

## BCF295 Laser Scanning Confocal Microscopy



The confocal microscope can make a three-dimensional image of a translucent object through the moving lens system, and can accurately test the subcellular structure and dynamic process.

### Specification

Item	Specification	BCF295
Optical system	NIS60 Infinite optical system(F200)	•
Laser	Laser 405 nm, 488 nm, 561 nm, 640 nm	•
Detector	Wavelength: 400-750nm, detector: 3 PMT (photomultiplier tube)	•
Scanning head	Maximum pixel size: 2048 x 2048 Scanning speed: 2 fps (512 x 512 pixels, bidirectional), 18 fps (512 x 32 pixels, bidirectional)	•
Pinhole	Round, 6 sizes	•
Confocal FOV	φ20mm inscribed square	•
Software	2D display/image processing/analysis	•
Eyepiece FOV	10×(25mm), EP17.5mm, adjustable diopter -5~+5, interface Φ30	•
Viewing Head	Siedentopf trinocular viewing head, inclined at 45°, Interpupillary 47-78mm, eyepiece interface Φ30, fixed diopter; Eyepiece/camera switching: (100/0, 50/50, 0/100); eyepiece/close eyepiece/adjustable Bertrand lens	•
NIS60 Objective	10× Apochromatic objectives, NA=0.45 WD=4.0 Cover slip=0.17	•
	20× Apochromatic objectives, NA=0.75 WD=1.1 Cover slip=0.17	•
	100× apochromatic objective lens, NA=1.45 WD=0.13 Cover glass=0.17 (Oil)	•
Nosepiece	Motorized sextuple nosepiece (with expansion slot), M25×0.75	•
Stage	Motorized control (conventional type): moving range 130 mm x 100 mm (stage size 325 mm x 144 mm), Maximum speed: 50mm/s; resolution: 0.1μm, repeat accuracy: ±1μm (common type 2.5μm), absolute accuracy: ±5μmlt, can be equipped with three special sample holder adapters such as multi-well plate, 35mm culture dish and slide plate	•

Condenser	6-hole electric control: NA0.55, WD26; phase contrast (10/20, 40, 60(optional)), DIC (10X, 20X/40X), Empty hole is optional	●
Focusing system	Coaxial coarse and fine focusing mechanism, stroke: 7mm up and 2mm down; coarse adjustment 2mm/rotation, fine adjustment 0.002mm/rotation; manual and electric control, minimum step 0.02um when electric control	●
Illumination System	Transmitted Kohler illumination, 10W LED	●
	Epi-illumination: 100W mercury lamp illumination; field of view/aperture diaphragm; 3-hole color filter insert (with ND6 and ND25 filters) 6-hole electric fluorescent turntable (standard for B, G, U); electric fluorescent shutter	●
Body port	Split ratio: Left: eyepiece = 100:0; right: eyepiece = 80: 20	●
Intermediate magnification	Manual 1X, 1.5X switching	●
DIC Plate	10X, 20X, 40X plug-in plate; can be placed in the converter slot	○
Power control box	Can display objective magnification, fluorescence band, etc.	●
Power cable	1. Microscope shock-proof table: air cushion type confocal special $\geq 1200\text{mm} \times 800\text{mm}$ shock-proof table, the panel adopts high permeability stainless steel plate. 2. Computer workstation: a set of HP workstations or similar performance workstations. (1) HP Z840/CT Workstation/English OS Windows 7 64bit Professional Edition (2) CPU: Intel Xeon E5-26434C 3.30 10MB 1600 x 1 or similar performance (3) RAM: 32GB DDR -1600 ECC or similar performance (4) HDD: 1TB 7200 RPM SATA 1ST HDD or similar performance (5) 16X SuperMulti DVDRW SATA 1st ODD or similar performance (6) Display: 2PCS $\geq 20$ inch LED backlit widescreen IPS LCD displays.	●

Note: ●Standard Outfit, ○Optional

### Sample Images

