



zumax

OMS3500 Surgical Microscope

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We Create Value
For Our Customers
With Our Service



Built-in cable design with 3 /6 electromagnetic brakes system for smooth operation.

Optional built-in 4K 3D video module to capture/record surgical images with a single click on the photo/video button.

Compact main lens up to 200mm-600mm focusable stroke.

The OMS3500 features a sturdy metal stand with a compact base design that takes up very little space in the operating room and provides excellent mobility.

Top Optical Imaging And Easy Handling

The OMS3300/OMS3500 is ZUMAX's first surgical microscope for general surgery applications.

The ZUMAX has the world's leading optical technology, combined with years of ergonomic research to provide a high-definition and bright surgical field of view, and the flexibility and ease of operation to provide you with a stable, reliable, durable and cost-effective operating microscope.



MAGNIFICATION & ILLUMINATION

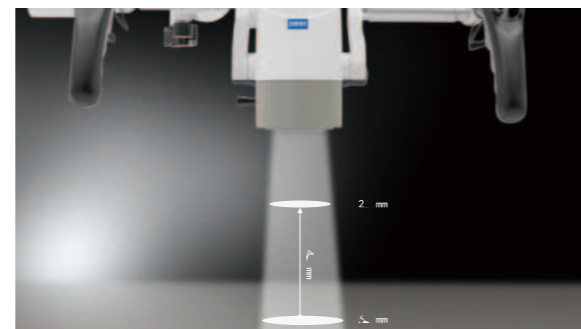
Excellent Optical Quality

High quality optical glass, multi-layer optical coating and apochromatic design, with excellent optical performance, large depth of field, high definition and high resolution.



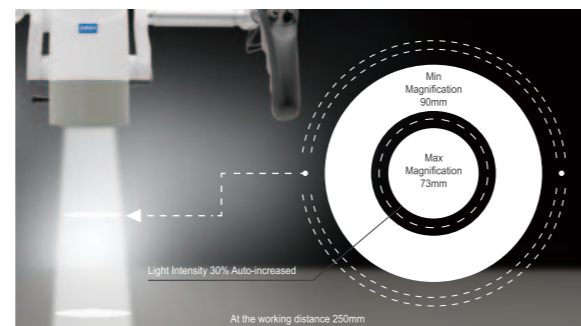
VarioDist Objective Lens

The focal point separation of the pair lines can be adjusted in the range of 200mm to 600mm, allowing for easy focusing during operation.



BriPlus Illumination System

30% auto-increased intensity at maximum magnification to get more light for high magnification. When the magnification at the highest, the light spot is the smallest and when the magnification is at the lowest, the light spot is the largest.



MagPlus1.5™ 180deg inclinable binocular with PD(optional)



	0-180 deg inclinable binocular tube with PD	MagPlus1.5 180 deg inclinable binocular tube with PD
Magnification Adjustment	0.4x ~ 2.4x	0.4x ~ 2.4x
Magnification	1.8x ~ 20x	2.7x ~ 29x
Diameter of Field-of-view(mm)	124 - 11.6mm	82.5 - 7.7mm

Anti Reflect Module



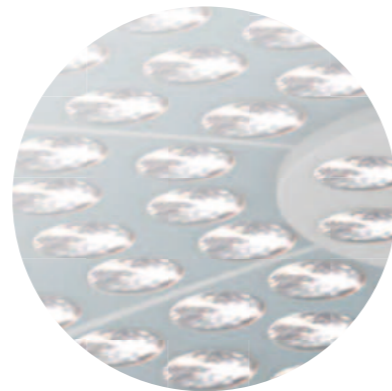


LIGHTING SYSTEM

INTEGRATED FILTERS

TruLED Illumination

Illumination:>100000 lux, color rendering reproducibility (CRI:92), LEDs present many advantages over Halogen or Xenon sources including lower energy consumption, longer lifetime, improved robustness and durability and reliability.



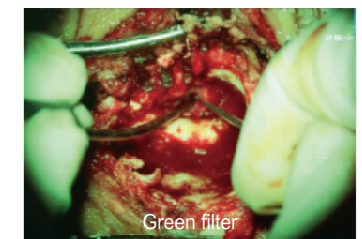
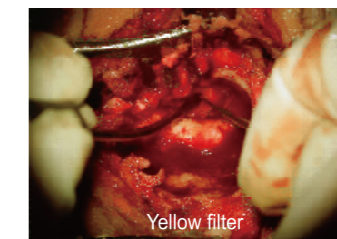
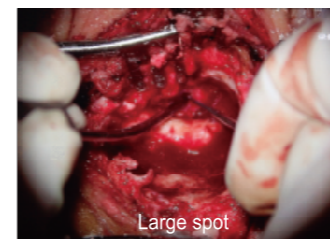
TruLED Illumination

In addition to the two color filter of yellow and green, it is equipped with four pattern lighting range selector to reduce the burden to the eyes of the user.
 Yellow filter: Prevents premature curing of composite.
 Green filter: Improves detail visibility by enhancing the (Red free) contrast of tissue with a strong blood supply.



BiLED Illumination

Backup light source for accidentally shutting down of the main LED Illumination.



Secondary Lighting (optional)

The illuminance is higher than 200,000 Lux at 250mm working distance.



Integrated Laser Filters (optional)

Argon:488~514nm
 Diode:660nm
 Diode:800~830nm
 Diode 980nm
 & NdYag 1064nm

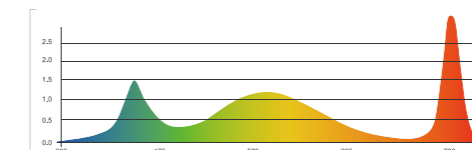


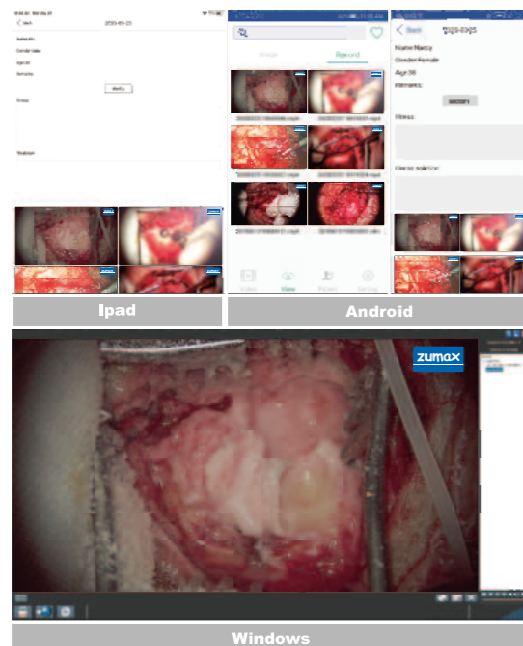
IMAGE OUTPUT & RECORDING

Integrated 4K Camera with external flash disk (optional)

Zumax introduces outstanding UHD resolution and superior color performance, fidelity and economical. With outstanding performance, the camera outputs a whopping 3840/2160 resolution from HDMI interface with increased resolution up to 1800 TV lines, and has auto focus function.

iMovCloud™ Image Management (optional)

iMovCloud system has Single version, Intranet version and *Cloud version. iMovCloud Single version is an advanced and fully integrated surgical image management system which based on Windows platform. It is an ideal choice for worldwide dental clinics. Together with Zumax microscope to collect videos and images, integrate four major management functions of clinics, doctors, patients and medical records to realize the sorting, analysis and documentation "Intranet version" service, which realize local network viewing, maintenance, management easily, is coming soon "Cloud version" service, which realize cloud viewing, cloud maintenance, cloud management, remote joint inspection and other functions.



Multiple shooting methods by wireless control set or photo & video Button on both handles.

Multiple shooting methods by wireless control set or photo & video Button on both handles.



4K 3D (optional)

Twin 4K Cameras.

Teaching or presenting in 3D mode which helps teachers teach and students learn through real time depth perception.

Help patients to understand procedures clearly and better with 3D videos.

Recorded 3D video in a SD card, can be viewed on 3D TV, 3D projectors and VR/AR viewers.

Outputting real 3D streaming while the dentists are operating on microscope live.

OPERATION SYSTEM

■ Multifunctional Handle, Foot Pedal



Multi-functional Handles

Ergonomic handles can control zoom magnification, fine focus, brightness as well as photo & video recording electronically by touching the buttons.

Motorized Zoom

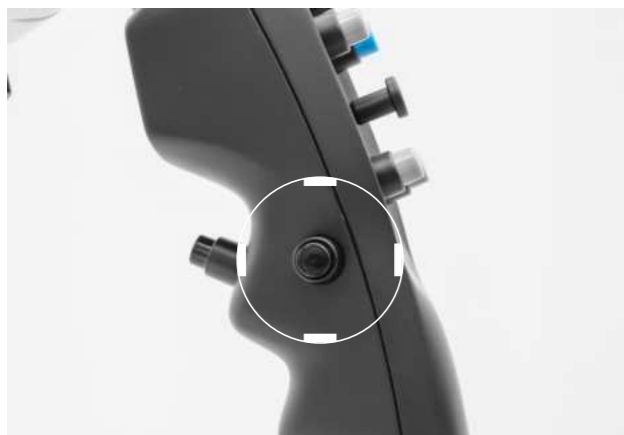
Convenient zoom adjustment continuously motorized in pushing-and-pulling the joystick.

12-Function Wire/Wireless Foot Pedal (Optional)

Which realized the doctor's blind operation of illumination switch, brightness adjustment, zoom magnification, fine focusing and taking still photos and videos without removing the visual field. Free hands when hands on.



■ FreeMov® Electromagnetic System



3/6 Magnetic Brakes

The magnetic brakes provide an easy and precise positioning of the microscope. Just press the buttons (a or b) to release handbrakes and bring the microscope in the location required.

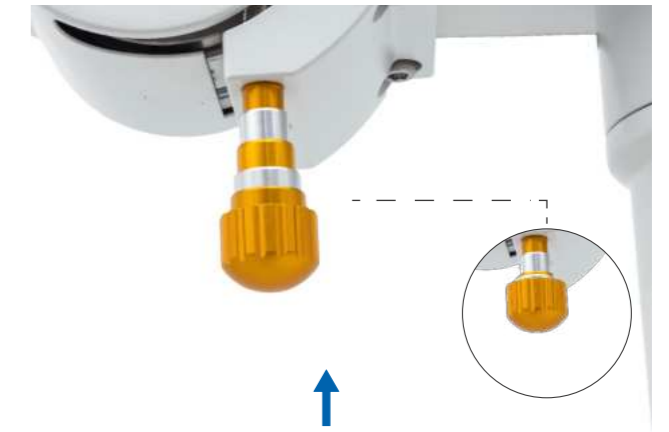


■ Visualization Of Operations



SmartMon LCD Display

WD: Working Distance
ZM: Zoom Factor
MF: Magnification
MS: Measurement Factor
BR: Brightness



Working Distance Limit Bolt

The second arm with working distance limit bolt and memorable working range adjustment for quick adjustment of working distance to position for surgery in different departments.

■ Stereo Assistant Scope (Optional)

Connect the beam splitter and stereo observation tube and 180 deg inclinable binocular on OMS3200 microscope, assistant can have stereo image from scopes easily when helping Chief surgeon.



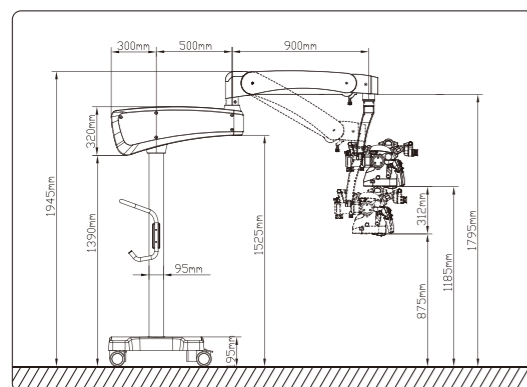
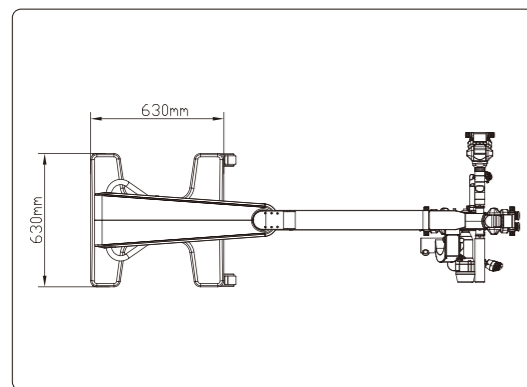
■ Face To Face Bridge For Four-Hand Surgery (Optional)

The bridge provides the surgeon and the assistant with a face-to-face view to improve the efficiency of the operation, while the bridge is equipped with a beam splitter for additional accessories such as a stereo observation tube or an external camera.



With the rotation ring, the eyepieces keeps horizontal when the main lens is doing pendulum movements.

TECHNICAL CONFIGURATION



Parameters

Optic parameters:	OMS3300	OMS3500
Optic parameters:		
ZOOM Steplessly variable magnification factor	0.4 x ~ 2.4 x	
Working distance	Variable focal length objective lens have a working distance variation range of 200 mm ~ 600 mm · Tolerance≤20%	
Binocular tubes (optional)	90 deg binocular tubes · 45°deg binocular tubes · 190°inclinal binocular tubes · 190°inclinal binocular tubes (F170/F250) Choose at least one of these	
Range of pupil distance adjustment for binoculars	55 mm ~ 75 mm	
Eyepiece	Magnification: 12.5x, Minimum adjustment range for visual acuity (High eyesight (m-1)): +7 ~ -7	
Illumination of the surface	Maximum illumination not less than 100000 lx when objective lens working distance of 200 mm	
Illumination of the surface (with optional secondary illumination module)	Adjust the secondary illumination module and the LED main illumination source to a maximum of not less than 150,000 lx at a working distance of 200 mm.	
Diameter of light spot	The illuminated spot diameter is Φ85 mm at a magnification factor of 0.4 x for a VarioDist objective working distance of 200 mm, with a tolerance of ±15%; the illuminated spot diameter is Φ215 mm at a magnification factor of 0.4 x for a VarioDist objective working distance of 600 mm, with a tolerance of ±15%.	
Maximum weight limit	The maximum weight limit for accessories or attachments is 14Kg, the maximum weight does not include the weight of the lens and balance arm.	
Diaphragms	Large diaphragm · Middle diaphragm · Small diaphragm	
Filters	Yellow filter, Green filter	
Polarizer	Optional	
Laser protection filters	488-514 nm · 660 nm · 800-830 nm · 980 nm & 1064 nm for optional	
Controls	FreeMov 3 [®] -Electromagnetic brakes	FreeMov 6 [®] -Electromagnetic brakes
	Multi-functional handles, below buttons to lock/unlock 3 brakes, Side buttons to lock/unlock 6 brakes,joysticks for motorized zoom +/-, Motorized focus +/-, 4 buttons for taking photo/video, lighting +/-	
	SmartMon LCD display, displaying current working distance, zoom factor, magnification, measurement factor, LED brightness	
Optional accessories	Beam splitter, binocular extender, assistant scope, srotation ring, beam splitter with binocular extender, iris diaphragm, camera adapter, camcorder adapter, mobile phone adapter, built-in camera system	
Stand system (including: first arm · second arm)		
Stand	Floor stand,with first arm and second arm	
Second arm	Length not less than 850 mm, rotation angle not less than 300 °, movement up and down not less than ±300 mm	
First arm	Length not less than 500 mm, rotation angle: 360 °	
Electrical parameters		
Voltage rating	220 VAC 50 Hz	
Input power	≤150 VA	≤200 VA
fuse	T2.5 AL 250 V	T3.15 AL 250 V
Illumination system	LED illumination source	
Noise	≤ 65 dB (A)	
Operating mode	Continuous running	
Medical image capture and storage software (optional)	Release version V3	
Medical imaging software (optional)	Release version V1	
Function control software	Release version V1	
Cyber Security (optional)		
Operating environment	Processor: ARM Memory: memory frequency not less than 500MHz, RAM capacity: not less than 1GB; memory;ROM capacity: not less than 32MB Peripheral devices: None Software environment: system software is embedded LINUX system, support software is arm-linux-gcc, no security software including. Network conditions: network architecture (BS), network type (LAN), bandwidth (100/1000M bit/s adaptive)	