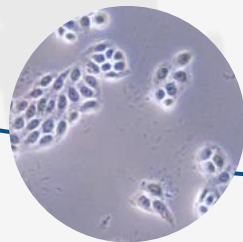
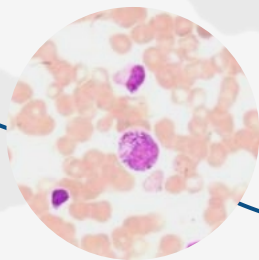
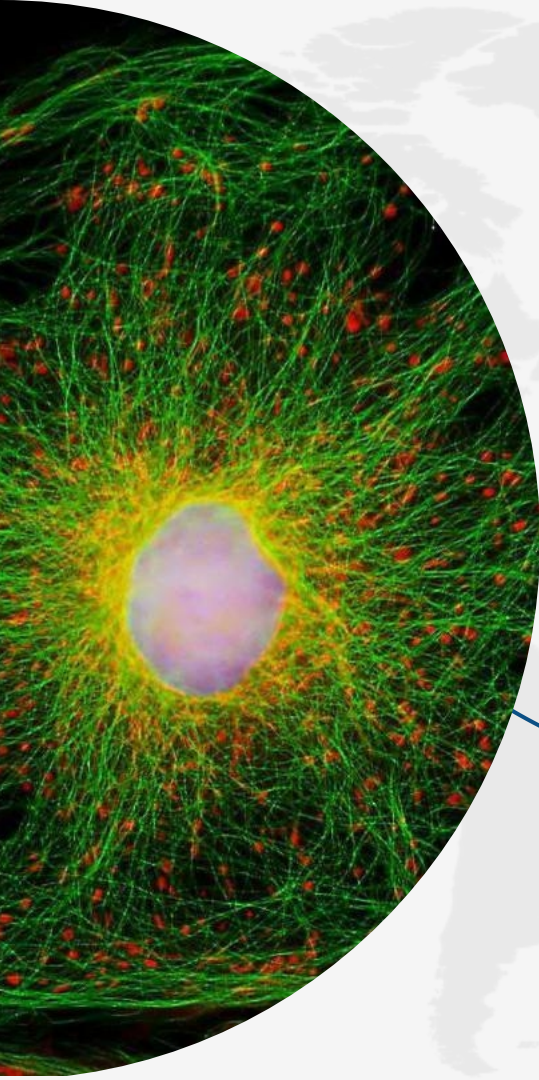


# Microscope & accessories Products List 2021

— Guangzhou Micro-shot Technology Co., Ltd —  
[www.m-shot.com](http://www.m-shot.com)  
[sales@mshot.com](mailto:sales@mshot.com)



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# Digital microscope solution

All of microscopes can add microscope camera

All of microscopes can add thermpla plate



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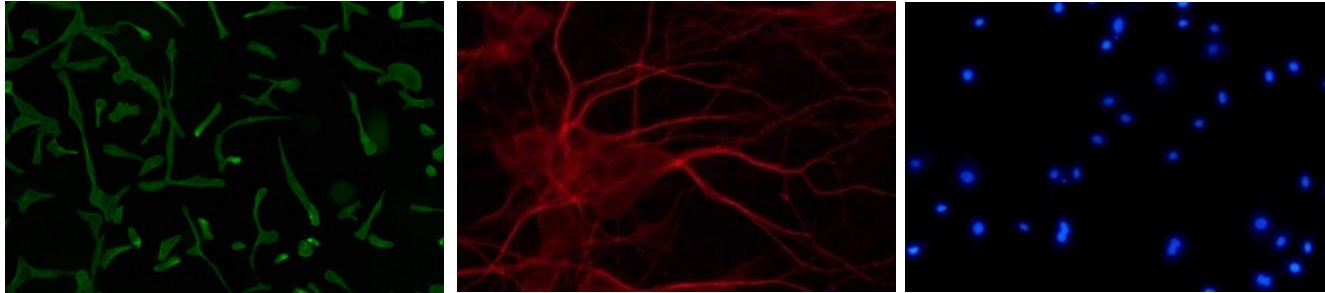
# Microscopes

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# What is fluorescence image looks like?

## Features

- Background is dark black
- Object looks strong fluorescence light usually in colors of green, red and blue (sometimes orange, yellow)





# Upright fluorescence microscopes

## Entry level upright fluorescence microscope

It is used at common lab / clinical lab observing auto-fluorescence, immunofluorescence, pathology, tuberculosis, fungus, fluorophores staining slides, etc.



### Model: MF31

#### Single color

B/G/U excitation groups

LED lamp lighting

See fluorescence in color of green/red/blue



### Two colors / Three colors

BG/BU /BGU excitation groups

LED lamp lighting

See fluorescence in color of green, red, blue

## Scientific grade upright fluorescence microscope

It is used to observe scientific research lab / institute / cancer diagnose at hospital, such as brain neuron, bone marrow, FISH, karyotype, CTC, etc.



### Model: MF43-N

Sixtuple fluorescence wheel

BGU excitation groups

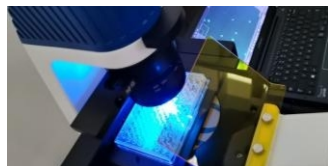
100W broad-spectrum LED light source

See fluorescence in color of green, red, orange, blue

# Inverted fluorescence microscopes

## Entry level inverted fluorescence microscope

It is used at common lab / pharmaceutical lab observe and culture of living cells, object in liquid of culture dishes / flask, biological science, fluorescence staining slide etc.



### Model : MF52-N

Observation method of bright field, phase contrast and fluorescence  
BGU excitation groups  
LED lamp lighting  
Pre-set 0.75X C-mount adapter  
See fluorescence in color of green, red, blue

## Scientific grade inverted fluorescence microscope

It is used at scientific research lab / institute / cancer diagnose at hospital, such as brain neuron, living cells, organism, etc weak fluorescence object.



### Model: MF53-N

Quintuple fluorescence wheel  
BGU excitation groups  
100W broad-spectrum LED light source  
Pre-set 0.75X C-mount adapter  
See fluorescence in color of green, red, orange, blue

# Stereo-fluorescence microscopes

## Cost effective stereo fluorescence microscope

Used for observing model organism in three-dimension image, such as drosophila or zebrafish, developmental biology depends on stereo fluorescence to sort eggs or embryos that have been tagged with a specific marker called a fluorophore.

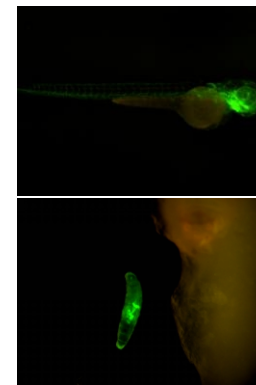


### Model : MZX80

Three dimension imaging performance  
BGU excitation groups  
LED lamp lighting  
See fluorescence in color of green, red, blue

## Scientific grade stereo fluorescence microscope

Used for observing model organism in three-dimension image, such as **C. elegans**, drosophila or zebrafish, trans-gene seed/plant, developmental biology depends on stereo fluorescence to sort eggs or embryos that have been tagged with a specific marker called a fluorophore.



### Model: MZX81

Three dimension imaging performance  
BGU excitation groups  
LED lamp lighting  
See fluorescence in color of green, red, blue

# Monocular stereo-fluorescence microscopes

It is consist of continues zoom lens, monocular observation tube, fluorescence illumination and camera.



## Model: MZX11

Total magnification 25X-160X

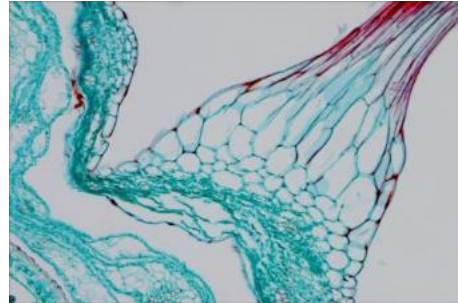
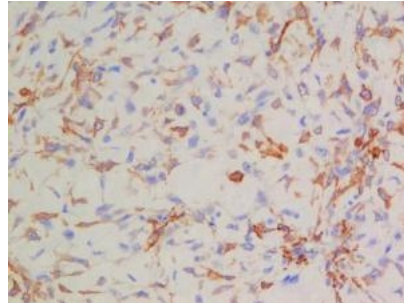
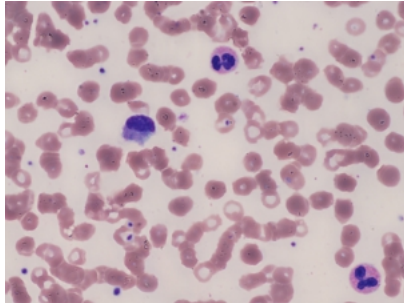
Fluorescence excitation: Blue (EX460nm~490nm)

Green and UV excitation are optional

# What is biological bright field image looks like?

## Features

- Background is white



# Upright biological microscopes

## Finite biological microscope

It is used to observe biology plant slide and cells tissue of simple applications in school, medical industry lab, clinical center, **veterinary** etc.



Trinocular type



Binocular type

### Model : ML11

Cost effective  
Achromat objectives  
LED lighting

## Inifite biological microscope

It is used to observe biology plant slide, cells tissue, histology applied in university, hospital pathology lab, clinical center, scientific institute etc.



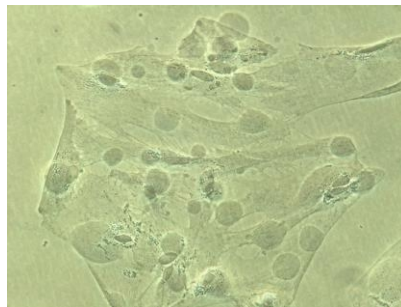
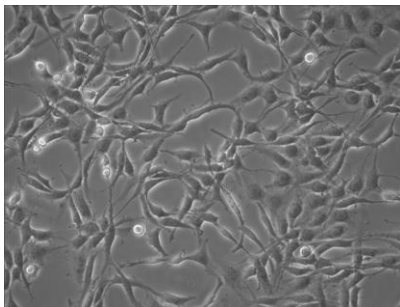
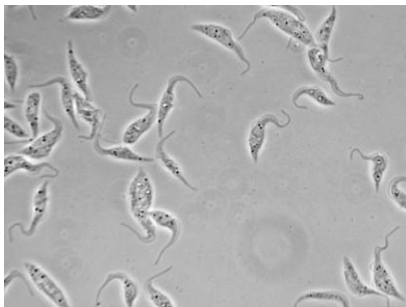
### Model: ML31

Trinocular head  
Infinite plan achromat objective  
LED lamp lighting

# What is phase contrast looks like?

## Features

- Emboss image, background is mostly gray



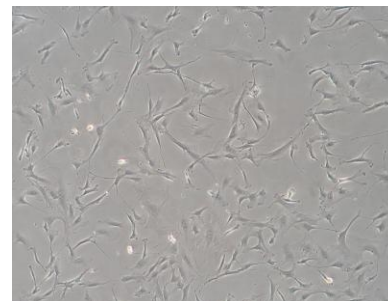
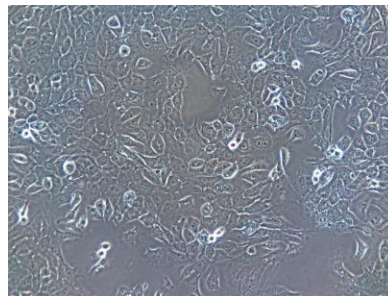
# Inverted biological microscopes



## Model: MI52-N

### Bright field & phase contrast observation method

It can be used to observe and study biological sections, biological cells, bacteria, living tissue culture, fluid precipitation, etc., and other transparent or translucent objects, powder, fine particles and other objects.



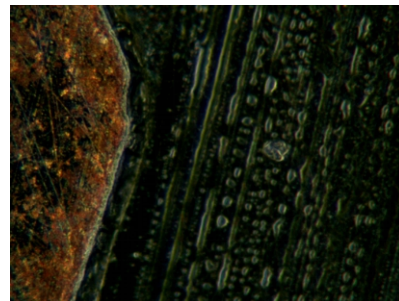
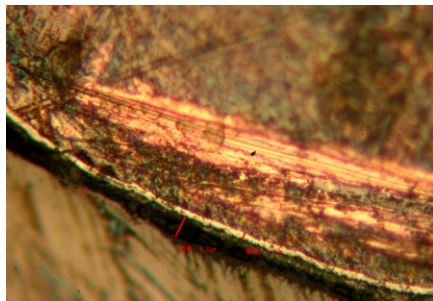
Phase contrast



# What is metallurgical image looks like?

## Features

- Metal structure object surface has reflecting light



Dark field

# Upright metallurgical microscopes

## Entry level upright metallurgical microscope

It used to observe object made of metal to study its structure and surface such as metalworking parts, solder joint, steel product, etc.



### Model: MJ22

Finite optical system  
Plan achromat objectives  
Reflected & transmitted lighting  
6V 20W Halogen lamp



### Model: MJ31

Infinite optical system  
Infinite plan achromat objectives  
Reflected & transmitted lighting  
LED lamp



### Model: MJ33

**Bright field & Dark field**  
Infinite optical system  
Infinite plan achromat objectives  
Reflected & transmitted lighting  
12V 30W Halogen lamp  
It can add DIC function

# Inverted metallurgical microscopes

## Inverted metallurgical microscope

It is used to observe object made of metal but volume is bigger and can not be focused by upright microscope.



### **Model: MJ42**

Finite optical system

Plan achromat objectives

6V 20W halogen lamp

**It can add Dark field function**

# Scientific grade metallurgical microscopes



## **Model: MJ43-N**

Infinite optical system

Semi-plan achromat metallurgical objectives

30W LED epi-illuminating

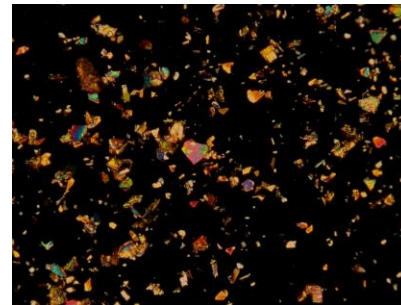
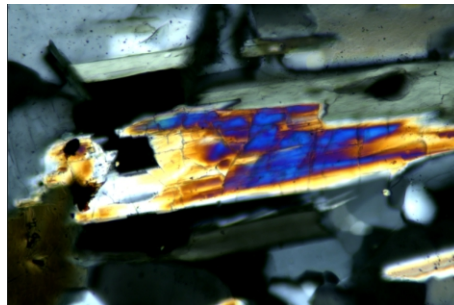
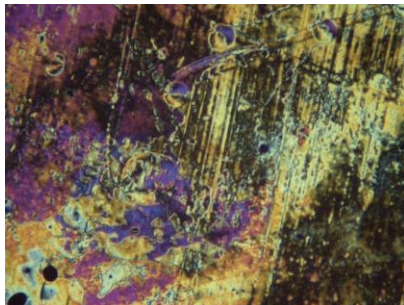
9W LED transmitted lighting

**It can add fluorescence function**

# What is polarizing image looks like?

## Features

- Polarizing microscope is a necessary instrument for the research and identification of birefringent substances by using the polarization characteristics of light. Such as mineral, rock, fiber, powder, etc.



# Polarizing microscopes

## Round stage polarizing microscope

It is mostly used to observe objects of mineral, rock, crystal, fiber and etc.



### Model: MP20

Finite optical system  
Achromat objectives  
Transmitted lighting  
6V 20W Halogen lamp



### Model: MP30

Finite optical system  
Strain-free plan achromatic objectives  
Transmitted lighting  
Polarizer & analyzer, with compensators  
6V 20W Halogen lamp



### Model: MP41

Infinite optical system  
Strain-free plan achromatic objective  
Reflected & transmitted lighting  
Polarizer & analyzer, with compensators  
6V 30W Halogen lamp  
It can add DIC function

# Polarizing microscopes

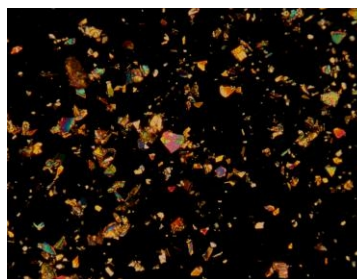
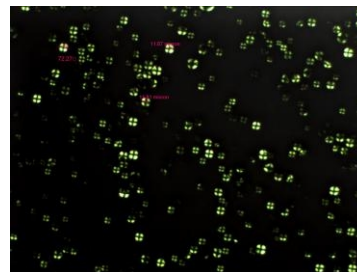
## Rectangle stage polarizing microscope

It is mostly used for pharmacy industry such as starch granules, urine crystal, etc.



### Model: ML31-P

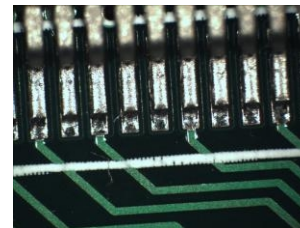
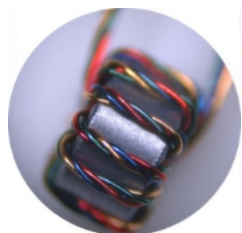
Infinite optical system  
Infinite plan achromat objectives  
Transmitted LED lighting  
Polarizer & analyzer



# What is stereo image looks like?

## Features

- Three-dimension performance image of bigger object than micro sample.





# Stereo microscope - 3D performance



## Model MZ62

Total zoom 6.7X~45X

Up and down LED lighting

Working distance 106mm



## Model MZ101

Total zoom 7X~63X

Up and down LED lighting

Working distance 110mm

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# Microscope Cameras

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# USB2.0 Cameras & USB3.0 Cameras

## USB2.0 Camera

It's suitable to use with entry level microscopes for **static** imaging, such as biology, metallurgy, stereo, **simple** polarizing and **strong** fluorescence.



### Model: MD30

3.0 megapixels/ USB2.0

1/2 inch sensor

12fps at 3mp

It's recommend to use with 0.5X C-mount adapter, 1X C-mount adapter is workable aslo



### Model: MD50

5.0 megapixels/ USB2.0

1/2.5 inch sensor

7fps at 5mp

It's recommend to use with 0.5X C-mount adapter, 1X C-mount adapter is workable aslo

## USB3.0 Camera

It's suitable to use with entry level microscopes for **static and dynamic** imaging (moving object), such as biology, metallurgy, stereo, polarizing and **strong** fluorescence.



### Model: MD50-T

5.0 megapixels/ USB2.0 & USB3.0

1/2.5 inch sensor

14fps at 5mp

It's recommend to use with 0.5X C-mount adapter, 1X C-mount adapter is workable aslo

# USB3.0 Cameras: larger size sensor

It's suitable to use with all types of microscopes



**Model: MS23**  
2.3 megapixels/ USB2.0 & USB3.0  
1/1.2 inch sensor  
40fps at 2.3mp  
Global shutter  
Spectral response 280~1100nm  
It's recommend to use with 0.5X / 0.75X C-mount adapter.



**Model: MS60**  
6.3 megapixels/ USB2.0 & USB3.0  
1/1.8 inch sensor  
71fps at 6.3mp  
It's recommend to use with 0.5X / 0.75X C-mount adapter.



**Model: MSX1**  
10.0 megapixels/ USB2.0 & USB3.0  
1/1.7 inch sensor  
36fps at 10mp  
It's recommend to use with 0.5X / 0.75X C-mount adapter.



**Model: MC50-S**  
5.0 megapixels/USB2.0 & USB3.0  
2/3 inch sensor  
37.5fps at 5mp  
Global shutter  
It's recommend to use with 0.5X / 0.75X C-mount adapter.



**Model: MSX2**  
12.0 megapixels/ USB2.0 & USB3.0  
1 inch sensor  
15fps at 12mp  
Spectral response 380~1000nm  
It's recommend to use 1X C-mount adapter



**Model: MSX11**  
21.0 megapixels/ USB2.0 & USB3.0  
4/3 inch sensor  
21fps at 21mp  
It's recommend to use 1X C-mount adapter and microscope of field view above 22mm

# Cooling camera

It's good to used for long time exposure of weak fluorescence imaging.



**Model: MSX11-C**

**21.0 megapixels/ USB2.0 & USB3.0**

4/3 inch sensor

21fps at 21mp

**Cooling to -15°C under room temperature**

It's recommend to use 1X C-mount adapter and microscope of **field view above 22mm**



**Model: MSH12-C**

**4.2 megapixels/ USB2.0 & USB3.0**

1.2 inch sensor

85% QE

46fps at 4.2mp

Longest exposure time 66s

**Cooling to -15°C under room temperature**

It's recommend to use 1X C-mount adapter and microscope of **field view above 22mm**

# HDMI Camera

It's used to connect with screen immediately through HDMI port



**Model: MD26-HD / HDMI & USB2.0 port**

**1080P / 2.0 megapixels**

Can capture and save 5MP image to TF card

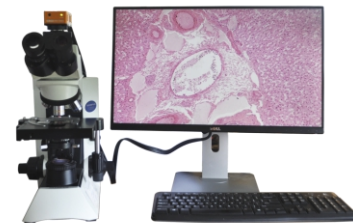
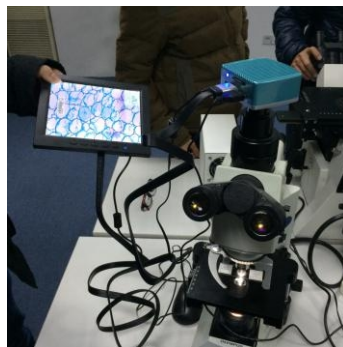
1/2.86 inch sensor

60fps at 2MP

Digital zoom 10x

TF card slot

It's recommend to use with 0.5X C-mount adapter, 1X C-mount adapter is workable aslo.



**Model: MD80-HD / HDMI port**

**4K/ 8megapixels**

1/1.9 inch sensor

30fps at 8MP

It's recommend to use with 0.5X C-mount adapter

Recommend to use with 4K high defenision screen, 1080P screen is also compatible.

# Tablet camera

It's a camera of tablet PC with Windows 10 OS, widely used for education and industry.



## Model: MD28-W

16 megapixels  
11.6 inch LCD screen  
Windows 10 OS  
Wifi connection  
Touch screen



It's recommend to use with 0.5X C-mount adapter, 1X C-mount adapter is workable aslo.

# Wifi camera

It's compatible to show image on PC, laptop, ipad and mobile phone.



**Model: MD80-W**  
**8 megapixels /4K**  
Wifi and USB port  
1/1.8 inch sensor  
5~10fps at 4K, 30fps at 1080P  
Support Windows/Android/ISO

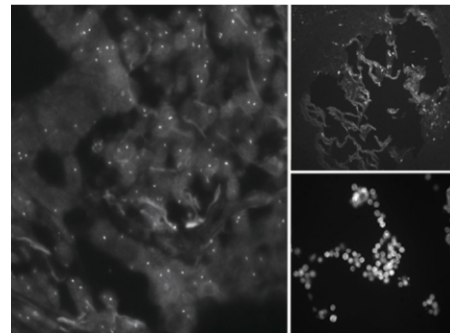
It's recommend to use with 0.5X /0.75X C-mount adapter





# Monochrome camera

It's good to used for super weak fluorescence and capture weak signal such as NIR.



**Model: MSH05**  
**5.0 megapixels/ USB2.0 & USB3.0**  
4/3 inch sensor  
12.5fps at 5MP  
Spectral response 380~1000nm

It's recommend to use 1X C-mount adapter and microscope of **field view above 22mm**

# Back-illuminated camera

It's special for scientific grade microscope imaging purchase such as **NIR and UV**, super weak fluorescence and weak signal.



**Model: MSH12-BI / Monochrome camera**  
**4.2 megapixels/ USB2.0 & USB3.0**  
1.2 inch sensor  
QE 95%  
22fps at 4.2mp  
Spectral response 200~1100nm  
**Cooling to -15°C under room temperature**

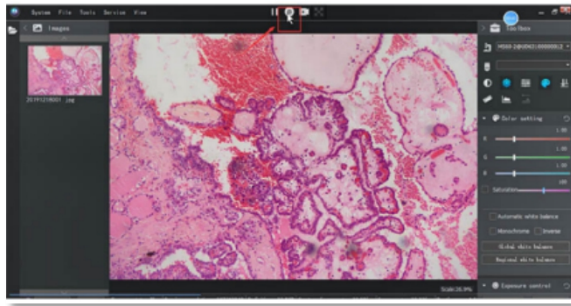
It's recommend to use 1X C-mount adapter and microscope of **field view above 22mm**



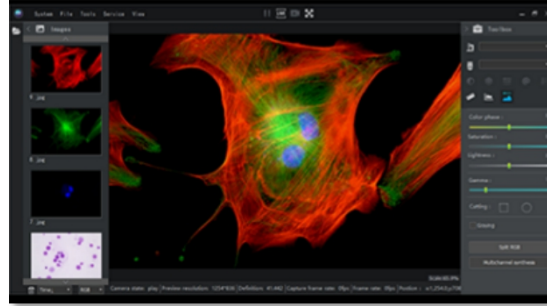
**Model: MSH20 / Monochrome camera**  
**4.2 megapixels/ USB2.0 & USB3.0**  
2 inch sensor  
QE 95%  
24fps at 4.2mp  
Spectral response 200~1300nm  
**Cooling to -15°C under room temperature**

It's recommend to use 1X C-mount adapter and microscope of **field view above 22mm**

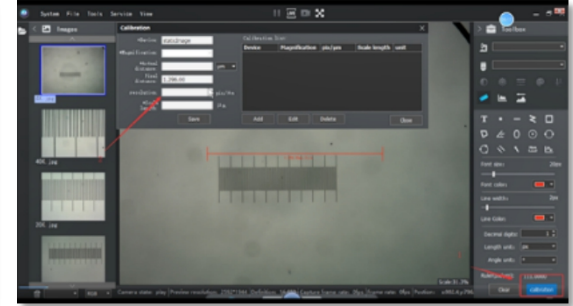
# Software - MSHOT Digital Imaging Analysis System



Bright field



Fluorescence



Measurement

Auto image splicing



Auto EDF  
Extend depth of field

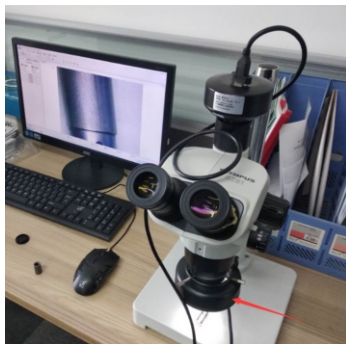
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Light source

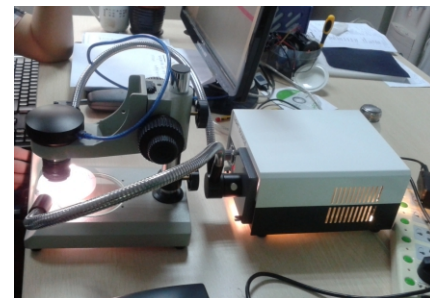
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# Light source for stereo microscope

It's assistant light source for stereo microscope lighting.



**Model:LED-305**  
**LED round lamp**  
5W  
48pcs lamp



**Model: H-150**  
**Fiber light source**  
21V 150W

## Broad-spectrum LED light source MG100 MG30

- MG100: 100W LED lamp lighting for fluorescence microscope
- MG30: 30W LED lamp for reflected white lighting
- Continuous BGU excitation wavelength covers 330nm~750nm
- Universal works for Olympus Nikon Leica Zeiss



# LED fluorescence illuminator

Used to upgrade traditional infinity bright field microscope to fluorescence function. It includes filters and light source. It's compatible to microscope brands of Mshot, Olympus, Nikon, Leica and Zeiss.



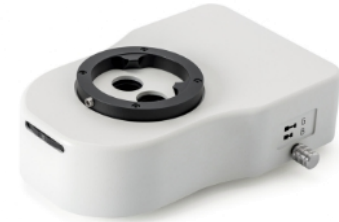
## Model: MF-LED

For upright microscope  
LED light source  
Excitation 300~580nm is optional (BGU)



## Model: MI-LED

For inverted microscope (Olympus)  
LED light source  
Excitation 300~580nm is optional (BGU)



## Model: MZX-LED

For stereo microscope  
LED light source  
Excitation 300~580nm is optional (BGU)



# Plug-in type LED Fluorescence Illuminator MF-LED-CX43

- Special for Olympus CX43 and CX33
- Single channel
- Dual channels
- Reflected white lighting



Single channel



Dual channels



Reflected white lighting

Plug-in



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## Thermal plate and heating stage

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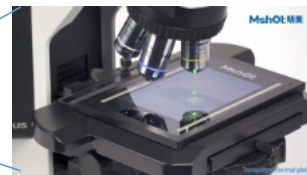
# Transparent thermal plate and heating stage

Used to heat culture dishes / slides to keep object at stable temperature.



Features:

- 0.5mm/0.7mm ultra thin design
- Room temperature - 50 °C ( $\pm 0.3$  °C precision)
- Heating speed can be controlled to meet your personalized experimental needs



Used to heat culture dishes / slides to keep object at stable temperature.

Transgene experiment reported by China Central Television

# High temperature thermal plate and heating stage

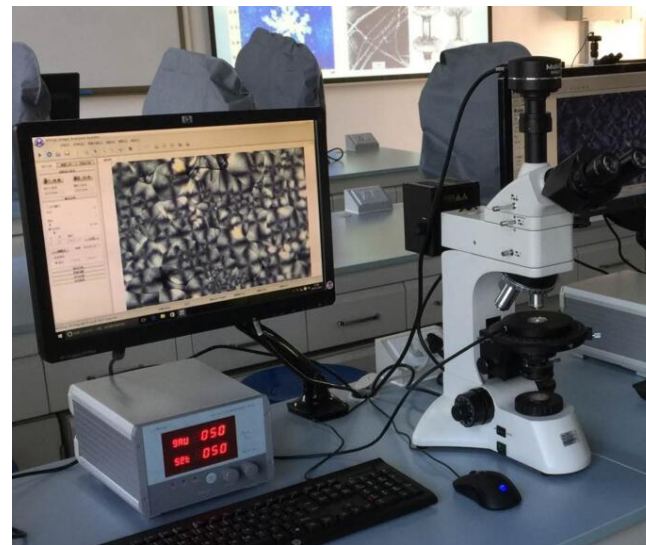
Used to heat metal, crystal and other solid object to liquid with high temperature.

It's usually to use with polarizing microscope.



**Model: K3000B**

Heating range: room temperature ~ 500°C



## Microscope C-mount adapters

They are used to connect microscope camera with microscope.  
Supports microscope brand of Mshot, Olympus, Nikon, Leica and Zeiss.



## Stage micrometer & Eyepiece micrometer



### Stage micrometer:

Put on microscope stage to use with camera and software for calibration before measurement image.



### Eyepiece micrometer:

Insert in eyepiece of microscope for measurement and division when looking through eyepiece.

# Package



Light-proof inner



Elegant box



Polypropylene protect



Explosion proof



Alluminum suitcase



Carboard carton

# THANKS!

— Guangzhou Micro-shot Technology Co., Ltd —

[www.m-shot.com](http://www.m-shot.com)

[sales@mshot.com](mailto:sales@mshot.com)

