

STALWART

Research Biological Microscope STM-2082 Series



STM-2082



STM-2082F



STM-2082MH10

Introduction

After years of research and development in optical technology field, STM-2082 biological microscope is designed to present a safe, comfortable and efficiency oSTMervation experience for users. With perfectly performed structure, high-definition optical image and simple operating system, STM-2082 realizes professional analysis, and meets all the needs of research in scientific, medical and other fields.

Features

- **High eye point wide field plan eyepiece.**

The eyepiece field of view has been upgrade from traditional 22mm to 25mm and 26.5mm, provide more flat field of view and improve working efficiency. With wider diopter adjustment range and foldable rubber eye guard.



- **Viewing head with multi-splitting ratio.**

The viewing head is designed of multiple options for splitting ratio.

1. Trinocular head with inverted image, splitting ratio Binocular: Trinocular=100:0 or 20:80 or 0:100 is standard. Except for concentrating 100% light to eyepiece tube or camera tube, there is another option with 20% light to eyepiece tube and 80% to camera tube, so that eyepiece oSTMervation and image output can be available at the same time.
2. Trinocular head with erected image, splitting ratio Binocular:Trinocular=100:0 or 0:100 is optional. The moving direction of samples is the same as oSTMerved.



- **Large size rackless stage for both hands.**

Large stage with adjustment in either hand In order to correct the hidden danger of horizon guide rail, the stage is designed with double-way linear driving mechanism. This change protects the stage from overload at the end of both rails, improves the reliability and performance of the stage.

The handle of the stage can be set at each side based on users' preference. The X, Y biaxial adjustment are designed with low position for comfortable operation.

Two slices can be hold on the stage by using damping-type double clips, easy for comparative study. Moving range: 80mm X55mm; precision: 0.1mm. Processed with special craft, the surface of the stage is anti-corrosive and anti-friction. The platform with an arc transition design reduces the stress concentration and damage from impact.



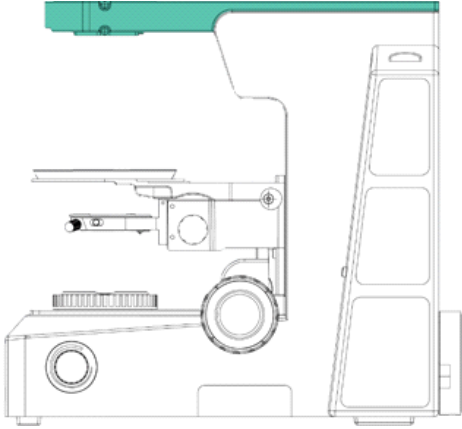
Features

- **Modular frame, improve the system compatibility**

With modularization design, separated cross arm and main body, improves the system compatibility of biological and fluorescence frame.

- **Highly sensitive coaxial coarse and fine adjustment system**

Coaxial adjustment adopts double-stage driving, with adjustable tension tightness and upper limit stop, coarse range is 25mm and fine precision is 1 μ m. Not only accurately focus but also precision measurement is available



Specification

Item	Specification	STM-2082	STM-2082F	STM-2082 Mh10
Optical System	Infinite color corrected optical system	Standard	Standard	Standard
Viewing Head	Seidentopf trinocular head(Inverted image), 30° inclined, interpupillary distance: 50mm-76mm; splitting ratio Eyepiece:Trinocular=100:0 or 20:80 or 0:100	Standard	Standard	Standard
	Seidentopf trinocular head(Erected image), 30° inclined, interpupillary distance: 50mm-76mm; splitting ratio Eyepiece:Trinocular=100:0 or 0:100	Optional	Optional	Optional
Eyepiece	High eyepoint wide field plan eyepiece PL10X/25mm, diopter adjustable	Standard	Standard	Standard
	High eyepoint wide field plan eyepiece PL10X/25mm, with reticle, diopter adjustable	Optional	Optional	Optional
	High eyepoint wide field plan eyepiece PL10X/26.5mm, diopter adjustable	Optional	Optional	Optional
	High eyepoint wide field plan eyepiece PL10X/26.5mm, with reticle, diopter adjustable	Optional	Optional	Optional
Objective	Plan semi-apochromatic fluorescent objective 4X/0.13 (infinity), WD=18.5mm	Standard	Standard	Standard
	Plan semi-apochromatic fluorescent objective 10X/0.30 (infinity), WD=10.6mm	Standard	Standard	Standard

Specification

	Plan semi-apochromatic fluorescent objective 20X/0.50 (infinity), WD=2.33mm	Standard	Standard	Standard
	Plan semi-apochromatic fluorescent objective 40X/0.75 (infinity), WD=0.6mm	Standard	Standard	Standard
	Plan semi-apochromatic fluorescent objective 100X/1.30(infinity), WD=0.21mm	Standard	Standard	Standard
Nosepiece (with DIC slot)	Backward Quintuple Nosepiece	Optional	Optional	Optional
	Backward Sextuple Nosepiece	Standard	Standard	Standard
	Backward Septuple nosepiece	Optional	Optional	Optional
Frame	Biological frame (transmitted), low-position coaxial coarse and fine adjustment, coarse adjustment distance: 25mm; fine precision: 0.001mm. With coarse adjustment stop and tightness adjustment. Built-in 100-240V_ AC50/60Hz wide voltage transformer, intensity adjustable by digital set and reset; built-in transmitted filters LBD/ND6/ND25)	Standard		Standard
	Fluorescence frame (transmitted), low-position coaxial coarse and fine adjustment, coarse adjustment distance: 25mm; fine precision: 0.001mm. With coarse adjustment stop and tightness adjustment. Built-in 100-240V_ AC50/60Hz wide voltage transformer, intensity adjustable by digital set and reset; built-in transmitted filters LBD/ND6/ND25)	Optional	Standard	Optional
Stage	Double layers mechanical stage, size: 187mm X168mm; moving range: 80mm X55mm; precision: 0.1mm; two-way linear drive, tension adjustable	Standard	Standard	Standard
Condenser	Swing-out type achromatic condenser (N.A.0.9)	Standard	Standard	Standard
Reflected Fluorescence illuminator	Sextuple reflected fluorescence illuminator with iris field diaphragm and aperture diaphragm, central adjustable; with filter slot and polarizing slot; with fluorescence filters (UV/B/G for option).	Optional	Standard	Optional
	100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable. (75W xenon lamp house for option)	Optional	Standard	Optional
	Digital power controller, wide voltage 100-240VAC	Optional	Standard	Optional

Specification

	Imported OSRAM 100W mercury lamp.(OSRAM 75W xenon lamp for option)	Optional	Standard	Optional
Transmitted Illumination	12V/100W halogen lamp house for transmitted light, center pre-set, intensity adjustable	Standard	Standard	Standard
Other Accessories	Camera adapter: 0.5X/0.65X/1X focusing C-mount	Optional	Optional	Optional
	Cooled CCD camera, SONY 2/3", 1.4MP, ICX285AQ Color CCD	Optional	Optional	Optional
	Centering objective for fluorescence oSTMervation	Optional	Optional	Optional
	Calibration slide 0.01mm	Optional	Optional	Optional
	Multi Viewing Attachment for 5 persons	Optional	Optional	Optional
	DIC Attachment	Optional	Optional	Optional

Application

This microscope is an ideal instrument in biological, histological, pathological, bacteriology, immunizations and pharmacy field and can be widely used in medical and sanitary establishments, laboratories, institutes, academic laboratories, colleges and universities

Sample Pictures

