STALWART

Research Fluorescent Biological Microscope STM-2083F

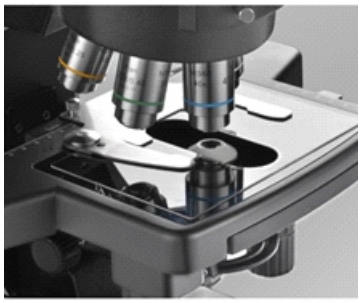
STM-2083F

Introduction

STM-2083F biological fluorescent microscope has been designed to present a safe, comfortable and precision oSTMervation experience. The motorized nosepiece and condenser will make your works easier. B, G, U, V, R fluorescent filters are available. With perfectly performed structure, high-definition optical image and ergonomical operating system, STM-2083F realizes professional analysis and meets all the needs of research in biological, medical, life science and other fields.

Features

- **Sapphire Glass Stage is optional.**



Mechanical stage with sapphire glass insert is optional, it is endurable, never could be scratched and allows users to clear the stage easily.

- **Put Slide by One Hand**

It is easy for users to put slides by one hand due to the special designed slide clip.

- **Image Capture Button**

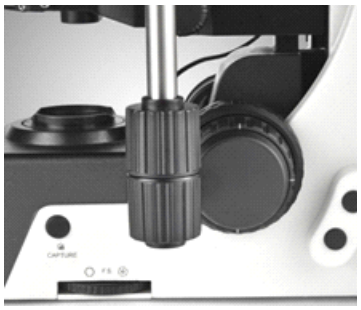
There is a cable from the microscope, the cable could be connected to the digital camera, after connection, just press the “CAPTURE” button at the right side of the microscope base, then you could capture the image easily.

Features

- **Tilting Trinocular Head is optional**

1. The eye tube can be adjusted from 0°-35°.
2. Digital cameras or DSLR cameras can be connected to the trinocular tube.
3. The beam splitter has 3-position (100:0, 20:80, 0:100).
4. The splitter bar can be assembled on the either side according to user's requirements.

- **Low-Position Focusing System.**

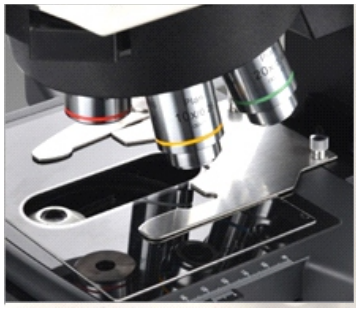


Very precise coaxial focusing system with fine division of 1μm, it comes with low-position coarse and fine focusing knobs, the ergonomic design provides comfortable experience for users.

- **Motorized Objective Change**

Objectives could be switched by simply pressing the buttons. Users could also self-define two of the most commonly used objectives and switch between them with the green button.
The illumination has connection with the objective, when the objective is changed, the light intensity will also be changed accordingly.

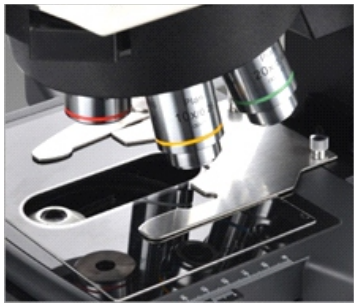
- **Nosepiece Rotating Buttons.**



This microscope has the function of motorized rotating nosepiece with the 2 buttons.

Features

- **Motorized Swing-out Condenser.**

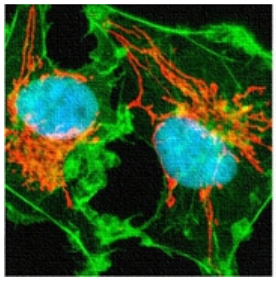
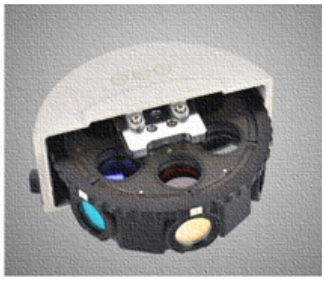


The top-lens on the condenser will be automatically swing-in or swing-out according to the objective lens that is selected.

- **Light Intensity Management.**

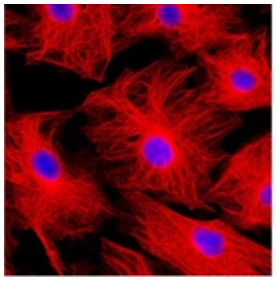
The illumination has connection with the objective, when the objective is changed, the light intensity will also be changed accordingly. Thus, from low to high magnification, the field of view maintains the same brightness. There is no need to manually adjust the intensity of the light and also reduce eye fatigue. The long-life LED light source ensures uniform brightness while is easy to maintain.

- **6-Position Turret for fluorescent filter blocks.**

All the fluorescent filter blocks use the high-performance filter lens. Up to 6 filter blocks can be installed in the turret, that allows users to view different stained specimens at the same time.

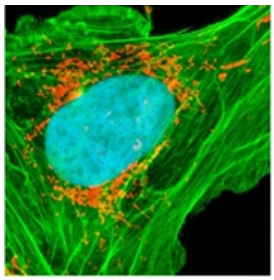
- **Fine focusing knob can be installed to left or right.**

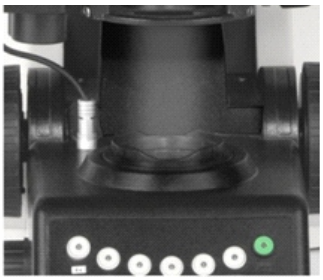



Customers can choose the position of the fine focusing knob to be right or left, according to their preferences.

Features

- **Light Intensity Management.**





The light intensity can be automatically switched according to the objectives, no need to adjust the brightness manually. The long life LED lamp can keep the light intensity and easy for maintenance.

Specification

Item	Specification		STM-2083F
Optical System	NIS60 Infinite Color Corrected Optical System		Standard
Viewing Head	Ergo Tilting Trinocular Head, adjustable 0-35° inclined, interpupillary distance 47mm-78mm; splitting ratio Eyepiece:Trinocular=100:0 or 20:80 or 0:100		Standard
	Seidentopf Trinocular Head, 30° inclined, interpupillary distance: 47mm-78mm; splitting ratio Eyepiece:Trinocular=100:0 or 20:80 or 0:100		Optional
	Seidentopf Binocular Head, 30° inclined, interpupillary distance: 47mm-78mm		Optional
Eyepiece	Super wide field plan eyepiece SW10X/25mm, diopter adjustable		Standard
	Super wide field plan eyepiece SW10X/22mm, diopter adjustable		Optional
	Extra wide field plan eyepiece EW12.5X/17.5mm, diopter adjustable		Optional
	Wide field plan eyepiece WF15X/16mm, diopter adjustable		Optional
	Wide field plan eyepiece WF20X/12mm, diopter adjustable		Optional
Objective	N-PLN Plan Objective	N-PLN 2X/NA=0.06, WD=7.5mm	Optional
		N-PLN 4X/NA=0.10, WD=30mm	Standard
		N-PLN 10X/NA=0.25, WD=10.2mm	Standard
		N-PLN 20X/NA=0.40, WD=12mm	Standard
		N-PLN 40X/NA=0.65, WD=0.7mm	Standard
		N-PLN 100X(Oil)/NA=1.25, WD=0.2mm	Standard
		N-PLN 50X(Oil)/NA=0.95, WD=0.19mm	Optional
		N-PLN 60X/NA=0.80, WD=0.3mm	Optional
		N-PLN-I 100X (Oil, with Iris Diaphragm)/ NA=0.5-1.25, WD=0.2mm	Optional
	N-PLN PH Plan Phase Contrast Objective	N-PLN PH 10X/NA=0.25, WD=10.2mm	Optional
		N-PLN PH 20X/NA=0.40, WD=12mm	Optional
		N-PLN PH 40X/NA=0.65, WD=0.7mm	Optional
		N-PLN PH 100X(Oil)/NA=1.25, WD=0.2mm	Optional

Nosepiece

Condenser

Accessories

	N-PLFN Plan Semi-apochromatic Fluorescent Objective	N-PLFN 4X/NA=0.13, WD=17.2mm	Optional
		N-PLFN 10X/NA=0.30, WD=16.0mm	Optional
		N-PLFN 20X/NA=0.50, WD=2.1mm	Optional
		N-PLFN 40X/NA=0.75, WD=1.5mm	Optional
		N-PLFN 100X(Oil)/NA=1.4, WD=0.16mm	Optional
Nosepiece	Motorized Backward Sextuple Nosepiece (with DIC slot)		Standard
Condenser	Swing-out type condenser N.A.0.9/0.25(Auto)		Standard
	Turret Phase Contrast Condenser		Optional
	Dark-field Condenser (Dry), used for objectives lower than 100X		Optional
	Dark-field Condenser (Oil), used for 100X objective		Optional
Transmitted Illumination	3W S-LED lamp, center pre-set, intensity adjustable		Standard
	12V/100W halogen lamp, center pre-set, intensity adjustable		Optional
Focusing	Low-position coaxial coarse and fine focusing, fine division 1μm, Moving range 35mm		Standard
Stage	Double layers mechanical stage, size 190mmX152mm; moving range 78mm X54mm (double slides holder, Right or left handle); precision: 0.1mm; with Sapphire Crystal Glass Insert		Standard
	Double layers mechanical stage, size 190mmX152mm; moving range78mm X54mm (double slides holder, Right or left handle); precision: 0.1mm		Optional
DIC Kit	10X DIC Objective Lens		Optional
	20X DIC Objective Lens		Optional
	Polarizer for DIC Kit		Optional
	DIC insert plate(10X/20X), can be inserted into the DIC slot on nosepiece		Optional
	DIC insert plate(40X/100X) can be inserted into the DIC slot on nosepiece		Optional
	DIC Turret Condenser		Optional
Reflected fluorescence illuminator	Turret with 6 filter block cubes position, with iris field diaphragm and aperture diaphragm, central adjustable; with filter slot and polarizing slot; with fluorescence filters (B,G fluorescent filters).		Standard
	U,V,R fluorescent filters		Optional
	100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable.		Standard
	3W LED lamps for B, G, U, V, B1, R filters, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable.		Optional
	Digital power controller, wide voltage 100-240VAC		Standard
	ND6/ND25 Filter		Optional

Specification

Other Accessories	0.5X C-mount Adapter	Optional
	1X C-mount Adapter	Optional
	Dust Cover	Standard
	Power Cord	Standard
	Cedar Oil 5ml	Standard
	Simple Polarizing kit	Optional
	Calibration slide 0.01mm	Optional
	Multi Viewing Attachment for 2/3/5/7/10 person	Optional

Accessories

- **N-PLN Series Plan Objectives.**

The Plan objectives can provide flat high transmittance image from visible light to NIR light. They are usually used for bright-field viewing as the high signal-to-noise, high resolution and high contrast features.

- **N-PLN PH Series Plan Phase Contrast Objectives.**

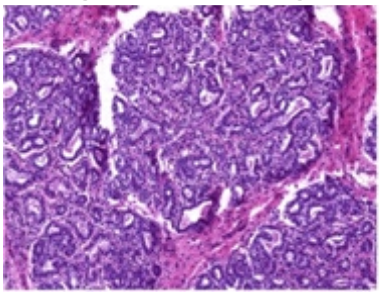
These plan phase contrast objectives are specially designed for phase contrast oSTMervation. They are good choice for clinic and scientific research. These objectives can provide advanced flat image of 25mm FOV under transmitted bright field.

Accessories

- **N-PLFN Series Plan Semi-APO Fluorescent Objectives.**

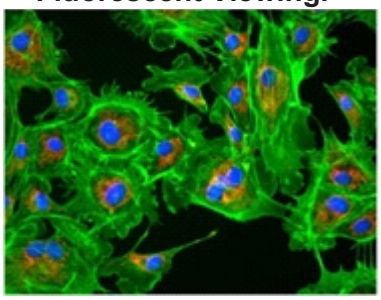
Owe to the multilayers coating technology, these Semi-APO objectives can compensate the spherical aberration and the chromatic aberration from ultraviolet and infrared light. High-sensitive fluorescence performance of the objectives ensures the sharpness, definition and color rendition of images.

- **Bright field Viewing.**



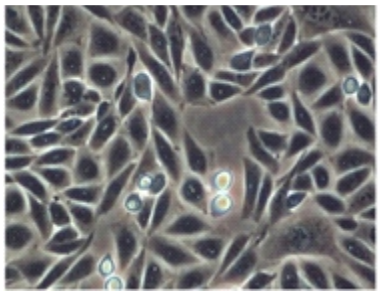

Brighter image, high resolution and flatness, suitable for all the magnifications.

- **Fluorescent Viewing.**




The compact epi-fluorescent components include noise elimination feature which ensures images captured are bright, with high contrast and high signal-to-noise ratio.

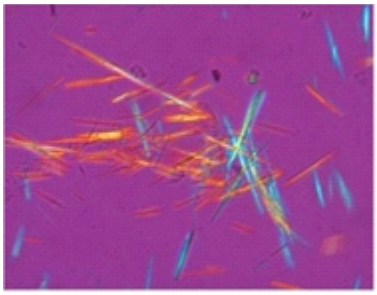
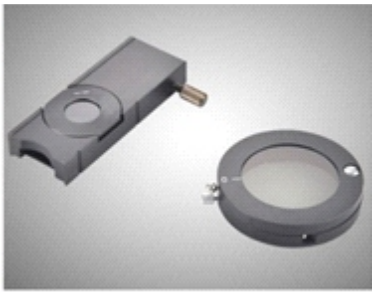
- **Phase Contrast Viewing.**




Users can get high contrast image of neutral background color whatever the magnification is. It is suitable for viewing non-stained specimen.

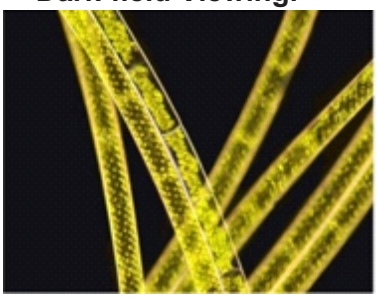
Accessories

- **Polarizing Viewing.**

It is quite suitable for viewing collagen, amyloid and crystal etc., double refracting specimens.

- **Dark-field Viewing.**




It can be used for clearly viewing of blood or flagellum etc., fine structure.

Dimension