

Fluorescence Imaging Microscope

ATF8000

Features

- Powerful image acquisition and analysis software
- Superior infinity chromatic aberration corrected optical system ensures excellent resolution and clarity
- Six-hole turntable fluorescence device, providing a variety of fluorescence excitation block options
- Five-hole turntable phase contrast device, equipped with 10X/20X/100X infinity Plan-field phase-contrast objective for phase-contrast and bright-field observation
- Large area automatic scanning, automatic image stitching, real-time autofocus
- Novel integrated frame provides excellent stability and operability
- Modular structure design, multi-functional combination to ensure the versatility of the system
- Super large field of view eyepiece, the field of view can reach 23mm
- Two-speed conversion trinocular observation tube, 100% observation; 20% observation, at the same time 80% photography

Application

- research laboratory
- Hospital and Biochemical Laboratory
- Hospital Clinical Laboratory
- university teaching
- Professional Laboratoryanning



(b) ATF8000INV

Description

ATF8000 is a large-area fluorescence imaging microscope with auto-focus and auto-scan carefully developed by Optosky. It uses a 200W ultra-high pressure mercury lamp as the light source and uses a 3-stage filter to filter the light source. It can output 3-color images. Excitation light; for emission light, 4-5 sets of filter wheels are used to collect fluorescence signals of different bands. ATF8000 is equipped with a 50X50mm large-area motorized scanning platform, supplemented by an advanced and fast ultra-large image stitching algorithm, so as to achieve the functions of fast scanning and large-area imaging. ATF8000 is equipped with a high-stability autofocus system, which can dynamically adjust the focus of the target in real time to achieve the best imaging effect. ATF8000 is connected to the computer through the USB 2.0 interface, and there is also advanced and easy-to-use PC-side control software, which can achieve perfect experimental operation.

Model	Description
ATF 8000	5 million pixel CCD
ATF 8000A	Cooling type 20 million pixel high-performance sCMOS , -15 °C, sensitivity increased by 50%
ATF 8000 INV	inverted type



a) ATF8000 & ATF8000A

1. Technical Parameters

Parameters	Specifications	Notes
Optical system	OTICS Infinity Chromatic Aberration Corrected Optical System	
Magnification range	40X ~ 1600X	
Eyepiece	10 X large field of view, high eye point plan eyepiece, field of view $\Phi 22$ mm ($\Phi 23$ mm optional)	
Infinity Plan Achromats mirror	2.5X / 4X / 10X / 20X (S) / 40X (S) / 60X (S) / 100X (S , O) / 100X (S , W)	
Observation tube	Hinged trinocular observation tube, 30° tilt , interpupillary distance adjustment 48 mm ~ 76 mm , trinocular two-speed conversion	
Converter	internal positioning five-hole converter	
Focusing device	Coarse and fine coaxial focusing, coarse adjustment with tightness adjustment, and a focus upper limit device	
Stage	Steel wire transmission stage (X- axis does not protrude), double-piece clamp structure	
Condenser	N . A . 0.9/0.13 Swing-out Condenser with Iris Stop	
lighting system	6 V / 30 W halogen lamp (wide voltage input: 100V ~ 240V), field of view diaphragm, center adjustable	
Six-hole turntable fluorescent device	1 00 W digital mercury lamp power epifluorescence device, optional B , G , Uv , V and others special filter	
	LED fluorescent power supply, optional B , G , Uv , V color filters	
Phase contrast device	Five-hole turntable phase contrast device (10 X / 20 X / 40 X / 100 X infinity plan phase contrast objective lens)	
	Independent phase contrast device	
Dark field device	Dark field condenser (dry, wet)	
Polarizer	polarizer, polarizer	
Camera device	Equipped with 320/5 million pixel digital camera system for bright field photography	
	configuration 3.1/5.1 million pixel CCD digital camera for professional picture recording	
X , Y axis electric control two-dimensional platform		
Maximum imaging range	50 X 50 mm	
Mobile resolution	0.1 μ _ m	
Positioning accuracy	1 μ m _	
Scanning speed	20mm / s _	
Focus method	Motorized , real-time focus	
Z axis (electric control, auto focus)		
Focus accuracy	$\leq \pm 0.2\mu$ m	
Maximum stroke	20 mm	
Focus speed	no more than 10 the s	

Dimensions	2 90 X 210 X 220 mm	
Weight	1 2 .3 kg	

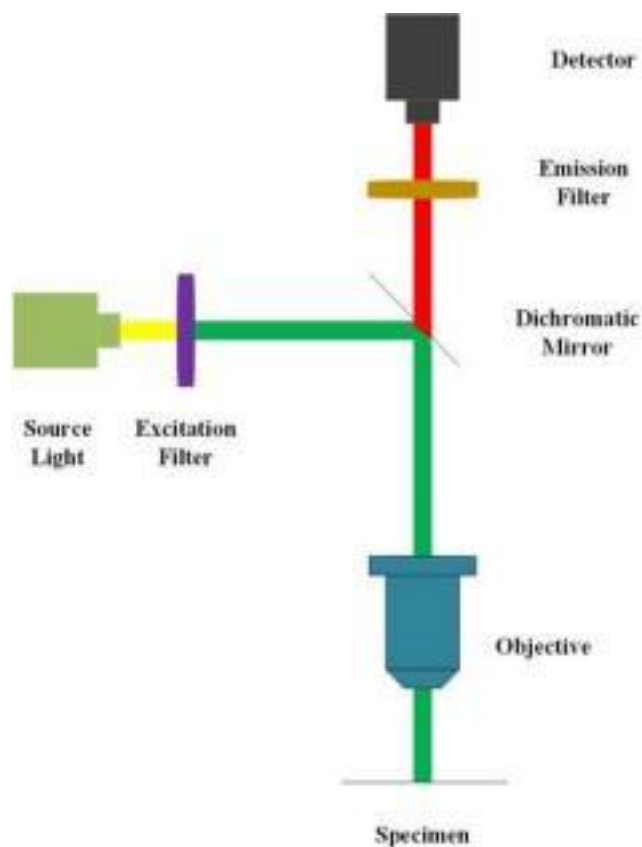


Figure 1 Schematic diagram of the function of the fluorescence microscope

2. Imaging example



