

BS-2045 Biological Microscope



BS-2045B



BS-2045T

Introduction

BS-2045 series microscopes are high quality biological microscopes, which are specially designed for biological and medical research and teaching experiments for colleges, universities, laboratories and related institutes. With infinity color correction optical system and excellent Koehler illumination system, BS-2045 can get uniform illumination, clear and bright images at any magnification. These microscopes can be used for teaching experiments, pathological examinations and clinical diagnosis. With outstanding functions, excellent cost performance, easy and comfortable operation, BS-2045 series microscopes present over expected and splendid micro images.

Feature

1. Infinite Color Corrected Optical System provides sharp and comfortable images.
2. Wide-field high eye-point eyepieces and plan achromatic objectives make the effect of fluorescence observation more perfect.
3. Outstanding appearance design and ergonomics structure design, long time use without feeling tired.
4. With the design of security lock and safe limits, it is much more secure, stable and can be kept for long.
5. Various microscopic examinations can be fulfilled, such as brightfield, dark-field, phase contrast, fluorescence, simple polarizing and so on.
6. LED fluorescence excitation illumination, breaking through the traditional type, is more stable, low radiation and long working life. Special fluorescent filter for tuberculosis examination is available.
7. Rackless stage can avoid the potential hazard caused by moving rack.



8. Intelligent illumination system.

- (1) With coded nosepiece, the microscope is able to automatically remember the light intensity of each objective which you are used to, it helps to improve the work efficiency and decrease the visual fatigue.
- (2) LCD on the right side of the frame shows color temperature and light intensity, as well as the objective magnification you are using, it is helpful to make record of experiment condition.



- (3) Color temperature can be adjusted to get the best contrast, which is ranging from 3000K to 5600K.



3000K warm color LED (minimum)



5600K natural white LED (maximum)

The color temperature of LED light source is adjustable by straight screwdriver.



Application

BS-2045 series biological microscopes are ideal instruments for biological, pathological, histological, bacterial, immune, pharmacological and genetic fields. They can be widely used in education, medical and sanitary establishments, such as schools, hospitals, clinics, laboratories, medical academies, colleges, universities and related teaching labs and research centers.

Specification

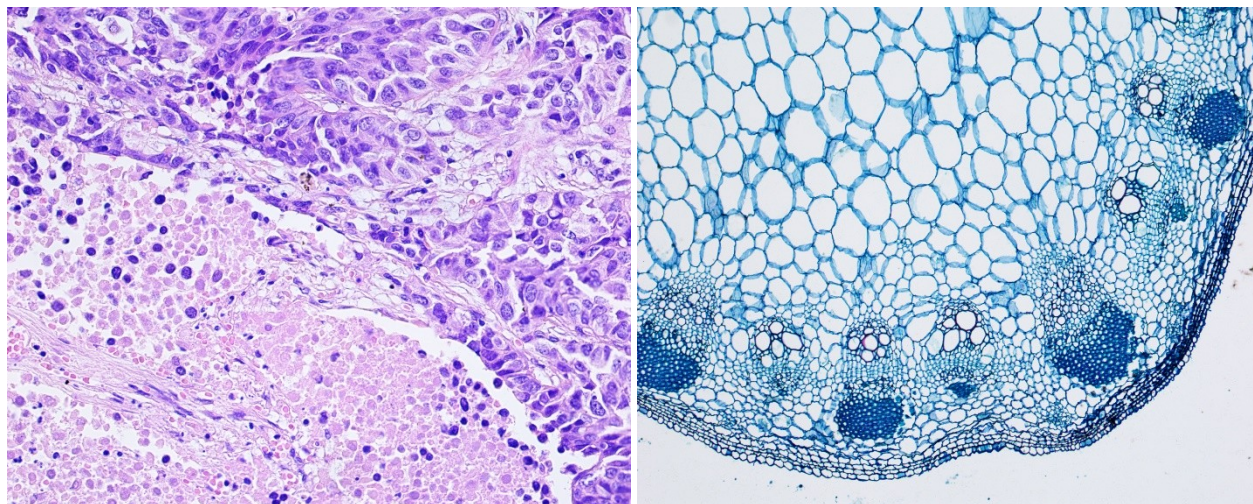
Item	Specification	BS-2045B	BS-2045T	
Optical System	Infinite Color Corrected Optical System, parfocal distance 45mm	●	●	
Viewing Head	Seidentopf binocular head, 30° inclined, Interpupillary 50-75mm, 360° rotatable, eyepiece tube: Φ30mm	●	○	
	Seidentopf trinocular head, 30° inclined, Interpupillary 50-75mm, 360° rotatable, Fixed light splitting ratio: Eyepiece:Trinocular=8:2, eyepiece tube: Φ30mm	○	●	
	Seidentopf trinocular head(dedicated for fluorescence), 30° inclined, Interpupillary 50-75mm, 360° rotatable, Fixed light splitting ratio: Eyepiece:Trinocular=5:5, eyepiece tube: Φ30mm	○	○	
Eyepiece	High eyepoint wide field plan eyepiece PL 10×/22mm with adjustable diopter ±5	●	●	
	High eyepoint wide field plan eyepiece PL 10×/22mm with adjustable diopter ±5, with eyepiece micrometer	○	○	
	Eyepiece pointer	○	○	
	Eyepiece micrometer	○	○	
Objective	Infinite Plan Achromatic Objectives	2×, NA=0.06, WD=5.00mm (should work with frosted filter)	○	○
		4×, NA=0.10, WD=15.00mm	●	●
		10×, NA=0.25, WD=10.80mm	●	●
		20×, NA=0.45, WD=1.50mm	●	●
		40×(S), NA=0.65, WD=0.80mm	●	●
		60×(S), NA=0.85, WD=0.30mm	○	○
		100×(S, Oil), NA=1.25, WD=0.21mm	●	●
	Infinite Plan Phase Contrast	10×, NA=0.25, WD=10.80mm	○	○

	Objective	20×, NA=0.40, WD=1.50mm	○	○
		40×(S), NA=0.65, WD=0.80mm	○	○
		100×(S, Oil), NA=1.25, WD=0.18mm	○	○
	Infinite Plan Semi-Apochromatic Fluorescence Objectives	4×, NA=0.13, WD=16.40mm	○	○
		10×, NA=0.30, WD=8.10mm	○	○
		20×, NA=0.50, WD=2.00mm	○	○
		40×(S), NA=0.75, WD=0.74mm	○	○
		100×(S, Oil), NA=1.28, WD=0.14mm	○	○
Nosepiece	Reversed Coded Quintuple Nosepiece		●	●
Stage	Rackless Double Layers Mechanical Stage 150mm×162mm, moving range 76mm×50mm, double slide holder, accuracy: 0.1mm, Wear-resistant and anti-corrosion treatment on the stage surface		●	●
	Double Layers Mechanical Stage 150mm×140mm, moving range 76mm×50mm, double slide holder, accuracy: 0.1mm		○	○
Condenser	N.A.1.25 Koehler illumination condenser with aperture diaphragm (with plug-in phase contrast and dark field plate slot), condenser preset center and height adjustable		●	●
	N.A.1.25 Kohler Illumination Turntable Phase Contrast Condenser Set for 10X, 20X, 40X, 100X Phase Contrast Observation		○	○
	N.A.1.25 Kohler Illumination Turntable Phase Contrast + Dark Field Condenser Set for 10X, 20X, 40X, 100X Phase Contrast and 4X-40X Dark Field Observation		○	○
Focusing	Low position coaxial focusing system, moving range 30mm, with upper limit and tightness adjustment, fine division 0.002mm		●	●
Transmitted Illumination	3W LED (3000K-5600K), light intensity continuously adjustable; LCD on the right side of the frame to show the color temperature and the objective magnification		●	●
Mercury Reflected Illumination	Mercury reflected fluorescent illuminator with eyes protective plate, 100W mercury lamp house, power supply box, 100W DC mercury bulb (OSRAM/ Chinese brand)		○	○
LED Fluorescent Reflected Illumination	B1 band-pass type fluorescence module, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength:470nm		○	○
	G1 band-pass type LED fluorescence module, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength: 560nm		○	○
	B2 long-pass type fluorescence module, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength:470nm		○	○
	UV2 ultraviolet long-pass type LED module, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength: 385nm		○	○
	UV4 ultraviolet long-pass type LED module, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength: 365nm		○	○
	B4 LED fluorescence module dedicated for TB test, with intensity adjusting knob, and switch knob for bright field and fluorescence, central wavelength: 455nm		○	○
	Other various LED module for option, which can be custom-tailor according to the needs of clinical diagnosis.		○	○

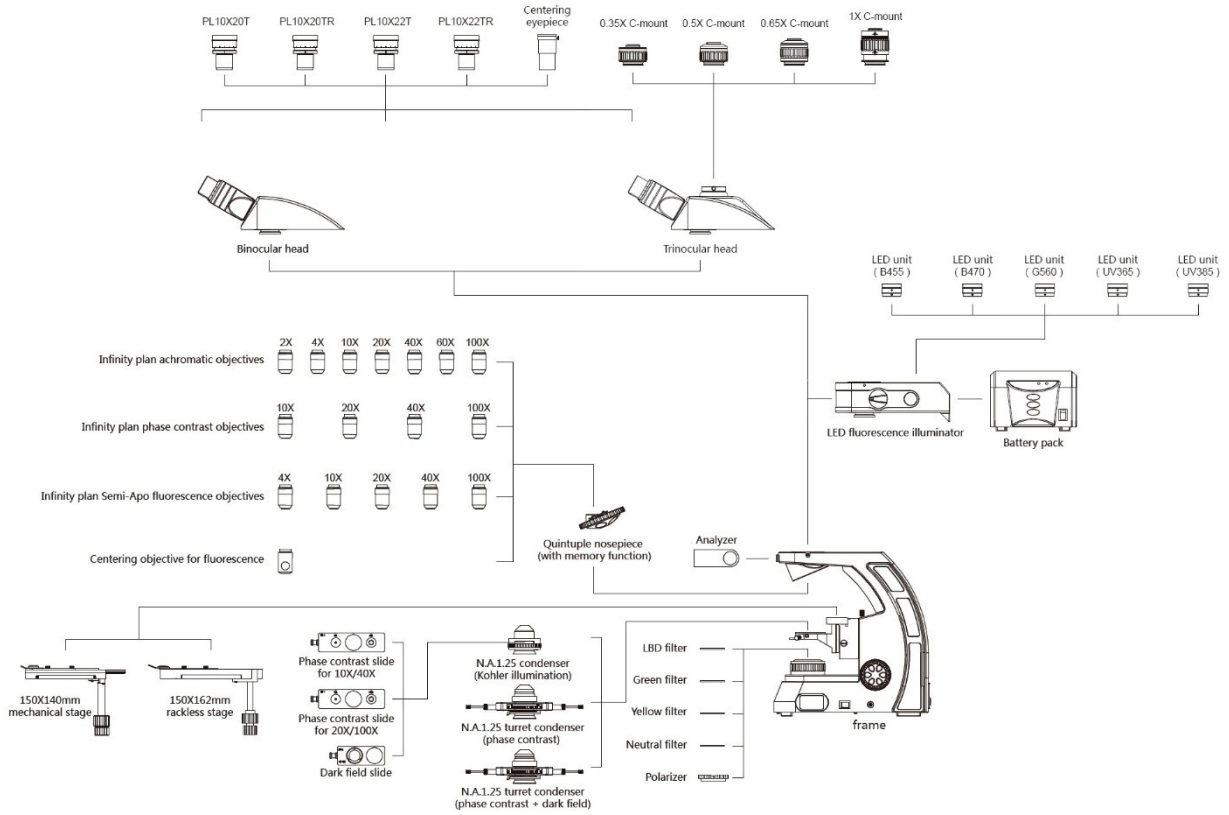
Filters	Blue filter Ø45mm	○	○
	Green filter Ø45mm	○	○
	Yellow filter Ø45mm	○	○
	Neutral filter Ø45mm	○	○
Polarizing Kit	Polarizer	○	○
	Analyzer	○	○
Dark Field Plate	Dark field insert plate (used for 4x-40x objectives)	○	○
Centering Telescope	Centering Telescope Ø30mm (used with phase contrast plate and objective)	○	○
Phase Contact Plate	10x, 40x Phase Contrast Insert Plate (used for 10x, 40x phase contrast objectives)	○	○
	20x, 100x Phase Contrast Insert Plate (used for 20x, 100x phase contrast objectives)	○	○
Power Adapter	External power adapter, input 100V-240V, output 15V2.67A	●	●
C-mount Adapter	0.35x C-mount adapter, adjustable	○	○
	0.5x C-mount adapter, adjustable	○	○
	0.65x C-mount adapter, adjustable	○	○
	1x C-mount adapter, adjustable	○	○
	Trinocular tube for digital eyepiece (Ø23.2mm)	○	○
Packing	1 set/carton, 58x56x28cm, GW: 10kgs, NW: 8kgs	●	●

Note: ● Standard Outfit, ○ Optional

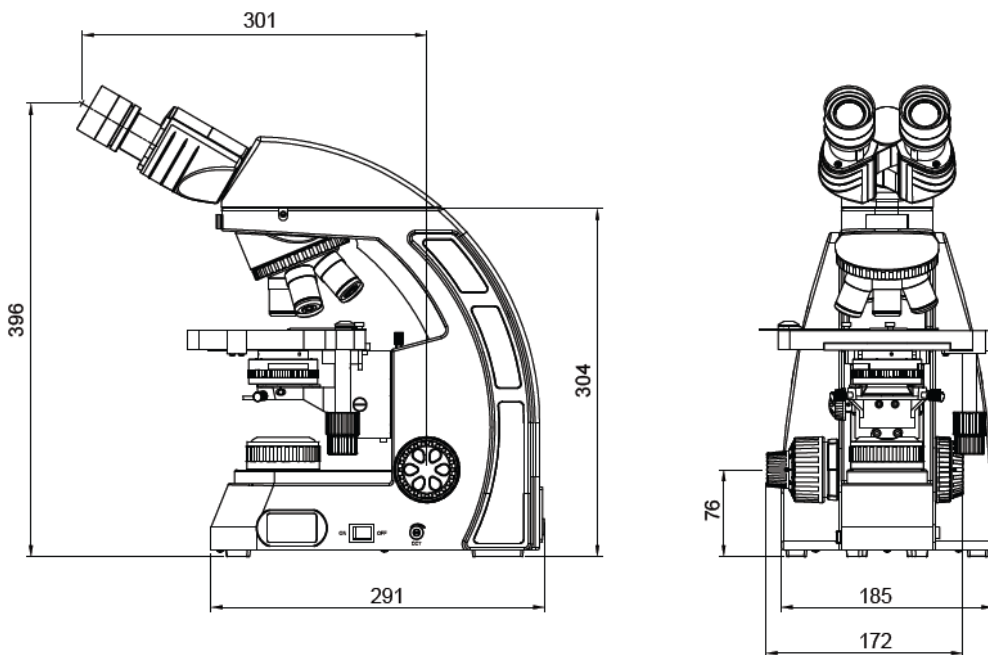
Sample Images



System Diagram



Dimension



Unit: mm