



## **SM621 Ophthalmic Surgical Microscope**

See Everything in Details

# See Everything in Details

New Visual Experience



## Cutting-edge Optic Design

High quality optical lens with Apochromatic(APO) design and multi-layer optical coating brings high resolution and deep depth of field, enables high comfort during the surgery.

## Motorized ZOOM System

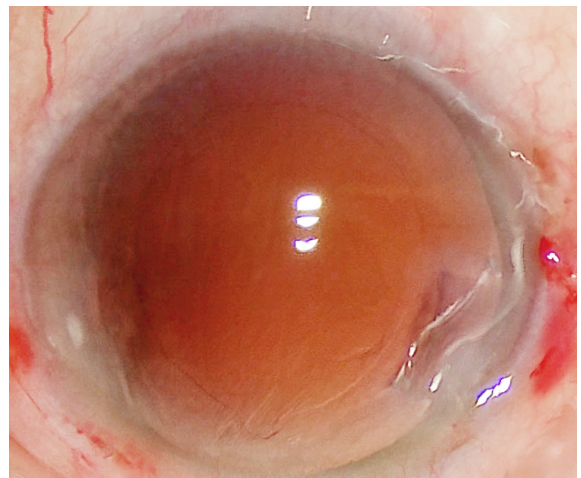
The SM621 adopts motorized ZOOM system to reduce discomfort when the field of view changes.

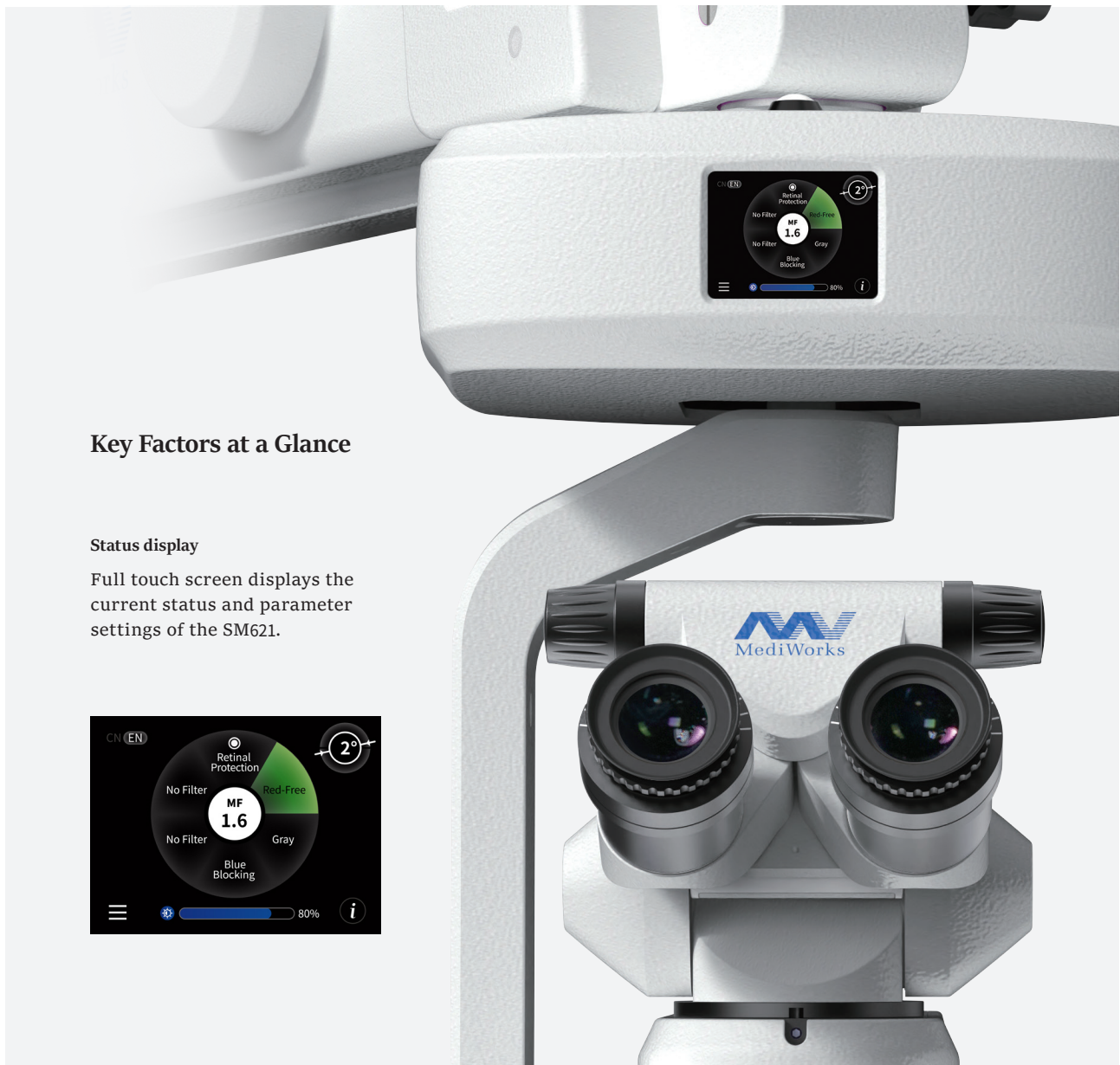
## Independent Assistant Microscope

SM621's assistant microscope adopts independent optical path which is independently from surgeon's microscope, it has 5 steps magnification changer.

## Bright and Stable Red Reflex

Red reflex by Stereo Coaxial Illumination (SCI) makes surgeons can see fine structure under weak light, easily perform continuous circular capsulorhexis (CCC) and aspirate residual lens cortex.

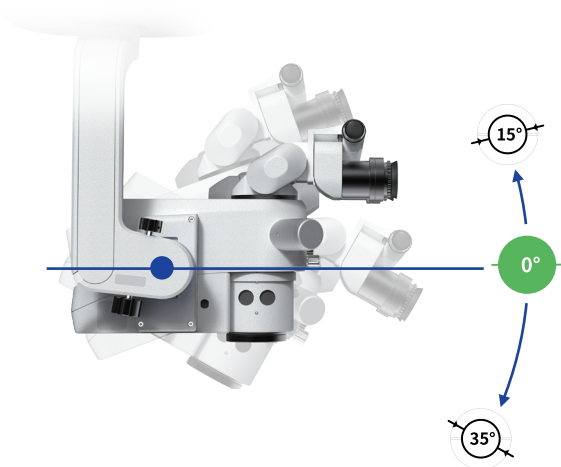
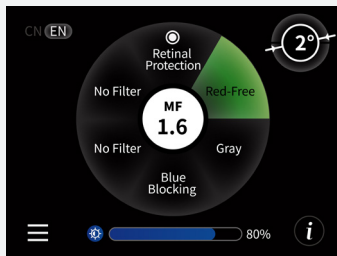




## Key Factors at a Glance

### Status display

Full touch screen displays the current status and parameter settings of the SM621.



### Adjustable balance system

The inclination of microscope head can be easily adjusted upwards and downwards while keeping balance. The inclination degree ranged from 15° upwards to 35° downwards will be shown on the “Status Display”.



## More Comprehensive More Details

### 360°

Premier and secondary arms can be rotated 360° which makes the SM621 can meet a wide variety of usage scenarios.

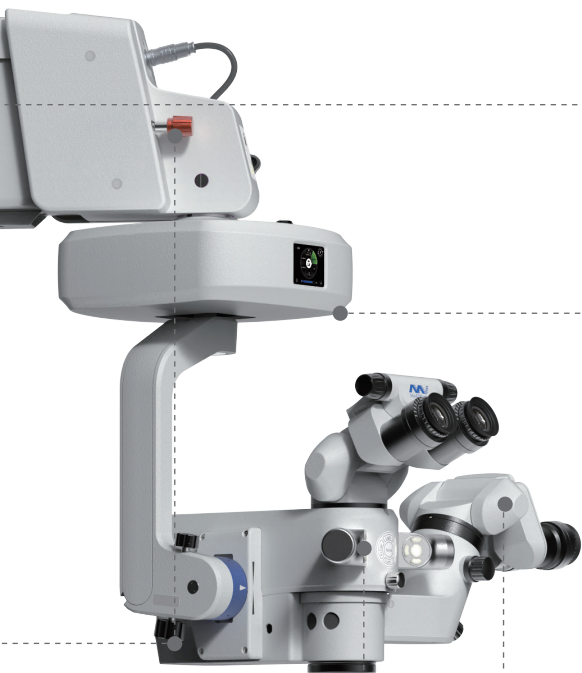
### Security Guarantee

Built-in backup power supply, easy bulb exchange and security lock on secondary arm ensure safe surgery.

### Electromagnetic Locking System

With electromagnetic locking system, the SM621 can be easily and accurately positioned at the same time keeps stable.





## • Auto Power-off Protection

The SM621 will automatically enter the powered-off state when the secondary arm is raised to a certain height. It will greatly facilitate surgeon's operation and extend the service life of lamp source.

## • X-Y-Z Axis Fine Adjustment

Accurate lateral and longitudinal X-Y-Z axis movements for precise positioning during surgeries.

## • 180°

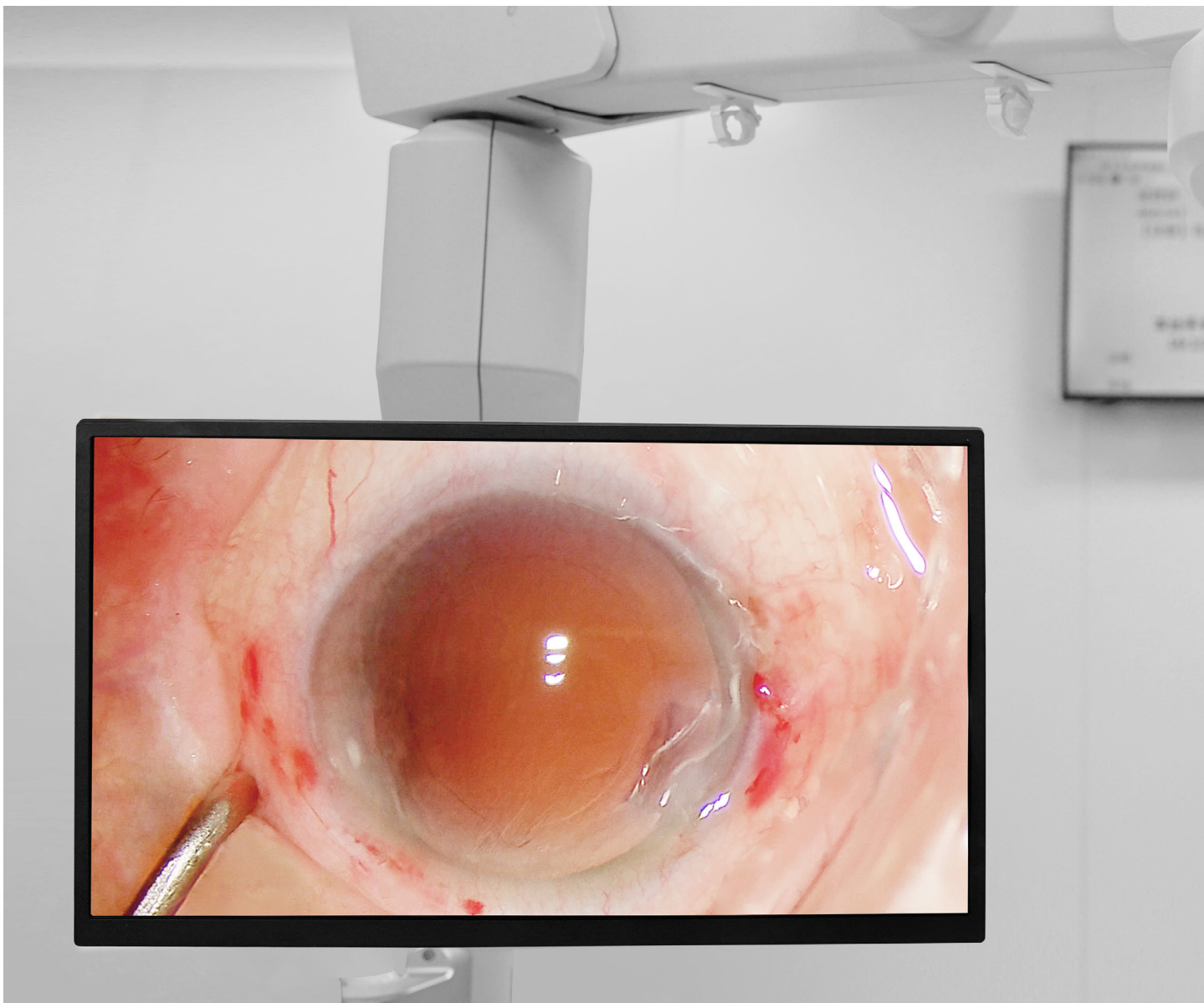
The binocular tubes of surgeon's microscope and assistant's microscope can be smoothly adjusted from 0° to 180°.



## • Wireless Foot Switch

The wireless foot switch can totally control 14 functions of SM621, surgeons can easily adjust the brightness and zoom magnification, switch the filters and backup bulb etc. Without any hand movement.

- |                       |                      |
|-----------------------|----------------------|
| ① Illumination on/off | ② Filter switch      |
| ③ Brightness +        | ④ Brightness -       |
| ⑤ XY axis reset       | ⑥ Backup bulb switch |

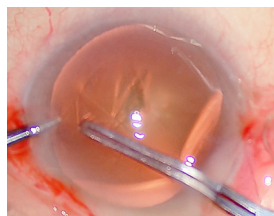


## **4K High Resolution Video**

Optional 4K digital module with low noise, high sensitivity and good image quality. It can be used for surgery teaching, academic research, patient case sharing which helps bring more harmonious communication between doctors and patients.

## **Enhanced Depth of Field**

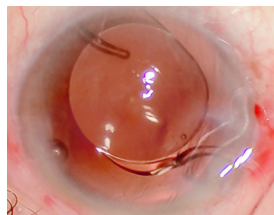
Adjustable aperture can meet different needs of brightness and depth of field.



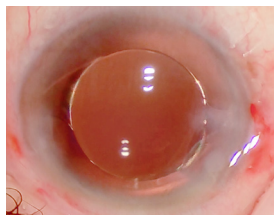
Anterior Continuous Curvilinear Capsulorhexis (ACCC)



Aspirate Lens Nucleus and Residual Cortex



IOL Implantation



IOL Cetered

## Clinical Applications

### Ocular anterior segment surgeries

Cataract phacoemulsification combined with intraocular lens implantation, glaucoma surgery, ICL implantation, pterygium surgery, ocular trauma surgery, orbital plastic surgery, etc.

### Ocular posterior segment surgeries

Vitrectomy, intravitreal injection, etc.



# Specifications

|                            |   |
|----------------------------|---|
| <b>Surgical Microscope</b> | Motorized zoom system with apochromatic lens, zoom ratio 1 : 6            |
|                            | Magnification factor $\gamma = 0.4$ to 2.4                                |
|                            | Focusing: electric, focus range: 50 mm                                    |
|                            | Objective lens: $f = 200$ mm  |
|                            | Binocular tube: 0 - 180°, tilt tube $f = 170$ mm                          |
|                            | Wide-angle eyepiece 12.5 x  |
| <b>Illumination</b>        | Assistant microscope manual magnification change: 5 steps                 |
|                            | Stereo Coaxial Illumination (SCI): Red reflex and full-field illumination |
|                            | LED illumination  |
|                            | One-touch automatic bulb exchange   |
|                            | Blue blocking filter  |
|                            | 25% gray filter   |
|                            | Red-free filter   |
|                            | Retinal protection filter   |
| <b>X-Y Coupling</b>        | Aperture diameter: 50 mm  |
|                            | Movement range: max. 50 mm x 50 mm  |
| <b>Suspension System</b>   | Automatic centering by pressing the reset button                          |
|                            | Floor stand   |
|                            | Maximum load capacity   |
|                            | 15 kg (complete equipment, including accessories)                         |
|                            | Electromagnetic locking   |
|                            | Maximum extension radius of spring arm 1270 mm, 360° rotation             |
|                            | Vertical moving range of the spring arm: 200 mm up and 300 mm down        |
| <b>Foot Control Module</b> | Universal casters   |
|                            | 14 functions wireless foot switch   |



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