IMMERSIVE AND VISIBLE

Naked Eye 3D Microscope

- 3D image without eyepieces, easy to operate
- 57mm depth of field under 20X magnification
- Teaching and Dentist-patient communication schemes with 3D image







Technical parameters of Naked Eye 3D Microscope

Technical requirements

Optical system

Zoom magnifications(F250mm): 3.6X-23.3X

PD adjustable range:55mm~75mm

Diopter range: +_7D

Objective lens: WD180-460mm

Diameter of FOV: 9.8mm-62.5mm

Zoom factor: 0.45x~2.91x

Illumination system

Light source: Built-in high-reliability medical LED light source, with continuously adjustable luminance.

Minimum illuminance of object surface (f=250mm): ≥50,000lx

Spot diameter: ≥60mm

Color temperature: 5500K, closer to natural light and colors

Color rendering index (Ra): ≥85

Support system

Maximum arm spread: 1390mm; turning radius of cross arm: 460mm, 360° rotation; spring arm: 700mm, ±160° rotation, vertical displacement ±315mm;

Base size: 516mm×516mm, which reduces consulting room space occupancy

The support is protected with antibacterial nano silver ion coating to ensure no cross contamination

Built-in UHD camera system

Video definition: 3840×2160 (4K, switchable to 2.7K, 1440P, 1080P, 960P and 720P)

Video frame rate: 25fps@4K

Storage medium: External USB flash disk

Playback function: Timely play back videos and picture files through camera module

3D image module

Video definition: 4K, 1080P, 960P, 720P

Frame rate: 60fps@1080P (recommended), available for 30fps@4K output

Output channel: Two-way

Output interface: Two-way micro HDMI

Image sensor: Sony high-end image sensor (x2)

Glasses-free 3D surgical intelligent display system

Image performance:

01. Display screen size: 28in

02. Effective image size: 648.9mm (H)*369.3mm (V)

03. Screen definition: 3840*2160

04. Pixel pitch: 0.16*0.16mm

05. Contrast ratio: 1000:1 (typical)

06. Luminance: 3000cd/m2 (typical)

07. Aspect ratio: 16:9

08. Color depth: 10bit 09. Color: Appox 1.073 billion colors

10. Color gamut: 72%NTSC

11. Backlight: LED

12. Visual angle: 85°/85°/80°/80° (typical)

Glasses-free 3D parameters:

01. Input voltage: 220V 50Hz

02. Maximum power: ≤86W 03. Standby power: ≤1W

04. Operating temperature: 0-35 $^{\circ}\mathrm{C}$

05. Operating humidity: 20%-90%, no condensation

06. Storage temperature) -20- 60 °C

07. Storage humidity: 10%-90%, no condensation

13. HDMI input: HDMI 2.0×2/available for 4K@60Hz

Electrical parameters:

01. View distance: 60cm-130cm 02. Optimal view angle: 50° (horizontal)

03. Human eye tracking: Available/Available for mask and surgical cap

04. Grating technique: Lenticular grating 05. Mask identification: Available (blue, white and green)