



ORBEYE Video Microscope

Discover the Next Evolution of Surgical Visualization

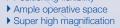


Game Changing 4K 3D Imaging Technology



▶ Freedom from ocular lens ▶ Positioning flexibility



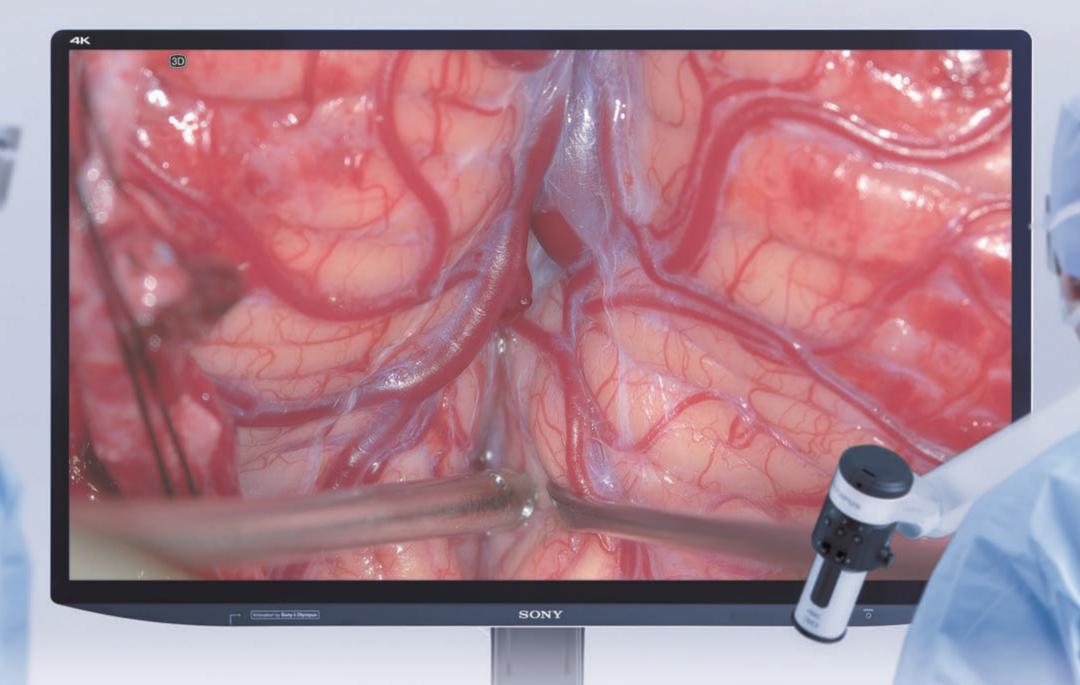




Team Surgery

▶ Education

▶ Easy setup Applicable for



Big Screen 4K 3D Visualization

- End to End 4K system: Four times the resolution of HD imaging helps to see anatomical detail.
- •3D: Natural depth of field visualization while remaining in natural ergonomic operating position.
- Larger Color Gamut: Helps in delineation of tissue boundaries, visualization of blood vessels and lesions.

No Image Latency

• Fast image processing achieves real-time visualization. ORBEYE's powerful processing system produces zero delay between surgeon's movements and 3D image on monitor allowing for precise instrument placement and visualization.

4K 3D Imaging Chain

• All of the components work together seamlessly to generate improved visibility. Each component, from the light to the monitor, is built specifically to produce an end to end 4K UHD/full 4K visualization.











Innovation by Sony & Olympus

Ergonomic Benefits of Heads-Up Surgery



Freedom from Ocular Lens

• Surgeon is untethered from traditional ocular lens of surgical microscopes allowing a more ergonomic, heads-up posture and positioning which may relieve stress on surgeon's head and neck intraoperatively.

Optical & Digital Zoom

- Thanks to digital zoom function, magnification can be quickly changed from optical zoom to twice as magnified range.
- At high magnification, ORBEYE provides the capability to recognize the details of brain parenchimal surface and direction of the nerve fibers.
- Instant change between high and low magnification is useful for anastomosis of vessels and visualization of the anatomy.

Greater Positioning Flexibility for Various Approaches

- •ORBEYE's small and flexible head enables the surgeon to observe the surgical field from various angles. Facilitates multiple surgical positions and approach techniques without surgeon posture compromise or discomfort when compared with conventional microscopes.
- ORBEYE's streamlined and compact optical head design provides ample surgical site space for unobstructed hand and instrument movements intraoperatively.
 Surgeons have unobstructed view of surgical site with magnified anatomical 3D images on the monitor.

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Immersive Experience of Team Surgery



Operative Efficiency

- •Surgeons and assistants can work side by side in the same orientation
- Facilitates multiple operator workflows for various procedures and approaches.
- Immersive experience for all O.R. personnel provides magnified surgical site 3D images for entire surgical staff.
- Staff inclusion in magnified 3D visualization may allow for greater surgical step anticipation and preparedness.

Education Advantage

- ORBEYE imaging system is a valuable tool for surgeon training and education. Every participant, both residents and senior surgeons, can see the same high-quality 4K 3D immersive images of the surgical field at the same time
- All surgical procedures can be saved using the 4K 3D recorder, allowing residents to study the surgical procedure repeatedly if they want.
- Surgical procedures can be explained by senior or main surgeons on the large monitor.

O.R. Environmental Solutions





Plug and Play

•ORBEYE eliminates the need for pre-procedure balancing or center of gravity adjustment. Traditional surgical microscopes require this step due to changes of the machine's center of gravity when moving their heavier ocular eyepieces.

Easy Transportation

•Thanks to its compact and lightweight design, ORBEYE can be easily transported from O.R. to O.R..

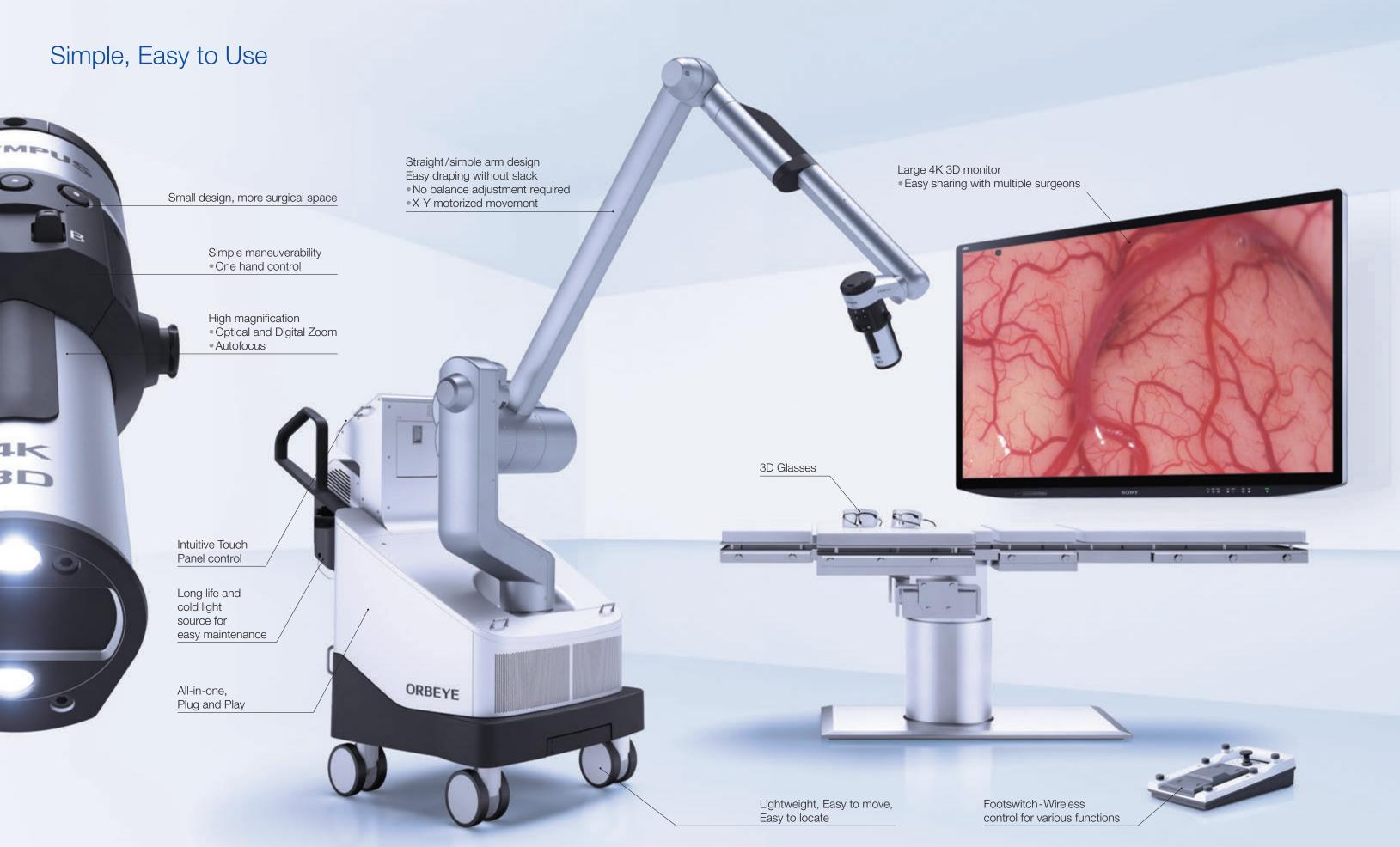
Easy Draping

• ORBEYE's compact optical head and arm design facilitate simple and quick one-person sterile draping. The optical head and arm designs of traditional surgical microscopes often require multiple people and considerable time for draping procedure.

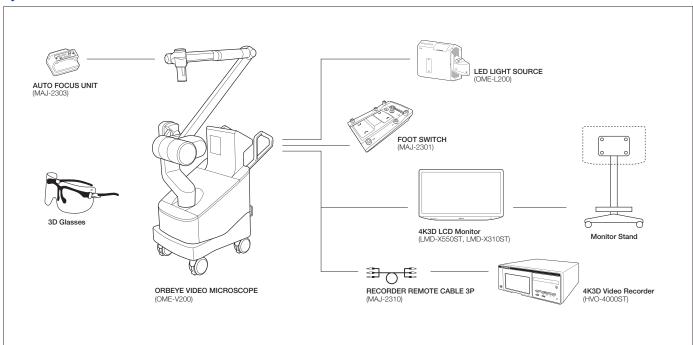
Applicable for Various Specialties

- Due to its versatile design, the ORBEYE can be a visualization tool for multiple surgical specialties and procedures.
- ORBEYE's small footprint helps for convenient placement in multiple O.R. configurations.
- Multiple specialty usage may increase cost-effectiveness, increase utilization and return on investment for administration.

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System Chart



Specification

Power Supply	Voltage	AC 100 - 120 V, within ±10%
	Frequency	50/60 Hz, within ±1 Hz
	Input current	6.5 A
Size	Dimension	517 (Base width) ×623.5 (Base length) ×1,882 mm (Total height)
	Weight	216 kg
Focus	Method	Motorized focal length variation
	Focal length	220-550 mm
	Auto focus	Yes (MAJ-2303 is required)
Zoom	Drive system	Motorized zoom magnification change
	Magnification ratio	1:12 (Optical 1: 6, Digital 1: 1.5 or 1: 2)
Observation	Image sensor	4K
	Output formats	4K (3D/2D), HD (3D/2D)
	Signal output (transmission method)	3G-SDI, HD-SDI





