

SOM-4000 Operating Microscope





SOM-4000



Operating Microscope



The SOM-4000 operation microscope is a double binocular microscope. The main microscope has zoom magnification system, adapt to different operation by changing the object lens. The assistant microscope has five-step magnifications, it can be locked at 90°to the left or the right of the main scope. Both of the two microscope has the visual angle of eyepiece which can be adjusted from 0° to 180°. The illumination system adopts double lights source meets customers' demand for personalized.

The system apply 6° and $+2^{\circ}$, -2° , $\pm 2^{\circ}$ coaxial illumination. According to the characters of ophthalmic operations, the illumination system is equipped with retina protecting device and a group of filters in the form of a rotating disk.

The instrument adopts embedded control system realizes intelligent control, Its adjusting functions include magnifying, focusing, horizontally moving, video, lights on\off and so on. All these functions can be controlled by the wireless footswitch or by the 6.5 inch LCD screen. By the medical CCD and the LCD, the operation process can be visualization, and the video data can be educed by the two USB sockets .

This instrument must be used in the environment where surrounding temperature varies from $+5^{\circ}$ C to $+40^{\circ}$ C, relative humidity varies from 30% to 75% and atmospheric pressure varies from 700hPa to 1060hPa.

This instrument is available and flexible for hard difficulty operations, such as ophthalmic operation, E.N.T. and etc.







Technical Features

Main microscope (Standard Object lens: F200)	
Total magnification(main)	4×~24.6× mm
Diameter of visual field	Ø9~Ø56 mm
Bidiffecter of visual field	<i>ps pso</i> mm
Assistant microscope	
Total magnification	4×, 6.3×, 10×, 16×,25×
Object lens	
Focus	200mm
Working distance	205mm
F =	250mm/300mm/350mm/400mm object lens are optional
Eyepiece	
Magnification of eyepiece	12.5×/21B
The adjustable range of diopter	±6D
The height of eyepiece cover	18mm
Binocular tube	
Visual angle of main scope	0°~180°
Visual angle of assistant scope	0°~180°
The adjustable range of pupil distance	52mm ~ 76mm
Illumination	
Light source	Medical halogen lamp and Medical Xenon lamp
Illumination mode	6° and +2°, -2°, ±2° coaxial illumination
Illumination maximum intensity	Halogen lamp $\geq 50,000$ Lx; $180,000$ Lx $\geq Xenon lamp \geq 100,000$ Lx
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Filter	
Five modes	Five modes: GG435, GG475, Red-free filter , black spot filter and no filter
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Slit chosen	
Five modes	0.2mm, 2mm, 3mm, 4mm, none
The parameter of position adjustment	
Maximum stretch radius of microscope arm	1320mm
Vertical movement range	880mm~1420mm (from floor to the front surface of objective)
Fine focusing distance	54mm
Fine focusing distance	≤2mm/s
Moving range of coordinate device	54mm×54mm
Moving speed of coordinate device	≤2mm/s
1.15 villy speed of coordinate device	
Electric parameter	
Input voltage	100V-240V/50-60Hz
Input power	550VA
Fuse tube	T5A L250V (51S-050H) // T10A L125V (51S-0100L)
Electrical safety standard	Executive standard IEC601-1 Type B, Kind I
Lamps	15V/150W cold-reflex halogen lamp and 12.5V/175W xenon lamp

