

4K 



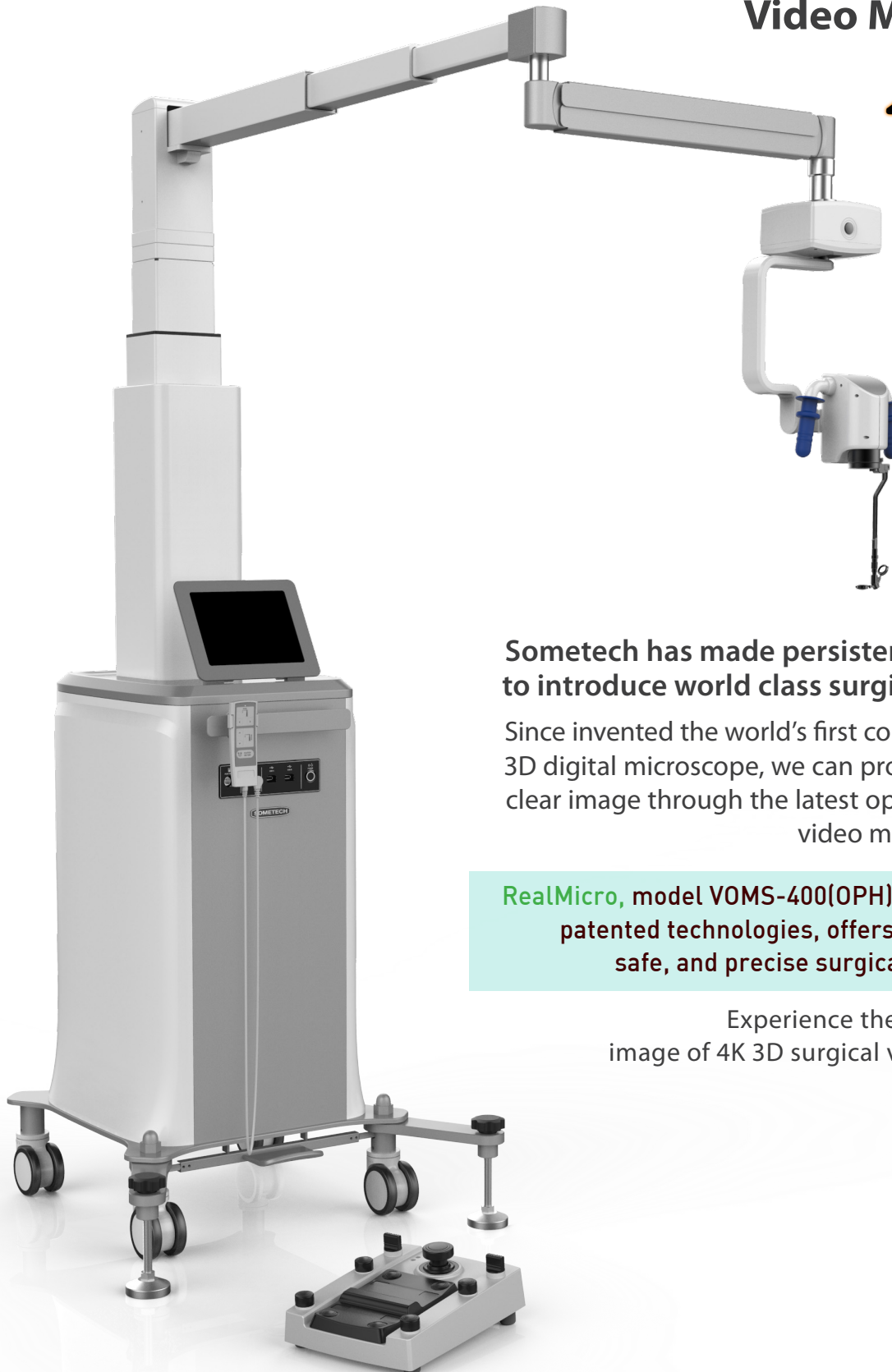
Digital RealMicro

Ophthalmic Surgical Video Microscope
Model name VOMS-400(OPH)

Excellent 4 times higher resolution and perfect colors with original digital 4K 3D video microscope system

Creating New paradigm With surgical Video Microscope

4K 



Sometech has made persistent effort in R&D to introduce world class surgical equipment.

Since invented the world's first concept of a Full HD 3D digital microscope, we can produce remarkably clear image through the latest ophthalmic surgical video microscope system.

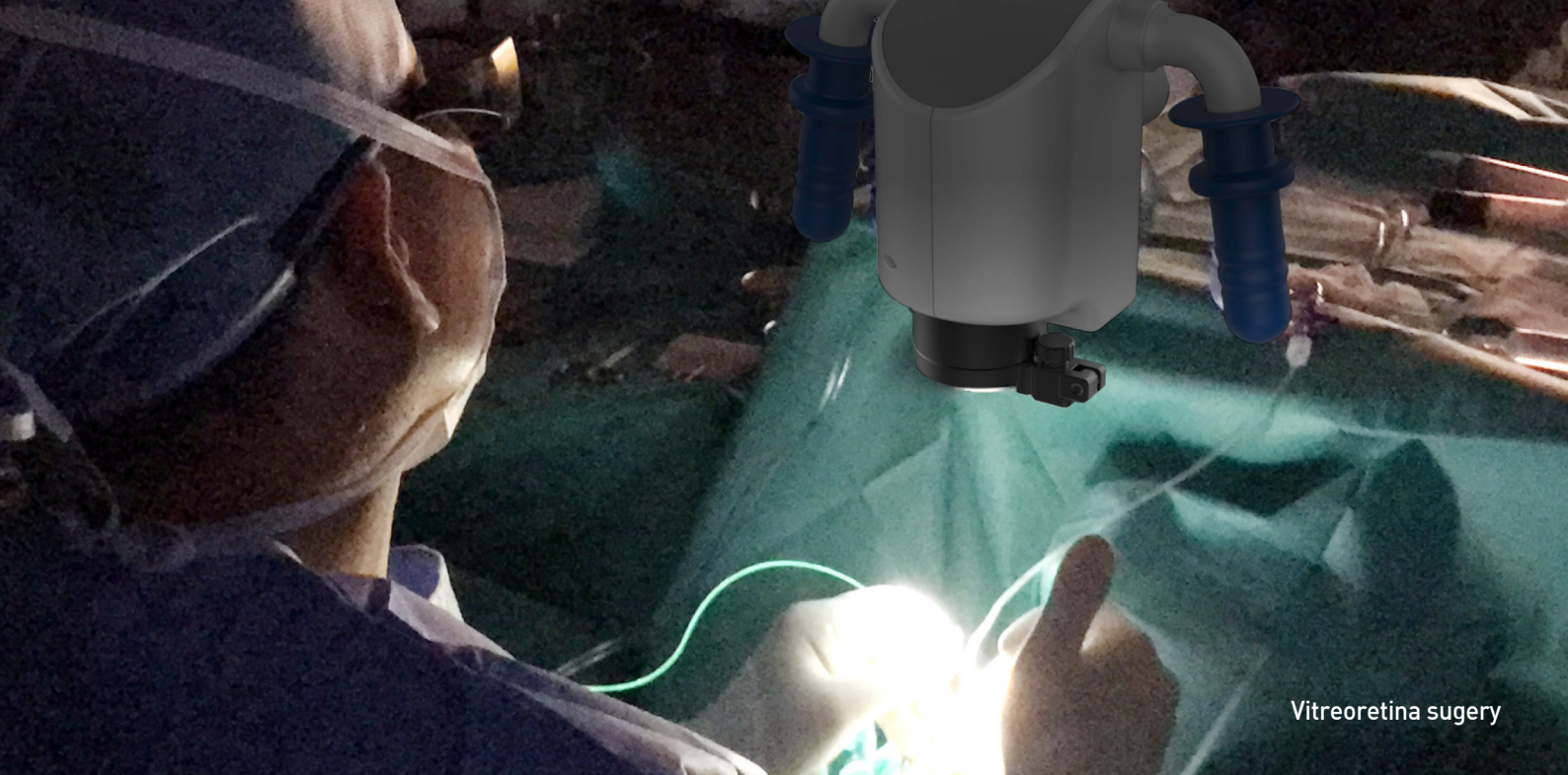
RealMicro, model VOMS-400(OPH) with its unique patented technologies, offers a comfortable, safe, and precise surgical environment.

Experience the real depth & fine image of 4K 3D surgical video microscope.



VOMS-400 is leading the trend of operation from the conventional binocular microscope to **4K 3D** surgical video microscope.





Vitreoretina sugery

RealMicro Digital



Revolution of Microscope

Innovative change of OP room

It contributes surgeons to concentrate on surgery due to effective connection with other surgical devices and also it optimizes to the effective workflow during surgery.

It is time to transform your OP room to innovative digitalized system.

True head up posture

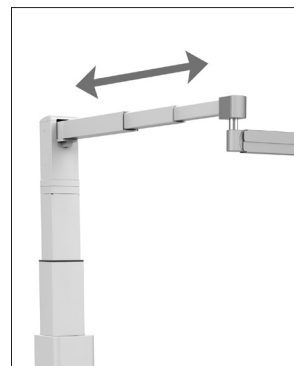
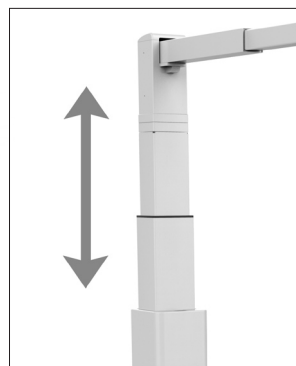
Surgeon's head up posture will be maintained throughout whole surgery by watching the 4K 3D monitor, providing freedom from inevitable neck pain, back pain, eye strain, and headache.

Easy Cooperation and education

Everyone in the OR cooperates easily and observe every detail of surgery as they watch same real time 3D image together with the surgeon. Captured 3D surgical images can be used for training and education.



VOMS-400 *Detail*



Structural features

- * Optimizing space of OR room
- * Motorized vertical, horizontal and tilting extension arm



Microscope Head

- * Multi lens (20/40 mm) for anterior & posterior OR
- * Motorizing movement controlled by foot pedal
- * Automatic 3D alignment
- * Integrated wide angle viewer (option)
- * Z axis



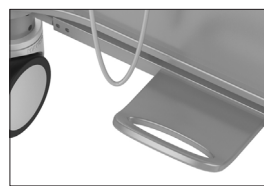
Control system

- * Comfortable touch panel & foot pedal
- * Wire or wire-less connection with foot pedal
- * Adjustable pedal function



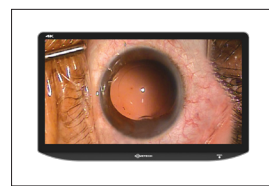
X,Y Axis movement

- * C-curve arm for the straight view of surgeon
- * Ergonomic head up structure
- * Decreasing of image tremble



Caster lock

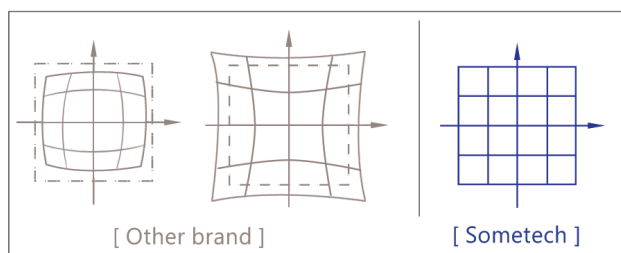
- * Pedal lock system of casters movement
- * Soft & smooth handing structure



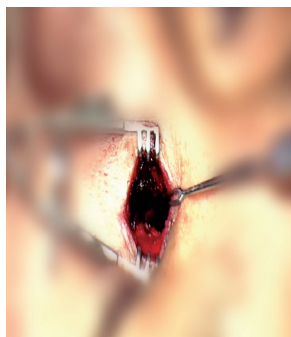
4K 3D Monitor (option)

- * 31" Surgical LCD monitor
- * Resolution (4096X2160) provides greater detail

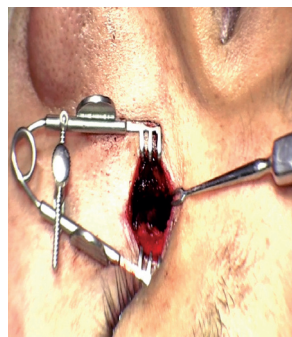
Advantages



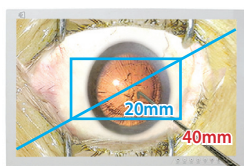
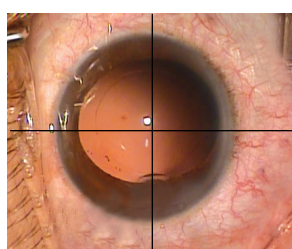
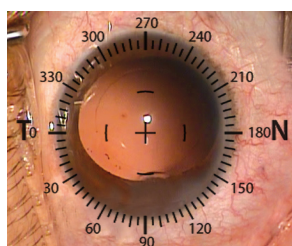
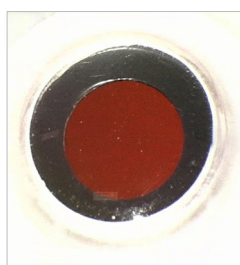
(* Actual image of oculoplastic surgery)



[Eyepiece type]



[Head up type]



Minimized distortion

Sometch`s patented lens can minimize the chromatic aberration. Surgeons are relieved from eye strain, dizziness, and headache caused by distortion.

Huge depth and wide field of view

Sometch`s patented image processing technology provides crystal clear images not only for the immediate but also the surrounding area.

Red reflex

Brilliant red reflex enables easier and safer cataract surgery.

Protractor on/off

Embedded protractor software helps surgeons position and align for toric IOL, ICRS, LRI and KP more accurately, ensuring optimal correction.

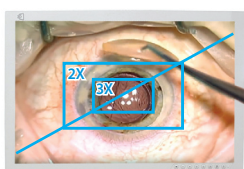
Cross line on/off

2X optical zooming by turret

Adjustable optical zooming up to two times by the simple twist of a turret

1.5X digital zooming by footswitch

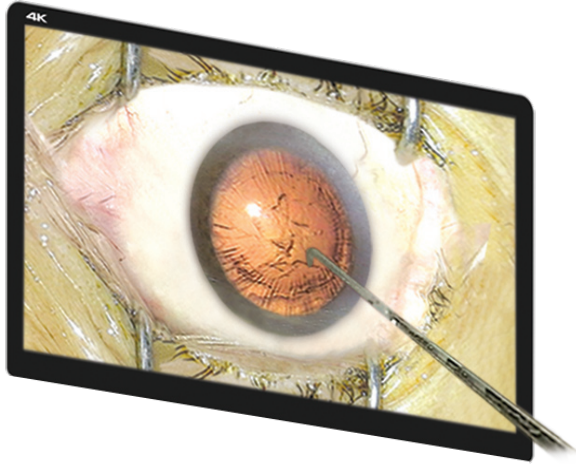
Digital zoom can be operated either by GUI on the main unit or foot switch for maximum convenience during surgery.



Anterior & posterior surgery

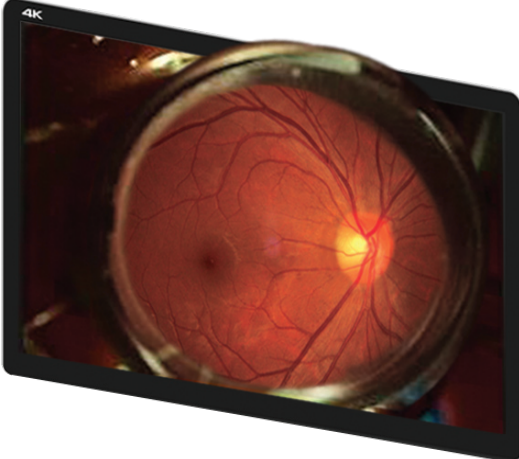
VOMS 400 can be used for various ophthalmic surgeries(Cataract / Retina / Glaucoma / Cornea / Lacrimal gland / Blepharoplasty). It is also useful for accurate operation, and 3D recording for surgeon trainees.

Cataract

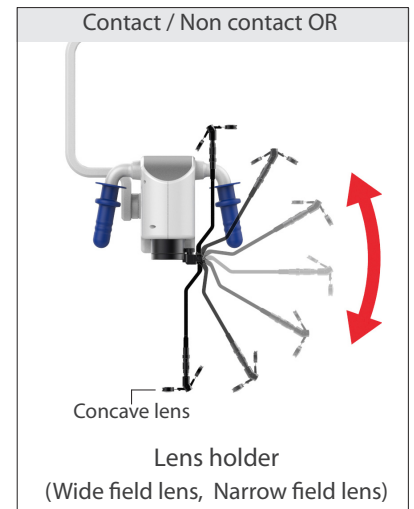


D.L : 40mm
(W.D : 200mm)

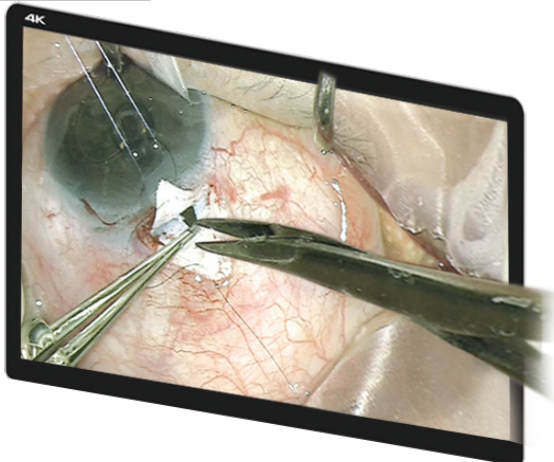
Retina



D.L : 20-40mm
(W.D : 200mm)

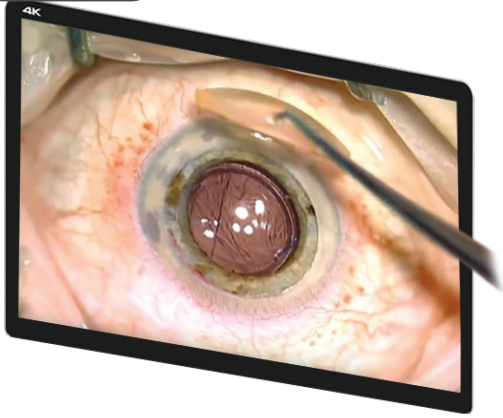


Glaucoma



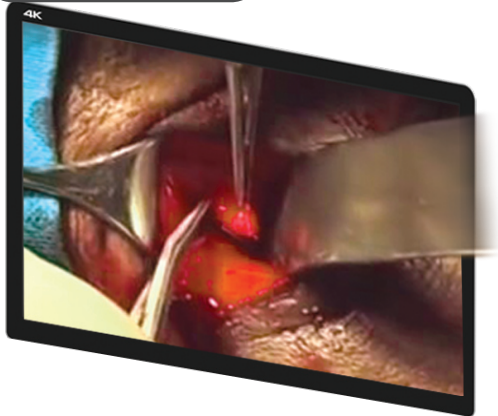
D.L : 40mm
(W.D : 200mm)

Cornea



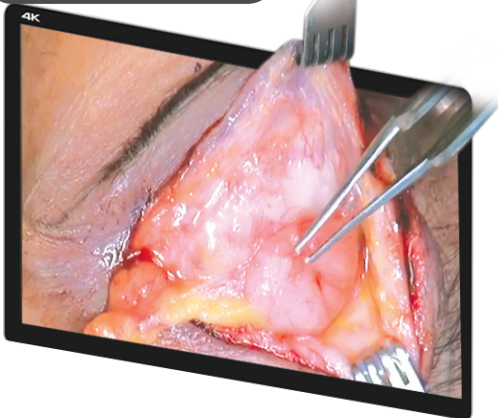
D.L : 40mm
(W.D : 200mm)

Lacrimal gland



D.L : 20-40mm
(W.D : 200mm)

Blepharoplasty

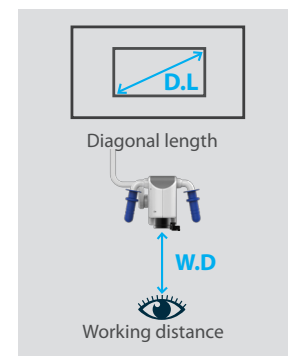


D.L : 20-40mm
(W.D : 200mm)

Lens specification

Distance and monitor size	Lens magnification based on D.L (Digonal length)	
Diagonal length	20-40mm(Motorized turret)	
Working Distance	W.D : 200mm	
31"Monitor	40x	20x
55"Monitor	70x	35x

* Magnification can vary by monitor size



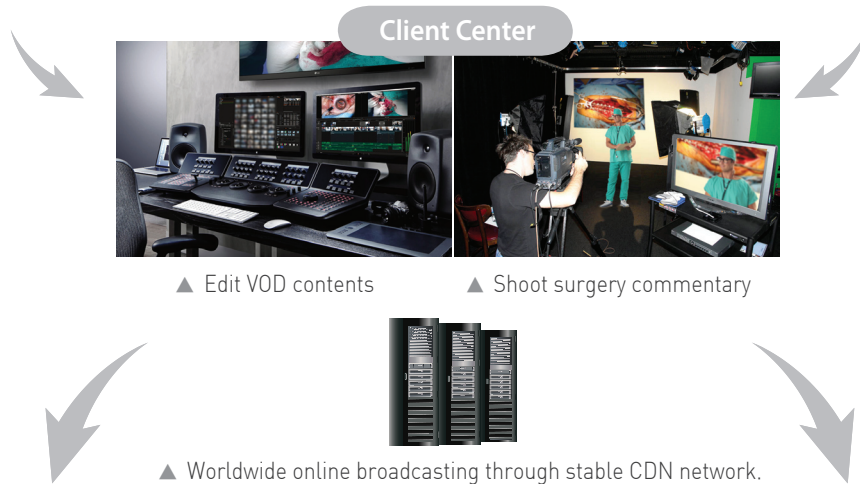
Educating surgeon trainees in 3D



▲ Capture the 3D surgical content using 4K 3D microscope.



▲ Capture the 3D surgical content using 4K 3D laparoscope.



Joint business between hospital and 3DSurgicalonline

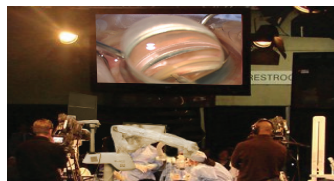
Developing AR/VR surgical simulator



◆ VOD contents

VOD service to watch and follow surgical procedures in various applications.

Setting up environment of VR/AR



◆ Education by Live surgery

- Online broadcasting platform allows streaming of real-time live surgery images to anywhere, anytime in the world.
- Live surgery can be also supported by Glasses - Free 3D Display

User group service

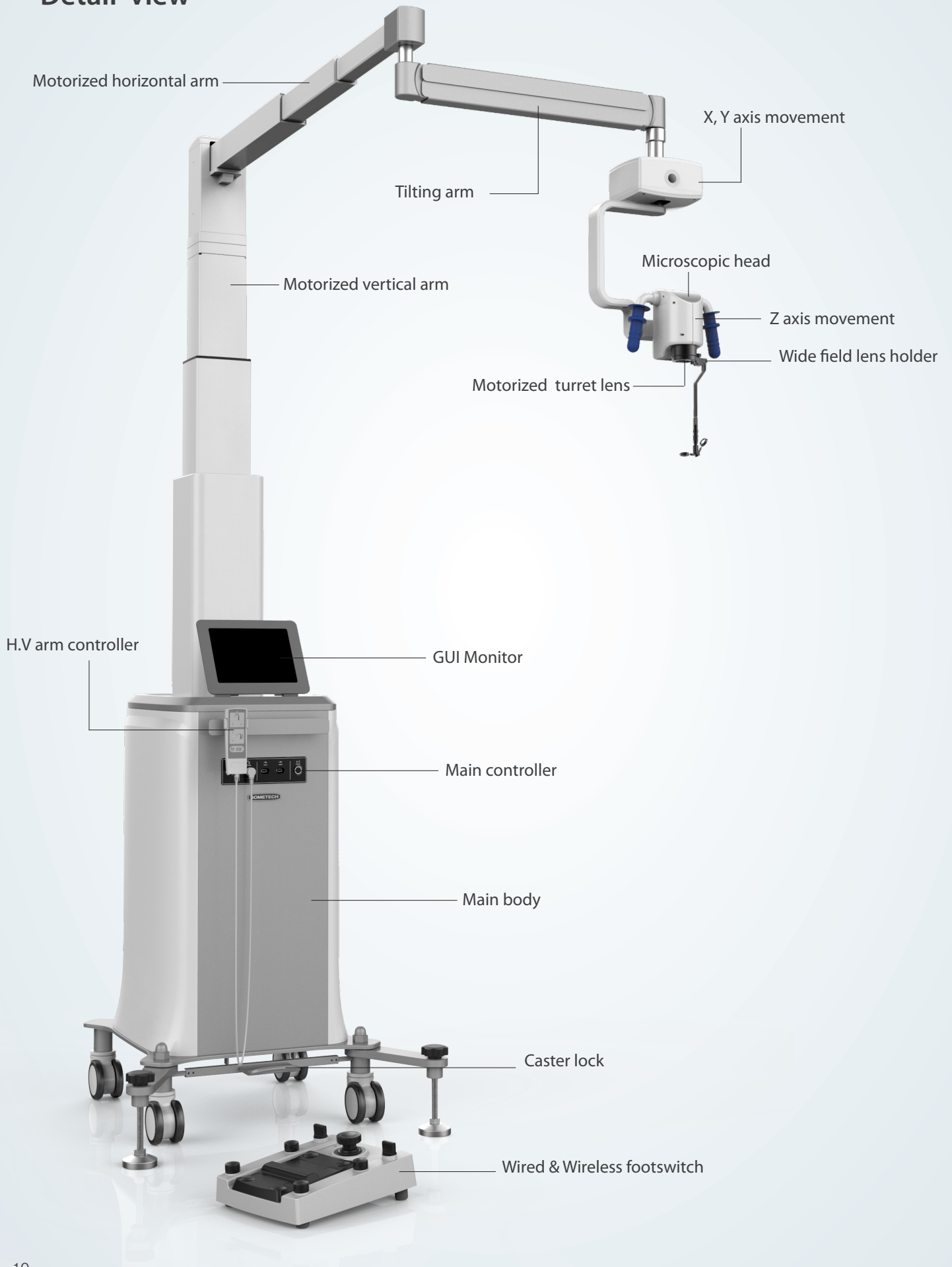
GROUP

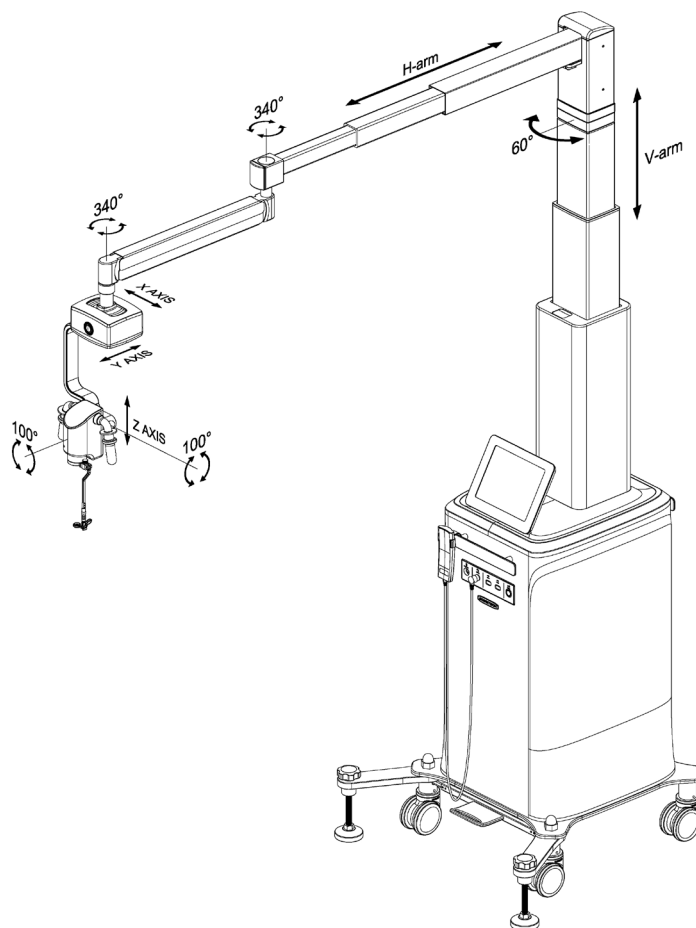
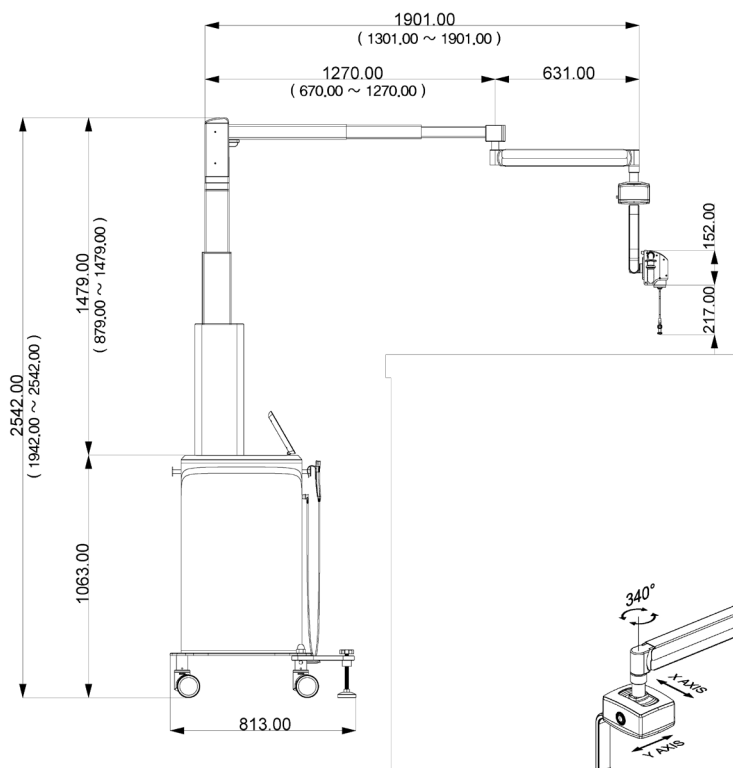


◆ Group

Hospitals, medical schools, surgical societies are supplied with an online platform to share information among colleagues, students / faculties, and members for mentoring surgeries, surgical case studies, and online seminars.

Detail view





▪ 4K3D RealMicro Digital VOMS-400

Dimension		824mm(W) x 1901mm(D) x 2542mm(H)
Weight		
Power		100-240VAC / 50-60Hz
Microscope head	Camera	4K(4096 x 2160)
	Lens	Motorized two turret lens (D.L 20mm ~ 40 mm)
	Light source	White LED with UV cut filter Intensity : Adjustable



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