



Scientific Research Inverted Fluorescence Microscope STF53-N



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Scientific Research Inverted Fluorescence Microscope

This SIMTUM inverted fluorescence microscope is equipped with semi-apochromat fluorescence objective lens with high numerical aperture, wide field of view eyepiece, 5-hole/6-hole fluorescence attachment and long-life wide-spectrum high-power LED light source. It is designed for scientific research and testing in the fields of nanomaterials and optoelectronics .

Advanced Modular Design

➤ Motorized XYZ stage option is available

The XYZ high precision motorized stage is workable to STF53-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.

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



➤ Semi-apochromat fluorescence objectives

The semi-apochromat fluorescence objective lens with high numerical aperture has the properties of high definition and fluorescence transmittance, and the imaging is sharp under brightfield fluorescence, which can meet the observation in various fluorescence fields.



➤ Wide field of view eyepiece

23 large field of view eyepiece are standard, and 25mm fields of view are optional, which can meet the needs of customers for large field of view observation.



➤ Fluorescence attachment works for 6 mirror units

Equipped with 5-hole/6-hole fluorescence attachment, it is easy to replace and disassemble. It adopts a turntable structure design, which is convenient to switch and can meet the observation needs of various fluorescence at the same time.



➤ Fluorescence illuminating system

The long-life wide-spectrum high-power LED light source not only has uniform brightness but also is easy to maintain. The spectrum covers the wavelength range of 350nm-760nm.



Meet Multiple Requirements of Observation Method

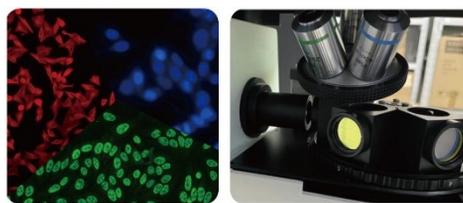
➤ Bright field observation

Using LED lighting, high brightness, low radiation, the light path does not need to be adjusted, providing an efficient and comfortable observation environment. Long service life, avoid frequent replacement, energy saving and environmental protection.



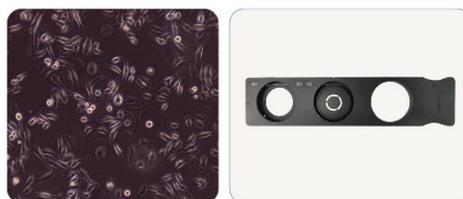
➤ Fluorescence observation

The new optical path upgrade greatly improves the brightness of fluorescence imaging degree and uniformity. Configurable U/V/B/G/Y/R to observe common fluorescent dyes such as DAPI, FITC, TRITC, Alexa Fluor series, Cy3 series, etc. materials in the fields of CTC detection, FRET, cellular immunity, etc.



➤ Phase contrast observation

The push-pull phase contrast ring plate design is simple and convenient to operate, and the phase contrast imaging is uniform. The ring of the corresponding multiple can be flexibly replaced according to the needs.



This SIMTRUM inverted fluorescence microscope can be customized and modified, and combined with laser, analytical spectroscopy, transparent hot stage, etc., it can be used in scientific research and testing in the fields of nanomaterials and optoelectronics.



Specifications

Item	Specification	
Eyepiece	WF10X/23 wide field eyepiece, high eyepoint	
	Centering telescope	
Head	Binocular observation tube, 45°inclined, pupil distance adjust range 50-75mm, diopter adjustable	
Objectives	Semi-apochromat Plan Fluor4X/0.13; WD: 18.5mm	Plan achromat LWDPan4X/0.1 WD: 11.98mm
	Semi-apochromat Plan Fluor10X/0.3; WD: 7.1mm	Plan achromat Plan10X/0.25 WD: 4.1mm
	Semi-apochromat Plan Fluor20X/0.45; WD: 5.9mm	Plan achromat Plan 40X/0.58 WD: 2.5mm
	Semi-apochromat Plan Fluor40X/0.65; WD: 1.6mm	
	Long working distance infinite plan achromat phase contrast Plan10X/0.25 PH; WD: 4.1mm	
	Long working distance infinite plan achromat phase contrast Plan20X/0.45 PH; WD: 5mm	
Nosepiece	Quintuple revolving nosepiece with bearing inner location and anti-fungus device	
Stage	Fixed stage 240mmX260mm,with low-positioned X/Y coaxial control knob, travel distance 135mmX85mm	
	Water drop slide glass holder (Φ118mm)	
	Multi-function slide glass holder (76mmX26mm, Φ60mm)	
	The motorized XYZ stage option is available	
Epi-fluorescence Illuminating	100W Broad-spectrum LED light source	
	Six tuple filter cube positions fluorescence attachment	
	Filter cube	Excitation wavelength
	UV(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	Coaxial coarse and fine with limit and locking devices, 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 0.75X/1X	

*Depending on the optional accessories such as light source and stage, the appearance of the product may be different.

