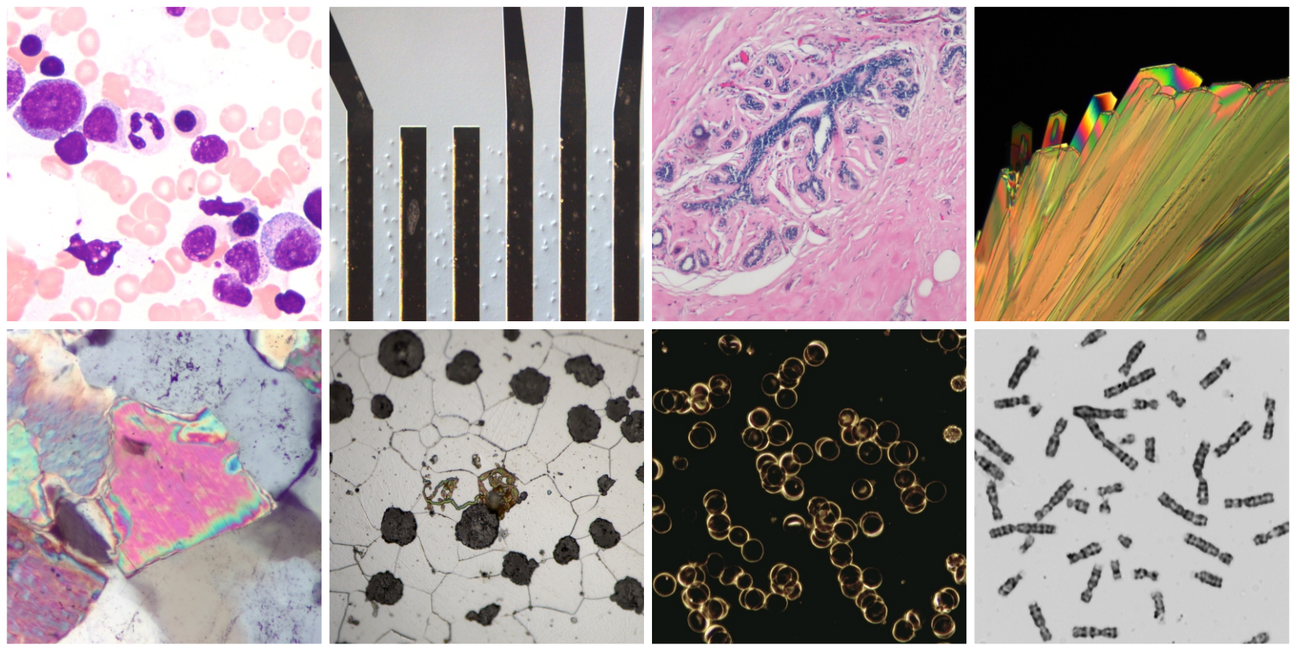


MshOt 明美

Microscope imaging system solution provider



ISO CERTIFICATED 9001:2015

ISO CERTIFICATED 14001

ISO CERTIFICATED 13485

MshOt 明美

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Email: sales@mshot.com

GUANGZHOU MICRO-SHOT TECHNOLOGY CO., LTD

Continuous innovation, only for better products and better services

MICRO-SHOT is a high-tech enterprise in China. It has been established for nearly 20 years. It focuses on the research and development, production and sales of microscopes and microscopic imaging system products, and is committed to automation, digitization and intelligence in the field of microscopic imaging. It has provided products and services to over 100 thousands users. Micro-shot has been repeatedly supported by the National Innovation Fund and has been recognized as a microscopic imaging engineering technology research center by the Provincial Department of Science and Technology.

The company seeks development with quality and takes service as its purpose. It has passed ISO9001 quality management system, ISO14001 environmental management system, ISO13485 medical device quality management system and intellectual property management system certification. Own medical device production qualification, and obtained nearly 100 patents and software copyrights.

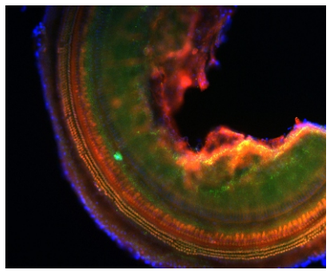
Headquartered in Guangzhou, it has service station in more than 20 large and medium cities across the country, and export to Asia, America, Europe, Middle East and Africa, providing comprehensive professional services.

Content

Microscope camera MSX11

Features : High resolution

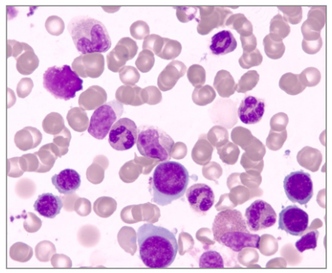
· Real 21 megapixels
· 4/3 inch big area sensor
· Ture color reproduction
· 21fps high frame rate



Microscope camera MSX2

Features : High sensitivity

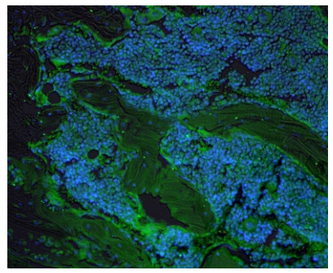
· 12.5 megapxiels resolution
· 1 inch big area sensor
· Ture color reproduction
· 15fps at full resolution



Microscope camera MC50-S

Features : High sensitivity

· 2/3 inch sensor
· Compatible to FISH software
· Excellent noise control
· 60fps high frame rate

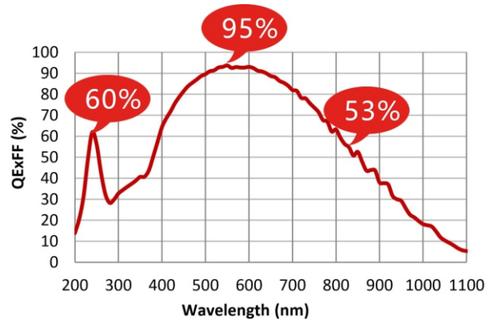


	MSX11	MSX2	MC50-S
Resolution	21.0 megapixels	12.5 megapixels	5.0 megapixels
Sensor size	4/3 inch	1 inch	2/3 inch
Pixel size	3.3 μmx3.3 μm	3.1μmx3.1μm	3.45μmx3.45μm
Frame rate	5280×3956 @ 21fps	4088×3072 @ 15fps	2448x2048 @ 60fps
	2640×1730(skip)@ 95fps	1920×1080 @ 57fps	1920x1080 @ 60fps
Exposure	12μs-30s	41μs-10s	20μs – 10s
Work mode	Progressive / Continuous	Progressive / Continuous	Progressive / Continuous
Shutter	Electrical rolling shutter	Electrical rolling shutter	Global shutter
Gain	1X-16X	1X-32X	1X–16X
AD convert	12bit	12bit	12bit
Image cache	128MB	64MB	64MB
Trigger mode	Software trigger	Software trigger	Software trigger
Software port	DirectShow/TWAIN/SDK	DirectX/TWAIN/SDK	DirectShow
Data port	USB3.0 5Gbps B-type	USB3.0 B-type，5Gbps	USB3.0 B-type，5Gbps
Working surrounding	Temperature：0-40℃；	Temperature：0-40℃；	Temperature：0-50℃；
	Humidity：10%-90%RH	Humidity：10%-90%RH	Humidity：10%-90%RH
Shell size	108.5×106.5×62.5 mm	108.5×106.5×62.5 mm	76×76×62.5 mm

Scientific camera MSH20/MSH12

Features:

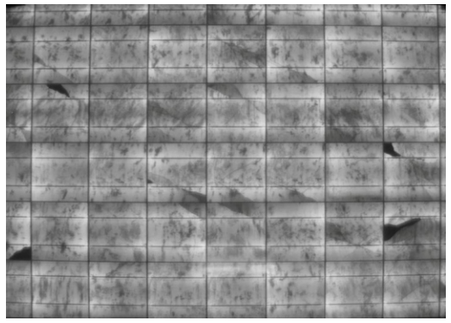
· Back-illuminated sCMOS，Monochrome
· super high sensitivity, maximum QE 95%
· Semiconductor cooling, ultra-low read noise
· High frame rate over 20fps at full resolution



NIR Shortwave Camera / UV Camera

Features:

· Optimized for UV or NIR imaging to further enhance results
· Ideal for applications such as in vivo imaging, chip or solar panel perspective, etc.

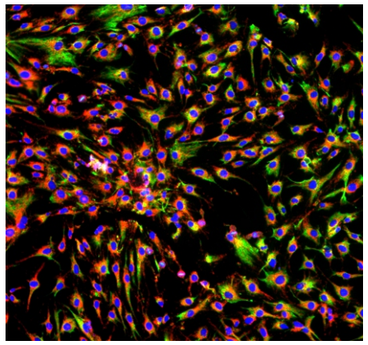


	MSH20	MSH12
Resolution	4.2 megapixels	4.2 megapixels
Sensor size	2 inch	1.2 inch
Pixel size	6.5 μm×6.5μm	6.5 μm×6.5μm
rame rate	2048×2048 @ 24fps	2048×2048 @ 22fps
Exposure	21μs - 20s	22μs - 120s
Spectral response	200nm~1100nm	200nm~1100nm
Read-out noise	1.6e-	2.0e-
Gain	1X-16X	1X-16X
AD convert	12bit	12bit
Image cache	128MB	128MB
Trigger mode	Software trigger	Software trigger
Software port	DirectShow/TWAIN	DirectShow/TWAIN/SDK
Data port	USB3.0 B-type，5Gbps	USB3.0 B-type，5Gbps
Working surrounding	Temperature：0-50℃	Temperature：0-50℃
	Humidity：10%-85%RH	Humidity：10%-90%RH
Shell size	113.2×105×92.6 mm	113.2×105×92.6 mm

Microscope camera MS90

Feature: High sensitivity

· High sensitivity to dark field and fluorescence
· Nearly 10 million high pixels, richer details
· High frame rate up to 20fps at full resolution



High speed camera MS16-H

Feature: High speed

· Frame rate up to 660fps to capture dynamic details
· Connect to a 10G network card computer using a 10G Ethernet copper cable
· Better sensitivity, improve imaging under low light illumination

	MS90	MS16-H
Resolution	9.0 megapixels	1.6 megapixels
Sensor size	1 inch	1.1 inch
Pixel size	3.76 μm×3.76 μm	9.0 μm×9.0 μm
Frame rate	3008x3008 @ 42fps	1500×1100 @ 660fps
Exposure	41μs-60s	1μs-1153ms
Work mode	Progressive/continous	Progressive/continous
Shutter	Electronic shutter	Electronic shutter
Effective gain	1X-32X	1X-125X
AD convert	12bit	12bit
Image cache	128MB	256MB
Trigger mode	Software trigger	Continous/software/hardware
Software port	DirectShow / TWAIN	DirectShow/TWAIN/SDK
Data port	USB3.0 B-type，5Gbps	10 Gigabit copper cable，10Gbps
Working surrounding	Temperature：0-40℃	Temperature：0-50℃
	Humidity：10%-90%RH（no condensation）	Humidity：10%-90%RH（no condensation）
Shell size	108.5×106.5×62.5 mm	64×64×61.7mm

HDMI WIFI camera MS80-W

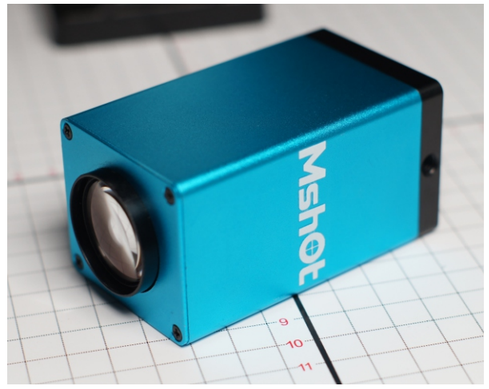
Feature:

· 5G high-speed WiFi, take photos with mobile phone/tablet
· Smooth picture, up to 60fps in HD resolution
· Support HDMI, the resolution can reach 4K standard
· Body with a camera button, which can be saved to the U disk

Auto focusing camera ME40

Feature:

· Auto focusing and works for gross object
· 8 megapixels, 10Z optical zoom, large depth of field
· Standard 1/4 interface, can be equipped with a universal bracket, flexible installation
· Three-button foot switch, zoom in / zoom out / take pictures, free hands



Microscope camera MD50/MD30

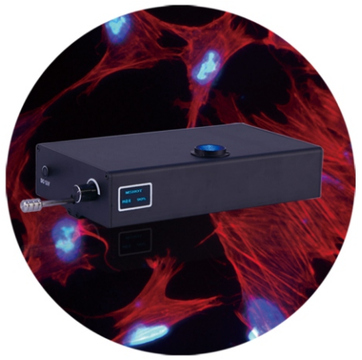
Feature: Cost-efffective

·Cost-effective, low-cost upgrade for digital imaging
·Optimized for microscopic imaging, up to 5MP/3MP
·Frame rate up to 15fps at full HD resolution

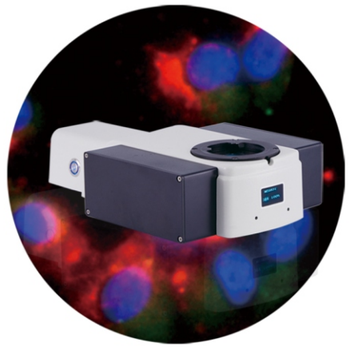
Microscope camera MS60

Feature: Excellent image quality

·6.3 megapxiels, excellent detail performance
·New ISP processing chip, true color reproduction
·Smooth picture, full pixel frame rate up to 71fps



Digital inverted
fluorescence attachment



Digital upright
fluorescence attachment

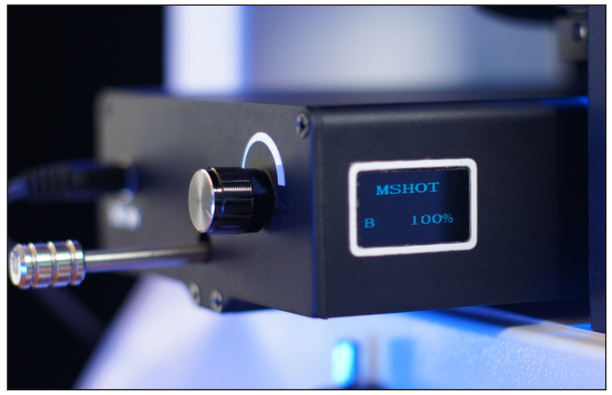
Digital stereo
fluorescence attachment

Four channels can be customized

Digital LED fluorescence attachment

Features:

· Digital screen to visualize brightness and bands for quantitative analysis
· High adaptability, matching all major brands of infinity microscopes
· Coding knob with memory function of dimming
· Light source / display / fluorescence cube are integrated
· A variety of fluorescence bands and excitation groups are available



Excitation groups	B	B BP ：EX:475/30nm；DM:505nm；EM:530/40nm
		B LP ：EX:475/30nm；DM:500nm；EM:510 nmLP
	G	G BP ：EX:530/40nm；DM:565nm；EM:605/55nm
		G LP ：EX:530/40nm；DM:570nm；EM:575 nmLP
	U	UV BP：EX: 375/30nm；DM:415nm；EM:460/50nm
		UV LP：EX: 355/50nm；DM:410nm；EM:420 nmLP
	Y	Y LP：EX: 560/40nm；DM:600nm；EM:610 nmLP
Light source		3W LED light source, brightness is adjustable, visual digital display
Observation method		Fluorescence, bright field
Input power		DC 12V2A

Upright fluorescence attachment

Brand	Model
Chinese Worldwide	Infinite optical system
Motorized sixtuple fluorescence module is optional	

Invertedfluorescence attachment

Brand	Model
Olympus	IX70, IX71, IX73, CKX41, CKX53
Nikon	TS100
Leica	DMIL

Stereo fluorescence attachment

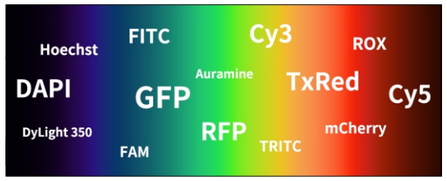
Brand	Model
Olympus	SZX7, SZX10, SZX16
Nikon	SMZ800, SMZ1270, SMZ25
Zeiss	SteREO Discovery.V8/V12/V16
Leica	M125, M165, M205C

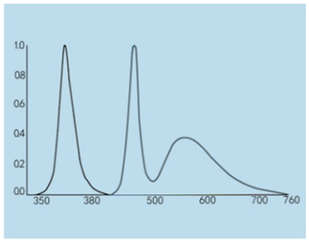
U	V	B	G	Y	R
DAPI	PacificBlue	FITC	Cy3	Texas Red	Cy5
Hoechst	Coumarin	GFP/EGFP	TRITC	mCherry	Draq5
AlexaFluor 350	BFP/EBFP	AlexaFluor 488	RFP	AlexaFluor 594	AlexaFluor 647
DyLight 350	DyLight 405	FAM	DsRed	ROX	DyLight 649

Broad-spectrum LED light source MG-100

Features :

· Broad spectrum, suitable for replacing mercury lamps and halogen lamps
· Fluorescence excitation is stable without decay
· Compatible with most type fluorescence microscopes
· Open to use, the working life can reach 50 times of mercury lamps
· The light intensity is controllable, and the ultraviolet band is individually controlled

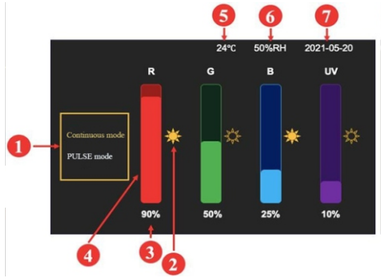


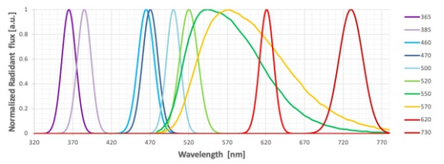


Four individual channels LED light source MG-120

Features :

· 50,000 hours of long life, equivalent to 250 mercury lamps
· Intelligent automation, support software / camera triggering
· Four channels are individually controlled, and can be output at the same time
· High brightness LED array, uniform light spot without shadow
· Strong adaptability, suitable for major brands of fluorescence microscopes



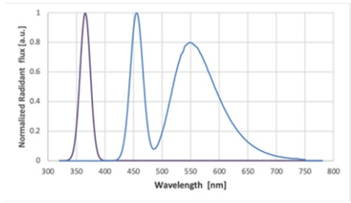


Product specification		
Model	MG-100	MG-120
Output spectrum	350-390nm/410-760nm two continuous outputs	Four customizable narrowband outputs, standard 365/460/550/625nm
Light box interface	Support four major brands of fluorescence microscopes	Support four major brands of fluorescence microscopes
Power	120W	70W
Control method	2 independent control, 0-100% dimming, 0.5% accuracy	4 independent controls, 0-100% dimming, 0.5% accuracy
Intensity memory	2 light paths	4 light paths
Controller	Touch screen controller	Touch screen controller, software trigger / camera trigger
Host interface	8P aviation head, with temperature control protection	8P aviation head, with temperature control protection
Cooling method	Forced air cooling	Forced air cooling
Beam angle	-	7°
Fiber Coupler	-	Liquid Optical Waveguide 3mm/5mm
Size	Light source: length 180 x width 114 x height 122 (mm)	Light source: length 180 x width 70 x height 168 (unit mm)
	Control box: length 196 x width 137 x height 65.5 (mm)	Control box: length 143 x width 110 x height 50 (unit mm)

Liquid-cooled light source MG-200

Features :

· Liquid cooling to avoid fan vibration
· High brightness, the light intensity is closer to the mercury
· Broad spectrum to meet various fluorescence excitation needs
· Long life, single life is more than 70 times of mercury lamp
· Open to use, suitable for major brands of fluorescence microscopes



Fluorescence filter for four major brands microscopes

Features :

· Cost-effective, the cost is more advantageous than original ones
· Various excitation wavelengths can be customized for different dye needs
· Optional special filter sets such as UV U, blue-green BG double-pass
· Optional imported Chroma filter, the effect is even better

Brand	Compatible models
Olympus	BX2 series: BX40, BX51, BX61, IX51, IX71, IX81
	Bx3 series: BX43, BX53, BX63, IX73, Ix83
Nikon	Eclipse TE/Ti 50i, 80i, 90i
	TS100
Leica	DM 2500, 3000, 4000, 5000, 6000
	DMIL
Zeiss	Axio Imager

Simple Stereo-fluorescence Light Source

Features :

· Easy installation, suitable for most stereo microscopes
· BGU and other multi-color options, 65mm bandpass emission filter
· Dual universal gooseneck, single or double color optional

CX33/CX43 insert-in illuminator

Features :

· Specially customized for CX33/CX43, highly adaptable
· LED fluorescence light source, optional BGU single color or BG double pass
· Optional warm color temperature reflected lighting for metallurgical observation

Triple light split trinocular tube

Features:

- Compatible with Olympus Infinity System, F=180mm
- Three beam splitters, support simultaneous imaging of eyepiece and camera
- Wide field of view, support 10X/25mm super large field of view eyepiece
- Optimized optical path for camera imaging

Microscope C-mount adapter

Features:

- Compatible with four major brands of microscopes, connected to trinocular head and C-mount camera
- There are various specifications of 0.5X/0.63X/1X, suitable for sensors of different sizes
- Optional dual light splitting interface, simultaneous access to dual cameras or camera + spectrometer

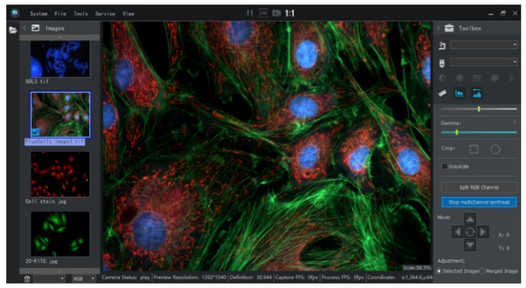
Transparent heating stage

Features:

- Provide the temperature conditions required for the survival of samples such as cells, sperm and eggs
- 0.3°C high-precision temperature control capability, room temperature -50°C heating speed adjustable
- Stainless steel frame, ITO coated tempered glass is strong and durable
- There are round / square shape options, suitable for inverted / upright / stereo microscope

Objectives

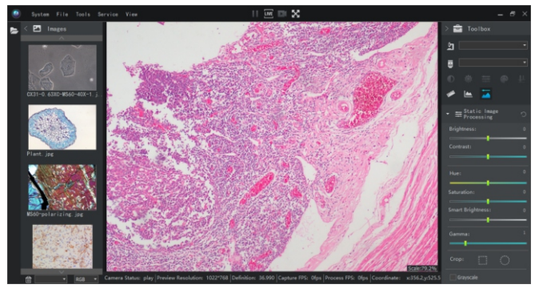
Type	Series
Biological	Upright plan achromatic Plan series
	Upright plan semi-apochromatic A-Plan series
	Upright plan semi-apochromatic Plan Fluor series
	Upright universal plan semi-apochromatic M-UPLFLN series
	Inverted Plan Achromatic Plan Series
	Inverted Plan Achromatic Phase Contrast Plan PH Series
	Inverted plan semi-apochromatic Plan Fluor series
	Inverted plan semi-apochromatic phase contrast PLFL PH series
Metallurgical	Semi-Apochromatic Metallographic Brightfield PLFL EPI Series
	Long working distance plan achromatic bright field PL L B.D series
Polarizing	Stress-free long working distance plan achromatic PL L series



MSHOT Digital imaging analysis system

Features:

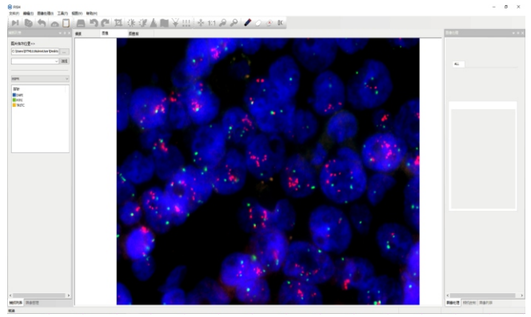
- Professional in-depth optimization for microscopy imaging
- Integrated hardware and software system
- Real-time preview, software control
- Support Directshow device
- Imaging adjustment functions such as white balance and exposure control
- Providing large image stitching and extend depth of field functions, large images can reach 13.8 billion pixels



MSHOT Digital imaging analysis system

Features:

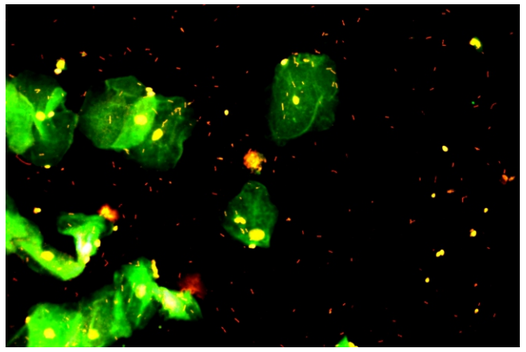
- User management & Audit trail is optional
- Outstanding in fluorescence imaging and processing
- Multi-channel synthesis operation, real-time shooting and merge channels in maximum 5 channels of fluorescence
- Support run two cameras at one time in the software
- Advanced settings of color matrix settings, CPU, GPU device acceleration, flat field correction and color point correction



FISH fluorescence in situ hybridization

Features:

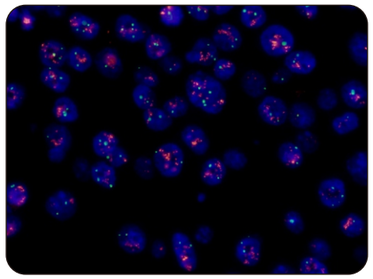
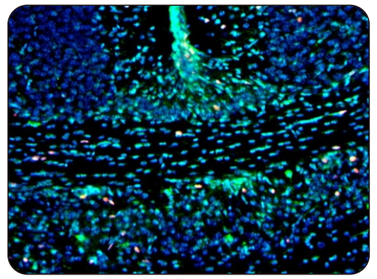
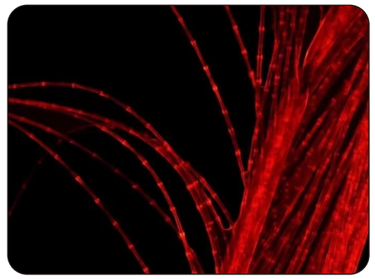
- Optimized design for fluorescence in situ hybridization
- Fast area auto exposure, fast imaging
- Automatic coloring, one-click synthesis of multi-color
- Multi-color fluorescence image acquisition, suitable for probes of various colors
- Intelligent gain enhancement for weak fluorescent signals, automatic removal of background noise
- Advise to use with MSHOT high sensitivity cameras



Immunofluorescence workability

Features:

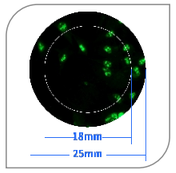
- Fungal fluorescence, reproductive tract disease fluorescence, liquid-based cell TCT and other commonly used pathological graphic report systems required photos are all applied
- Real-time preview, simple and convenient operation
- Offer SDK for secondary development with MSHOT cameras

Upright fluorescence microscope MF43–N

The research-grade upright fluorescence microscope MF43-N is equipped with sixtuple epi-fluorescence module and an ultra-long-life LED light source, which can be expanded and upgraded to achieve various observation methods. The high numerical aperture semi-apochromatic objective lens has clear imaging, especially suitable for FISH fluorescence in situ hybridization and other applications.


High Numerical Aperture Semi -Apochromat Objectives



10X/25mm super wide field of view eyepiece


Light intensity management


Expansion capabilities of professional fluorescence


LED fluorescent light source with a lifetime of over 10,000 hours


Low hand position high wear resistance stage

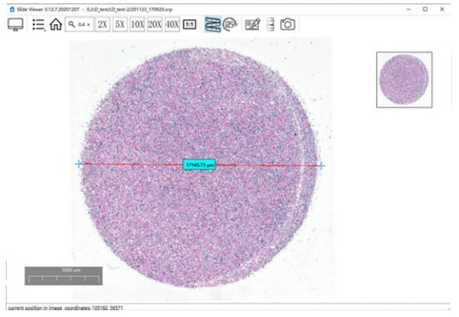
	MF43-N	
Eyepiece	Wide field 10X/25，diopter is adjustable	
Eyepiece tube	Hinged type trinocular observation tube, high eyepoint,30° inclination, Pupillary distance adjustment 50-75mm	
Plan semi-achromat objectives	Standard:	Optional:
	M-UPLFLN 4X/0.13 ; WD：17.15mm	M-UPLFLN 20X
	M-UPLFLN 10X/0.3 ; WD：7.68mm	Plan Fluor 4X / 10X / 20X / 40X / 100X
	M-UPLFLN 40X/0.75 ; WD：0.78mm	UPLFLN 4X / 10X / 20X / 40X / 100X
	M-UPLFLN 100X/1.30 Oil ; WD：0.15mm	
Epi-illuminating fluorescence system	Broad-spectrum LED light source MG100(standard)	4 individual channels LED illuminator MG120(optional)
	MG100 touch screen controller	MG120 touch screen controller(external trigger optional)
	Empty Epi-fluorescence Illuminator FL-43 (6-hole turntable, standard BGU three-channels, optional YRV, etc.)	
	Excitation tube	Excitation wavelength
	FB-U-M	EX：375/30nm; DM：415nm; EM：460/50nm
	FB-B-M	EX：475/30nm; DM：505nm; EM：530/40nm
	FB-G-M	EX：540/25nm; DM：565nm; EM：605/55nm
Nosepiece	Quintuple objective converter	
Stage	High wear resistance ceramic overlay stage with right hand coaxial low drive control knob	
	Traveling range: 80mm×50mm, 1mm/unit, accuracy 0.1mm	
Transmitted lighting	Warm white LED, brightness continuously adjustable	
	Abbe Condenser, N.A. 1.1	

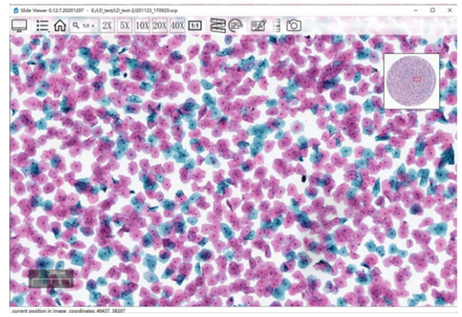
Digital Slide Scanner MDS4

Features:

- Dual cameras, taking into account slice scanning and high resolution ROI imaging
- Independent autofocus module, retaining the manual focus function of the microscope
- High-precision three-dimensional motion translation stage, which can be controlled by electronic handwheel
- Accurate and fast full-closed-loop autofocus, automatically identify the scanning range
- Fast scanning with high frame rate, 10X scanning can be completed in as little as 40S
- Smooth image reading software, open SRP image data

- Can be upgraded to fluorescence function





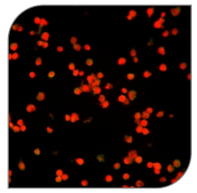
ML51–N

Features:

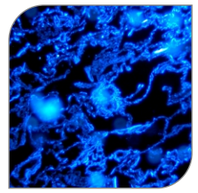
- 10X/25mm super large field of view eyepiece and trinocular tube
- High numerical aperture semi-apochromat objectives
- Convenient light intensity manager function
- Low hand position high wear resistance stage

Model	ML51-N
Observation tube	Triple light split hinged trinocular head, high eyepoint,30° inclination, PD50-75mm
Eyepiece	Ultra-wide field of view 10X/25, adjustable diopter
Objectives	Plan semi-apochromatic objective M-UPLFLN 4X/0.13; WD:17.15mm
	Plan semi-apochromatic objective M-UPLFLN 10X/0.3; WD:7.68mm
	Plan semi-apochromatic objective M-UPLFLN 40X/0.75; WD:0.78mm
	Plan semi-apochromatic objective M-UPLFLN 100X/1.35 Oil; WD:0.15mm
	Plan semi-apochromatic objective M-UPLFLN 20X/0.50; WD:1.96mm (optional)
	Plan semi-apochromatic objective Plan Fluor 4X/10X/20X/40X/100X (optional)
Focusing system	Coarse and fine adjustment knob, 25 mm one coarse stage stroke, gradations: 1 μm
Nosepiece	Backward quintuple nosepiece
Stage	High wear resistance ceramic overlay with right hand coaxial low drive control knob
	Moving range: 80(X)mm×50(Y)mm, accuracy: 0.1mm
Transmitted lighting	Abbe condenser NA1.1, Kohler Lighting
	Warm white LED lamp with light intensity management

Fluorescence microscope MF31



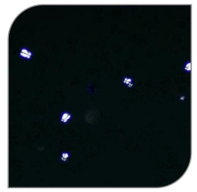
Long life LED fluorescence illuminator



Supports brightfield and fluorescence

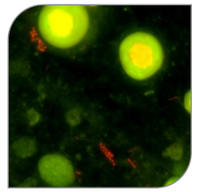
FN22 wide field eyepiece

High transmittance plan achromat objectives

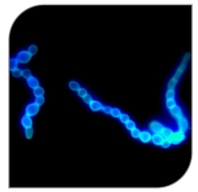


Expandable dark field, polarized light and other functions

Fluorescence microscope MF23



Long life LED fluorescence illuminator



Supports brightfield and fluorescence

Infinity plan achromat objectives

Comfortable Ergonomic Design

Optional binocular/trinocular head

Model	MF31	MF23
Eyepiece	Wide field WF10X/22	Wide field 10X/20
Head	Hinged type 30° inclined trinocular, pupil distance 53-75mm	Hinged type 30° inclined trinocular, pupil distance 44-75mm
Objectives	Infinity plan achromat objectives 4X/0.1	Infinity plan achromat objectives 4X/0.10
	Infinity plan achromat objectives 10X/0.25	Infinity plan achromat objectives 10X/0.25
	Infinity plan achromat objectives 40X/0.65	Infinity plan achromat objectives 40X/0. 65
	Infinity plan achromat objectives 100X/1.25	Infinity plan achromat objectives 100X/1.25
Fluorescence attachment	Excitation cube excitation wavelength	Excitation cube excitation wavelength
	UV 330-380nm	UV 330-380nm
	Blue 460-490nm	Blue 460-490nm
	Green 510-550nm	Green 510-550nm
Focusing	Fine and coarse adjustment with tension and limited stopper	Fine and coarse adjustment with tension and limited stopper
	Coarse stroke 40mm/rotation, accuracy 2μm, vertical 24mm	Fine adjustment gradations:2.5um,coarse stroke 15mm/rotation
Nosepiece	Backward quadruple nosepiece	Backward quadruple nosepiece
Stage	Double deck stage 210mmX140mm, Move range 76mmX50mm	Double deck stage 210mmX140mm, Move range 75mmX50mm
Transmitted light	Abbe condenser N.A. 1.25	Abbe condenser N.A. 1.25 can lifted up and down
	White LED, brightness is adjustable	
Camera port	0.5XC	

Biological microscope ML41

Features:

- Dual color temperature LED Kohler lighting, swing-out condenser
- Infinity optical system with great expansion potential
- High Numerical Aperture Plan Semi-Apochromat Objectives
- 10X/23mm large field of view high eye point eyepiece
- Quintuple nosepiece, high-precision mobile stage

Head	Hinged trinocular 30° inclined, PD 50-75mm，100/0 light splitting
Eyepiece	Wide field WF10X /23
Objectives	Plan semi-achromat A-Plan 4X/0.12；WD:11.6mm
	Plan semi-achromat A-Plan 10X/0.25；WD:10mm
	Plan semi-achromat A-Plan 40X/0.65；WD:0.55mm
	Plan semi-achromat A-Plan 100X/1.25；WD:0.17mm
	Plan semi-achromat A-Plan 20X/0.45；WD：2.9mm（optional）
	Plan semi-achromat fluorite M-UPLFLN 100X/1.30（optional）
Focusing	Coaxial coarse and fine focusing, accuracy 2μm，lifting 25mm
Nosepiece	Inward quintuple nosepiece wheel
Stage	Detachable double-deck mechanical moving stage 185mm×145mm
	Movement range: 75(X)mm×50(Y)mm，accuracy: 0.1mm
Transmitted lighting	Swing out condenser NA1.2/0.22
	Dual color temperature LED, warm light/cold light free change

Biological microscope ML31

Features:

- Infinity optical system with great expansion potential
- 10X/22mm big field of view high eye point eyepiece
- High transmittance plan achromat objective lens
- Expandable dark field, polarized light and other functions
- Long-life LED Kohler lighting system

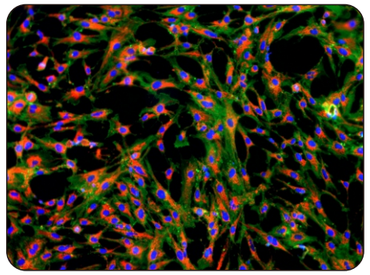
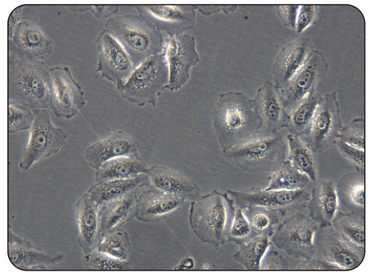
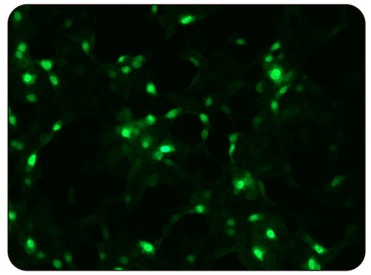
Eyepiece	Wide field WF10X/22
Head	Hinged Trinocular tube，30° inclined, pupil distance 53mm-75mm
Objectives	Infinity plan achromat objectives 4X/0.1，WD：12.98mm
	Infinity plan achromat objectives 10X/0.25，WD：10mm
	Infinity plan achromat objectives 40X/0.65，WD：1.47mm
	Infinity plan achromat objectives（oil）100X/1.25，WD：0.18mm
Focusing	Coaxial coarse and fine adjustment with limit stopper
	Coarse stroke 40mm, fine stroke 0.2mm, lifting range 24mm
物镜转换器	Quadruple nosepiece with inward tilt
载物台	Double-deck mechanical 210mm×140mm, moving 76mm× 50mm
聚光镜	Abbe condenser NA1.25
照明系统	White LED, brightness adjustable

Biological microscope ML11

Features:

·Compact appearance with comfortable handle design
·10X/18mm wide field eyepiece, binocular / trinocular head
·Long-life LED transmitted light source with Abbe condenser
·Coaxial design of coarse and fine adjustment with limit device
·Achromatic objective lens that meets the needs of teaching observation

Eyepiece	WF10X/18
Head	30°inclination,hinged trinocular, PD 50mm-75mm,one diopter is adjustable
	30°inclination,hinged trinocular, PD 50mm-75mm,one diopter is adjustable,R:T:80:20
Objectives	Achromat 4X/0.10，working distance：37.5mm
	Achromat 10X/0.25，working distance：6.55mm
	Achromat 40X/0.65，working distance：0.669mm
	Achromat 100X/1.25，working distance：0.198mm
Nosepiece	Quadruple nosepiece with inward tilt
Focusing	155mmx142mm double layer, moving range76mmX50mm, accuracy 0.1mm
Stage	Low position hand wheel coaxial coarse and fine adjustment with limit stopper, coarse movement stroke: 25mm,accuracy 0.002mm
Transmitted lighting	3W LED, pre-set lamp center, brightness continues adjustable
	Abbe condenser,N.A.1.25，with changeable aperture diaphragm
	Filters: blue, yellow and green

Inverted fluorescence microscope MF53–N

Research-grade inverted fluorescence microscope MF53-N is equipment with sextuple turret fluorescence module and long working life LED light source, high numerical aperture semi-achromat objectives are clarity. And it is flexible expand to different observation methods, also with XYZ motorized stage.

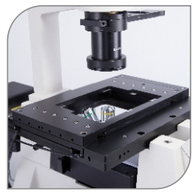
High NA semi-achromat objectives


10X/23mm wide view eyepiece

Sextuple turret fluorescence attachment

Flexible expand to Hoffman


LED light source working life over 10,000 hours


Can upgrade with high precision motorized XYZ stage

Eyepiece	WF10X/23 wide eyepiece, high eye-point	
Observation tube	Centering telescope	
	45° inclined，diopter is adjustable	
Objectives	Plan-achromatic objective LWDPlan 4X/0.1；WD：11.98mm	Semi-achromatic fluorite objective Plan Fluor 4X/0.13（optional）
	Semi-achromatic fluorite objective Plan Fluor 10X/0.3；WD：7.1mm	Plan-achromatic objective Plan 10X/0.25（optional）
	Semi-achromatic fluorite objective Plan Fluor 40X/0.65；WD：1.6mm	Semi-achromatic fluorite objective Plan Fluor 20X/0.45（optional）
	Semi-achromatic phase contrast objective Plan 10X/0.25 PH；WD：9.3mm	Plan achromatic objective Plan 40X/0.58（optional）
	Semi-achromatic phase contrast objective Plan 20X/0.45 PH；WD：5mm	
Nosepiece	Sextuple revolving nosepiece with bearing inner location and anti-fungus device	
Stage	Fixed stage 240mm×260mm；moving range：135mm×85mm	
	Water drop slide glass holder (Φ118mm)	
	Multi-function slide glass holder (76mm×26mm，Φ60)	
Epi-illuminating fluorescence system	Broad-spectrum LED light source MG-100；four individual channels MG-120	
	6 filter cube positions fluorescence wheel	
	Excitation filter	Fluorescence wavelength
	Ultra-violet (U)	EX:375/30nm；DM:415nm；EM:460/50nm
	Blue (B)	EX:475/30nm；DM:505nm；EM:530/40nm
	Green (G)	EX:540/25nm；DM:565nm；EM:605/55nm
Focusing system	Coaxial coarse and fine with limit and locking devices, low coaxial focus adjusting handle, Minimum adjustment gradations: 1 μm	
Transmitted illuminating	Warm LED brightness contentiously adjustment	
	LED rotary brightness control knob	
	Long working distance condenser 72mm, NA 0.30 with triple phase contrast slider 10X/20X/40X	
Camera port	Internal set 1X and 0.63X for choice	

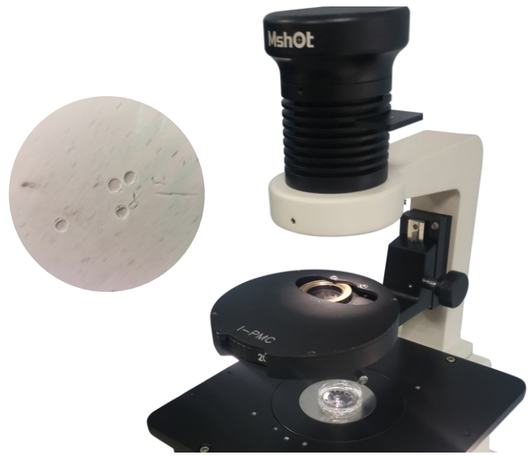
*Depends on different light source, stage and optional accessories, the product appearance might be different from the product phot in catalogue.

MF53-N Motorized XYZ stage

The XYZ high precision motorized stage is workable to MF53-N microscope to control high accuracy focusing under big zoom times objectives, applied with SDK, more automatic functions are workable. That is the basement of high resolution imaging.

Features:

- High precision, XYZ re-positioning accuracy gets to 0.1μm
- Moving speed is controllable for different zoom times objectives
- Ultrasonic motor is quite and stable running

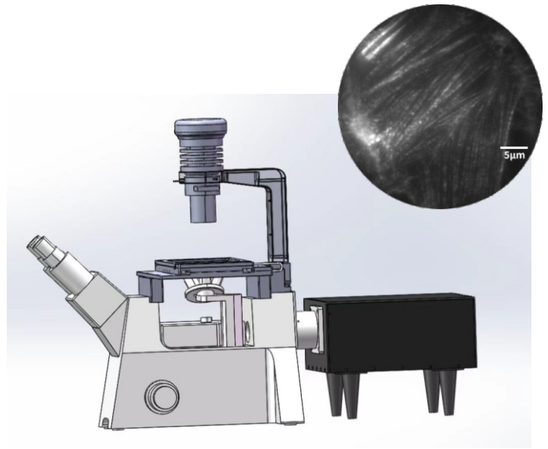


MF53-HMC Hoffman Modulation Phase Contrast

On the basis of MF53, the slit condenser and other accessories are upgraded to realize Hoffman modulation phase contrast observation, so as to realize clear observation of unstained samples such as oocytes with a three-dimensional sense, which is suitable for IVF reproductive assistance applications.

Features:

- Imaging has a three-dimensional effect similar to DIC, suitable for transparent samples such as oocytes.
- The cost is more advantageous than DIC, suitable for large-scale use such as IVF.
- Satisfy thicker transparent samples that cannot be observed by phase contrast.

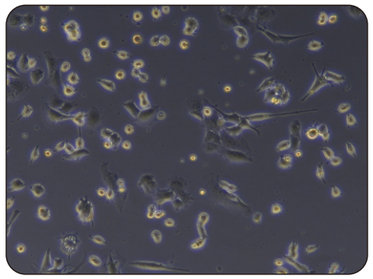
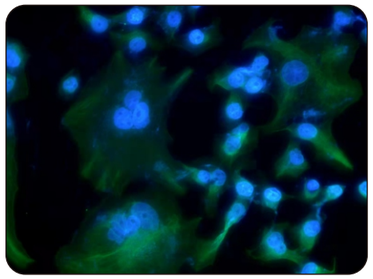
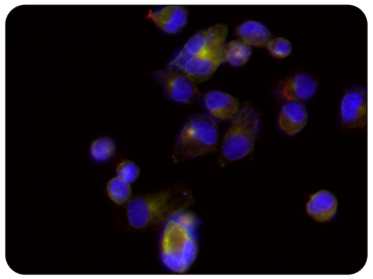


MF53-TIRF Total Internal Reflection Fluorescence

On the basis of MF53, the three-axis high-precision motorized platform and TIRF total internal reflection fluorescence module are expanded to achieve higher Z-axis resolution and clearer and sharper fluorescence imaging.

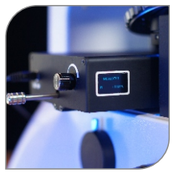
Features:

- Fluorescence imaging with high resolution and high signal-to-noise ratio.
- Meet the dynamic observation of cell surface substances, such as actin research.
- Configurable laser light source with 5 sets of single-mode fiber output.

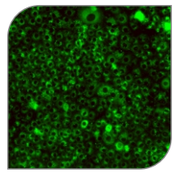




Inverted fluorescence microscope MF52–N

Inverted fluorescence microscope MF52-N adopts high-quality infinity optical design and digital display LED fluorescence module. The optical path has been deeply optimized to provide easy-to-use fluorescence excitation and high-quality phase contrast, fluorescence and bright field imaging. It is widely used in cells cultivation, bio-pharmaceutical, medical testing and other fields.


Long-life digital display LED fluorescence module


10X/22mm wide field of view eyepiece


Support phase contrast, fluorescence and bright field observation


Infinite plan achromatic objectives

Compatible with camera sensors below 1.2 inches

Built-in shading plate to reduce background fluorescence

Item	Specification	
Eyepiece	SWF10X/22 flat field eyepiece, high eye point	
Observation tube	Centering telescope	
	45° inclined, interpupillary distance adjustment 53-75mm, adjustable diopter	
Objectives	Long working distance plan objectives M-UPLFLN 4X/0.13,WD: 17.15mm	
	Infinity long working distance plan achromat objectives Plan 10X/0.25, WD: 9.3mm	
	Infinity long working distance plan achromat objectives Plan 40X/0.58, WD 2.5mm	
	Infinity long working distance plan achromat phase contrast objectives Plan 10X/0.25 PH,WD: 9.3mm	
	Infinity long working distance plan achromat phase contrast objectives Plan 20X/0.45 PH, WD: 5mm	
Epi Fluorescence illuminating system	LED cold light source, brightness continuously adjustable	
	Standard three sets of excitation cubes, other types are optional	
	Excitation cube	Excitation wavelength
	Ultra-violet (UV)	360-390nm
	Blue (B)	460-495nm
	Green (G)	528-553nm
Focusing system	Coaxial coarse and fine adjustment with limit and lock, low hand operating, fine adjustment hand wheel scale value 2μm	
Nosepiece	Quintuple internal positioning converter, ball bearing internal positioning, with anti-mildew device	
Stage	Round transparent stage: Outer ring φ118mm, Inner circle φ68mm	
	Petri dish holder 1	Inner size: 86mm×129. 5mm，for round Petri dishes Φ90mm
	Petri dish holder 2	Inner size: 34mm×77.5mm，for round Petri dishes Φ68.5mm
	Petri dish holder 3	Inner size: 57mm×82mm，for round Petri dishes Φ60mm
	Petri dish holder 4	Inner size: 29mm×77.5mm，for round Petri dishes Φ35mm
Transmitted illuminating	White LED, brightness continuously adjustable	
	Push-pull plate type phase contrast condenser, working distance 55mm	
	Green filter	
Fluorescence shield	110mm x 70mm	
Condenser	Push-pull plate phase contrast condenser, WD: 55mm, numerical aperture: 0.3	
Lighting system	9W LED，brightness is adjustable	
Camera port	Built-in0.75XC	

Inverted biological microscope MI52-N

Features:

- Standard 4X/10X/20X/40X objectives, support bright field and phase contrast observation
- Built-in interface, compatible with cameras within 1 inch
- Upgrade to fluorescence function with digital display LED fluorescence attachment

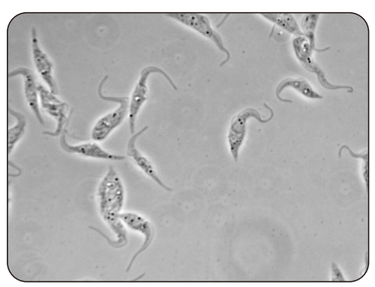
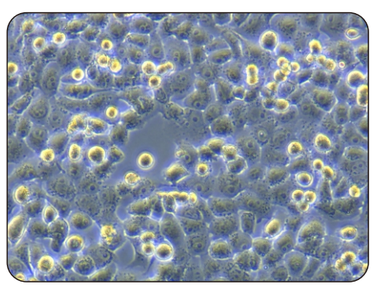
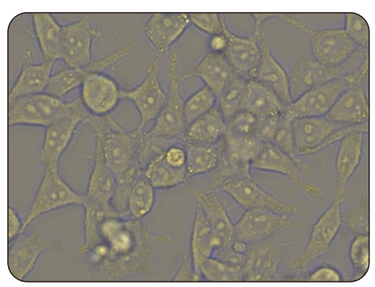
Eyepiece	SWF10X/22 plan eyepiece, high eye point
	Centering telescope
Head	45° tilt, interpupillary distance adjustment 53-75mm, diopter adjustable
Objectives	Long working distance plan objectives M-UPLFLN 4X/0.13，WD：17.15mm
	Long working distance plan achromatic objective Plan 40X/0.58,WD：2.5mm
	Long working distance plan achromatic phase contrast objective Plan 10X/0.25 PH，WD：9.3mm
	Long working distance plan achromatic phase contrast objective Plan 20X/0.45 PH，WD：5mm
Focusing	Coaxial coarse and fine with stopper, minimum division of fine focusing is 2μm
Nosepiece	Quintuple nosepiece
Stage	Fixed stage size：227mm×208mm； Mechanical moving range：135mm×77mm
	Transparent round stage：Overall size is φ118mm，Inner size is φ68mm
	Four sizes of petri dish holders, suitable for round petri dishes of different sizes
Phase contrast	10X, 20X, 40X (20x and 40x in one unit)
Conderser	Push-pull plate phase contrast condenser, working distance: 55mm, numerical aperture: 0.3
Illuminating	9W LED, brightness is adjustable
Camera port	Built-in 0.75XC

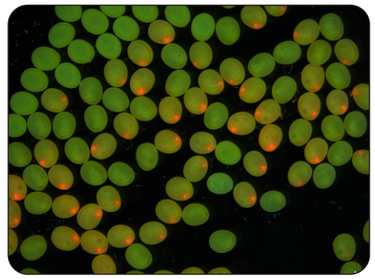
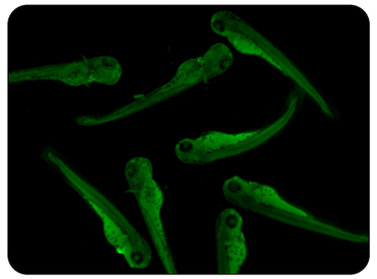
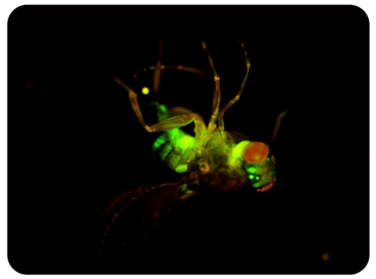
Cell factory microscope MI40

Features:

- The height of the transmitted light source is adjustable, and to place 10 floors cell factory
- Long working distance condenser for phase contrast and bright field
- Long working distance plan achromatic objectives is high clarity
- Standard interface, compatible with camera sensors within 1 inch

Eyepiece	SWF10X/22 plan eyepiece, high eye point
Head	45° tilt, interpupillary distance adjustment 53-75mm
Objectives	Long working distance plan M-UPLFLN 4X/0.13, WD：17.15mm
	Long working distance plan achromat Plan 40X/0.58, WD：2.5mm
	Long working distance plan achromat phase contrast Plan 10X/0.25 PH, WD：9.3mm
	Long working distance plan achromat phase contrast Plan 20X/0.45 PH, WD：5mm
Focusing	Coaxial coarse and fine with limit and locking, fine adjustment hand wheel scale value 2μm
Nosepiece	Quintuple internal positioning converter with anti-mildew device
Stage	Mechanical stage，size：242mm×200mm，moving range：30mm×30mm
	Round rotatable plate, outer diameter：φ130mm, light port diameter<φ20mm
Transmitted illuminating	Push-pull plate type phase contrast condenser, working stroke 55mm-400mm
	White LED, brightness continuously adjustable
	Green filter
Camera port	Built-in 0.75XC

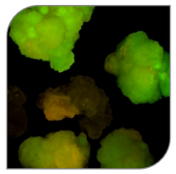




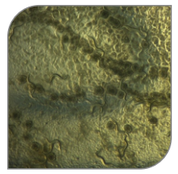
Stereo–fluorescence microscope MZX81

Stereo fluorescence microscope MZX81 adopts high-quality infinity parallel dual optical path Galilean optical system, which can provide clear and sharp bright field and fluorescence imaging, standard 1X apochromatic differential objective, the zoom ratio reaches 1:7, which can meet the application of model organism research, transgenic breeding, ink time series identification and so on.

1X plan apochromat objective



Long-life digital display LED fluorescent module



Support phase contrast, bright field and fluorescence observation

1:7 large zoom ratio

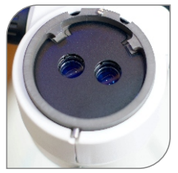
10X/22 wide field of view eyepiece

Optional configuration for stamp and signature identification

Model	MZX81	
Eyepiece	WF10X/22	
Head	Lead-free tube, 30° tilt, 100%/0 light path selection	
Objective	1X plan apochromatic objective, WD: 81mm (2X is optional)	
Epi-illuminating fluorescence	Excitation cube	Excitation wavelength
	Blue (B)	460-490nm
	Green (G)	510-550nm
	Ulta-violet (UV)	330-380nm
Zoom body	Zoom ratio： 7:1 (0.8x ~ 5.6x)	
	Magnification scale 0.8, 1, 1.25, 1.6, 2, 2.5, 3.2, 4,5, 5.6	
Zoom times	8-56X	
Basement	SZ2-ST standard base	
	Fluorescence special board M-FL	
Dust cover	MSHOT dust cover	

Stereo microscope MZX100

Zoom ratio up to 1:10

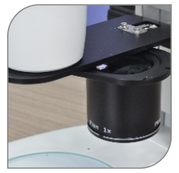


Infinity parallel dual Light

Optional variable angle binocular head

A beam splitter can be installed to connect to the camera

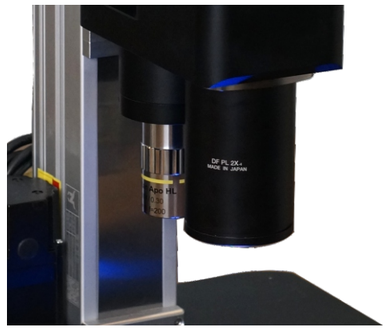
Optional adjustable angle transmission base



Optional dual objective switching system

Eyepiece	High eye point and large field of view WF10X/22	
	WF15X/16 (optional)	
	WF20X/12.5 (optional)	
	Reticle eyepieces (different magnifications) (optional)	
Binocular	Binocular inclination 20°, interpupillary distance 48-75mm	
	Variable angle binocular head, 0-30° (optional)	
Splitter	L type, switchable beam splitter, eyepiece: camera 100:0/50:50	
Fluorescent	MZX-BG-BD/MZX-BY-BD fluorescence attachment (optional)	
CCD adapter	0.5XC / 1XC	
Objective	1X big plan objective, WD:78mm	
Zoom range	0.8X-8X	
Actual view	27.5-2.8mm	
Focusing	Focusing lens frame, lifting range 100mm	
Basement	Column type transmission plate base, vertical arm adjustment	
Work board	Φ140mm clear glass work board	
Lighting	Up/down LED light source lighting	

MZX100 is a research-grade stereo microscope, which adopts infinity parallel dual optical path, the zoom ratio is as high as 1:10, and the characteristic dual objective lens switching system can be equipped with an adjustable angle transmission base to realize the three-dimensional observation of transparent samples such as cells , can be equipped with a digital display LED fluorescence module to achieve fluorescence observation.



High Power Stereo Microscope MZX200

Features:

- Featured double objective switching, optional stereo objective lens 10X/20X high magnification objective lens
- Magnification times from several to hundreds, low magnification screening and high magnification observation in one
- Four-channel fluorescence excitation LED attachment can be added
- The height of the center of field of view during switching is consistent

Stereo microscope MZ101

Features:

· 10X/22 large field of view eyepiece, more comfortable observation
· 1:9 large zoom ratio, sample adaptation is more flexible
· 110mm ultra-long working distance, large operating space
· Reflective and transmitted lighting, ring lights is optional

Eyepiece	Wide-field eyepiece WF10X/22, both independent adjustment ±5 diopters
Observation head	Hinged trinocular, light splitting ratio 50%/50%
	45° tilt, interpupillary distance 54-75mm; ultra-long working distance 105mm
Zoom body	Magnification time 0.7X-6.3X, zoom ratio 1:9
Objectives	1X large flat-field objective lens, ultra-long working distance 110mm
Actual filed of view	31.4-3.49mm
Basement	Size: 310mm×280mm, effective vertical travel: 220mm
Focus bracket	Adjustable focus handwheel
Light source	Up/down LED light source lighting, 30W halogen lamp (optional)
Work board	Frosted glass work board
CCD adapter	1XC, 0.5XC (optional)

Stereo microscope MZ62

Features:

· 10X/22 large field of view eyepiece, more comfortable observation
· Excellent plan achromatic processing, clear image
· Ultra-thin reflective and transmitted LED light source
· Standard 1X objective lens working distance up to 105mm

Eyepiece	Wide-field eyepiece WF10X/22, both independent adjustment ±5 diopters
Observation head	Hinged trinocular, splitting ratio 50/50; 45° tilt, pupil distance 54-75mm
	Hinged binoculars; 45° tilt, 360° rotation (column base plate) (optional)
Zoom body	Magnification 0.67X-4.5X, zoom ratio 1:6.7
Objective	1X, long working distance 105mm
Actual field of view	32.8-4.88mm
Basement	Slope-type column base, stroke 106mm
Focus bracket	Adjustable focus handwheel, lifting range 50mm
Light source	Up/down LED light source lighting, LED ring light and cold fiber (optional)
Work board	φ95mm frosted glass; white transparent / black and white board (optional)
Camera adapter	0.5XC, 1XC (optional)

Polarizing

Polarizing microscope MP41

Features:

· Infinity optical system, halogen Kohler lighting
· Rotating stage, 360° equal division scale, satisfying extinction observation
· With Bertrand lens and swing-in condenser lens for conoscopic observation
· With compensator slot, three kinds of compensators are standard

Item	Specification
Eyepiece	Wide field WF10X/22
	Reticle eyepiece 10X/22, grid value 0.1mm/grid
Head	30° tilt, trinocular, two beam splitters
Objectives	Infinite objective PLL5X/0.12 working distance: 26.1mm
	Infinite objective PLL10X/0.25 working distance: 20.2mm
	Infinite objective PLL40X/0.60(spring) working distance: 3.98mm
	Infinite objective PLL60X/0.70(spring) working distance: 3.18mm
Nosepiece	Quintuple inward-facing ball positioning nosepiece
Stage	Rotary stage, diameter Φ150mm, 360° equal scale, vernier grid value 6' ,lockable
Epi-lighting system	6V30W halogen lamp, brightness adjustable
	Built-in field diaphragm, aperture diaphragm
	(yellow, blue, green, frosted glass) color filter conversion device
	Analyzer (rotatable 360°, with scale and micro-mover); polarizer (rotatable 360°)
Intermediate	Push-in Bertrand lens, center adjustable
	λ compensator (gypsum); λ/4 compensator (mica); quartz wedge compensator
Focusing	Coarse and fine adjustment coaxial, fine adjustment handwheel scale value 2μm
Transmitted lighting	6V30W halogen lamp, adjustable brightness, adjustable bulb center
	Abbe condenser, can be lifted up and down, NA1.25, blue color filter; frosted glass
	Polarizer (rotatable 360°, with four readings of 0°, 90°, 180°, 270°)

Metallurgical

Metallurgical microscope MJ43

Features:

· Semi-apochromatic metallurgical objective, the bright and dark field objective is optional
· Long-life LED epi-illumination, halogen light box is optional
· Light intensity manager, which can automatically adjust the matching light intensity according to the objective lens
· Strong scalability, can realize DIC and infrared transmission imaging

Item	Specification
Eyepiece	Large field of view WF10X/22, adjustable diopter
Head	Hinged trinocular viewing tube, high eye point, 30° tilt, interpupillary distance adjustment 50-75mm
Objective	Semi-apochromatic metallurgical PlanFluor EPI 5X/0.15 Semi-apochromatic metallurgical 5X/10X/20X/50X/100X (optional)
	Semi-apochromatic metallurgical PlanFluor EPI 10X/0.3
	Semi-apochromatic metallurgical PlanFluor EPI 20X/0.45
	Semi-apochromatic metallurgical PlanFluor EPI 50X/0.8
	Semi-apochromatic metallurgical PlanFluor EPI 100X/0.9 (optional)
Lighting	Warm White LED Illuminators
	Broad-spectrum high-power LED light source MG-30, MG-30 power control box
EpiKohler Lighting	Epi-illuminator RE-43 (6-hole turntable)
	Bright field excitation block I (no brightness attenuation)
	Simple Polarizer Attachment
Nosepiece	Quintuple nosepiece
Condenser	Abbe condenser, NA 1.1

Inverted metallurgical microscope MJ42-N

Features:

· Infinity optical system, modular design
· LED epi-illumination, long life and low heat generation
· Compact and stable, suitable for large-sized metal samples
· Kohler illumination, expandable polarized light and dark field

Item	Specification
Eyepiece	Wide field of view WF10X/22
Objective	Long working distance plan achromatic PL L 10X/0.25 WD: 5.00mm
	Long working distance plan achromatic PL L 20X/0.40 WD: 8.80mm
	Long working distance plan achromatic PL L 50X/0.70 WD: 3.68mm
	Long working distance plan achromatic PL L 100X/0.85 (dry) WD: 0.40mm
Head	Trinoculars, tilted 45 °, two beam splitters, interpupillary distance 53~75mm
Focusing	Coarse and fine coaxial with stopper and lock device, fine value: 2μm
Nosepiece	Quintuple (inward ball bearing)
Stage	Dimension of mechanical stage: 242mmX200mm, moving range 30mmX30mm
	Round rotatable stage:overall sizeΦ130mm, minimum aperture < Φ20mm
Lighting system	LED light, adjustable brightness
	Built-in field diaphragm, aperture diaphragm and pull plate polarizer
	With frosted glass, yellow, green, blue color filters

Metallurgical microscope MJ31

Features:

· LED epi-illumination, long life and low heat generation
· 10X/22 large field of view eyepiece, comfortable observation
· Infinity optical system, long working distance metallurgical objective
· Push-Pull Polarizers and Analyzers

Item	Specification
Eyepiece	Wide field of view WF10X /22
Head	Hinged trinocular, 0/100% light splitting, 30° tilt, pupil distance 55-75mm
Objective	Long working distance plan objective L Plan5X/0.15 WD: 23.6mm
	Long working distance plan objective L Plan 10X/0.30 WD: 17.7mm
	Long working distance plan objective L Plan 20X/0.40 WD: 10.4mm
	Long working distance plan objective L Plan 50X/0.55 WD: 7mm
	Long working distance plan objective L Plan 100X/0.8 WD: 3.2mm (optional)
Focusing	Coarse and fine coaxial with locking and limit device, fine grid value 2μm
	The micro-motion stroke is 0.2mm per circle, and the focus range is 24mm
Epi-illuminating	Kohler lighting with color filters: green, blue, yellow, frosted
Condenser	Abbe Condenser NA.1.25, lifting up and down with variable aperture diaphragm
Nosepiece	Inward-type quadruple nosepiece (inward-type quintuple nosepiece is optional)
Stage	Double deck platform (size: 210mm×140mm, moving range: 75mm×50mm)
Transmitted lighting	Abbe Condenser NA1.25
	White LED, brightness adjustable

Optical customization

Optical ight path

Features:

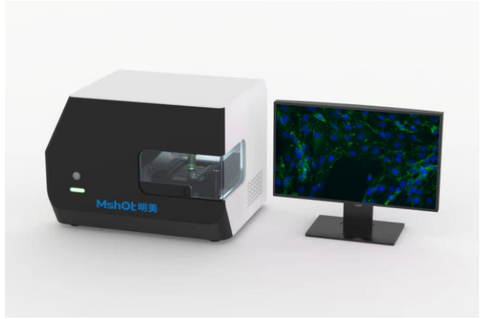
·Can import laser light source, fiber light source

·Can realize dual optical path, precise optical path adjustment

·Motorized objective turntable, repeat positioning accuracy ≤ 3μm

·Motorized fluorescence filter turntable, fast and accurate switching

·Field of view imaging high uniformity, brightness difference≤5%



Fluorescent slide scanner

Features:

· Based on MSHOT rich experience in fluorescence imaging research and development

· A variety of LED fluorescent light source solutions are optional, and the excitation effect is stable

· High sensitivity imaging camera, more suitable for fluorescence imaging

· High-precision piezoelectric electric stage with autofocus

Monocular fluorescence imaging

Features:

•The structure is simplified and the volume is small, which can be used as an imaging component of a large system

•Standard RMS objective lens interface, high quality imaging, flexible magnification,

•Single-channel or multi-channel LED fluorescence excitation scheme is optional, and can be switched electrically

Pre-sale	·Program Consulting ·Demo
On sale	·Timely supply ·Training
After sale	·Quick response ·In time answer
QC	·System management ·Life time