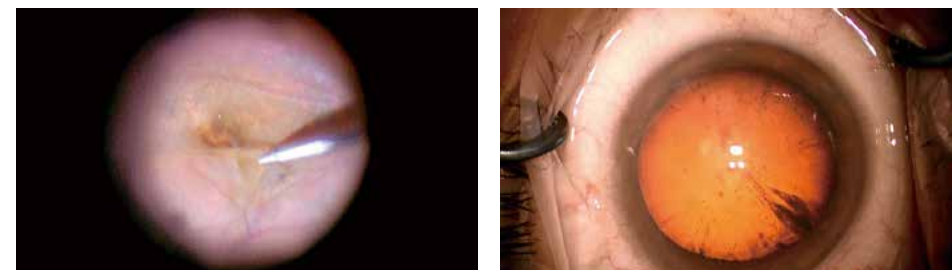


# Optics and Light Source

## New Optics

- New red reflex illumination system providing extremely bright reflected light from the fundus, allowing Surgeons to perform cataract surgery with ease.
- By adopting a standard objective lens of F=200 mm, the working distance is optimized for vitreoretinal surgery.
- 10x magnification eyepieces bring a wider, brighter, and sharper view with a larger depth of focus.

\* Compared to OM-18



## Two Independent LED Light Sources

- Light intensity for red-reflex illumination & coaxial illumination can be adjusted separately due to their fully independent light sources.

## High-luminance LED

- Bright and sharp high-luminance LED having excellent color balance, giving a much brighter reflected light from the fundus in combination with the new red reflex illumination optical system.

## Blue Light Reduction

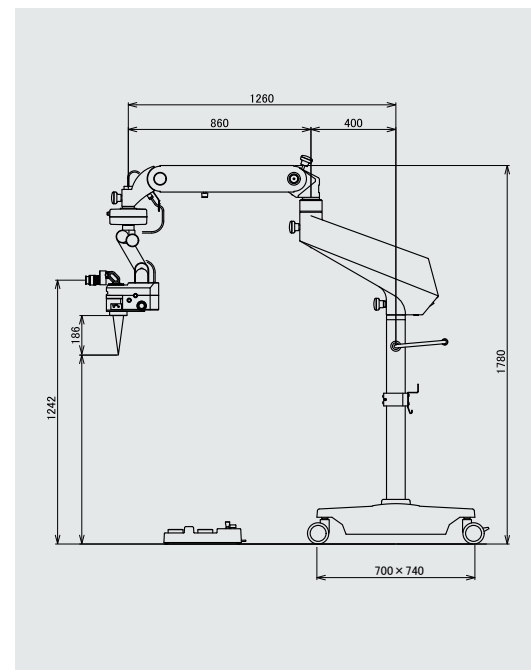
- With the blue correction filter, the projected light is soft and easy on the patient's eye by reducing the peak of the characteristic blue wavelength of LED.



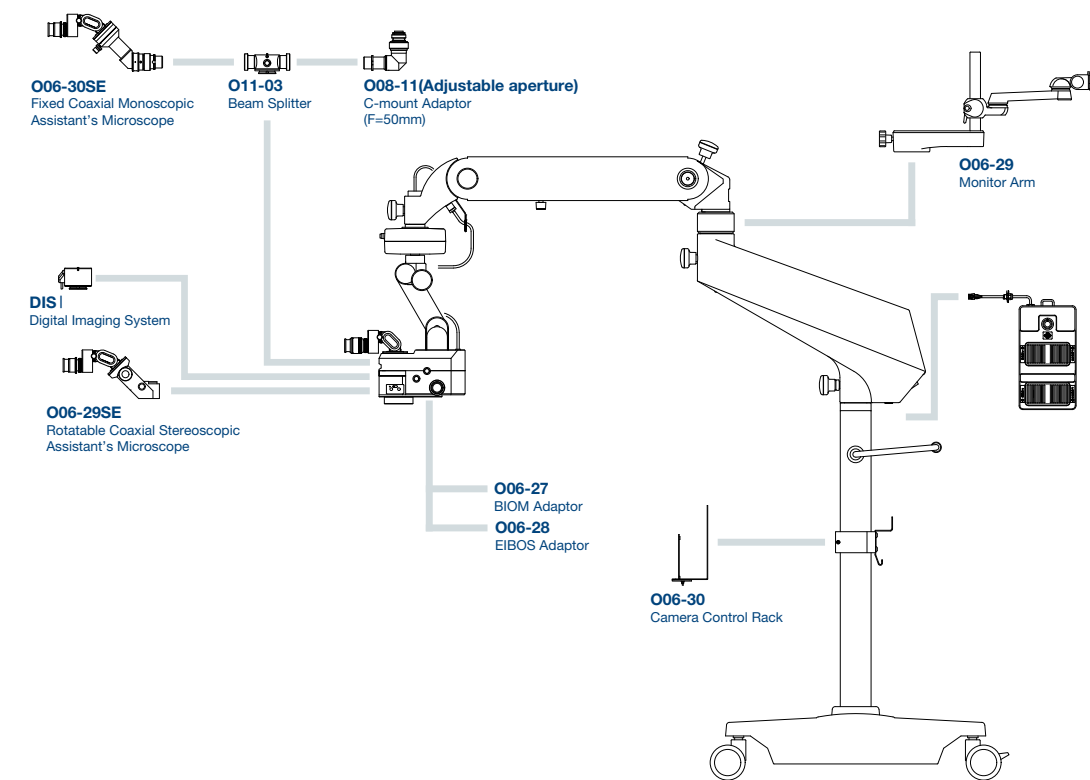
## Specifications

<b>Microscope</b>	Magnification changer	Motorized zoom type (zoom ratio 1:6)
	Objective	F=200mm
	Eyepieces	10x (high-eyepoint & wide field)
	Binoculars	Tilttable binocular tubes F=170mm
	Total magnifications	3.4x to 20.4x
<b>Illumination</b>	Real fields of view	Ø58.8mm to Ø9.8mm
	Focusing stroke	50mm (with centering function)
	X-Y movement stroke	±25mm in each direction (with centering function)
	System	Direct illumination
	Light source	LED
	Field of illumination	Ø60mm
	Field of red reflex illumination	Ø20mm
	Illumination control	9 steps
	Filters	Heat-absorbing, Blue Correction, Yellow, Retina Shield
	Mount	Floor stand
<b>Arm &amp; base</b>	Maximum arm extension	1260mm
	Arm vertical stroke	500mm
	Base size	700mm x 740mm
	Weight	163kg
<b>Others</b>	Power consumption	125VA
	Power supply	AC 100-230V, 50/60Hz

## Dimensions



## System Chart



• Design and specifications are subject to change as improvements are made to the product.

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# Operating Microscope OM-19

Serving your vision





## Operating Microscope

# OM-19

## Operating microscope with a feeling of being “visible”



The world's first operating microscope with independent light intensity adjustment for coaxial and red-reflex illumination to suit each patient case and Surgeons unique preference.

High-performance LED operating microscope combining “visualizing” with “ease of use”.

## Ergonomics Tailored for You

### Tilttable Binocular Tubes

- Tilttable binocular tubes with an incline of more than 90° to suit the height and posture of the operating surgeon. Movable range: 0° (straight) to 90° (inclined).
- High-grade high-eyepoint multi-coated eyepieces delivering a bright and sharp view.



### Easy-to-see Operation Panel

- Light intensity for coaxial and red-reflex illumination can be adjusted separately.
- Focus, zoom, and X-Y speed are independently adjustable.
- Automatic X-Y and focus centering can be performed at the touch of a button.



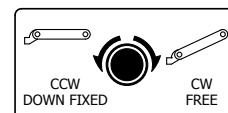
### Foot Controller

- 10-way operation including red reflex illumination on/off, coaxial illumination on/off, X-Y movement, focusing up/down, and zoom in/out are all included.
- Foot switch configuration of the focusing up/down and zoom in/out can be changed according to the Surgeons individual requirements and application.
- Waterproof foot controller.



### Safety Stop Mechanism

- Safety stop mechanism equipped as standard, where the lowest arm position can be set according to the height of the operating table, critical during VR procedures.



### Microscope Head Tilting Mechanism

- By adopting a fine movement interlock system, the microscope head tilts back and forth easily, necessary in the application of glaucoma surgery, with a movable range of around 30° each way.

## Various Options

### Rotating Coaxial Stereoscopic Assistant's Microscope

- Stereoscopic view available also through the assistant's microscope.\*
- 180° continuous rotation through right and left directions whilst mounted.
- Magnification adjusted manually in three steps.
- Tilttable binocular tubes equipped as standard, which can incline more than 90°.

\*Red reflex image through the assistant's microscope is different than the main surgeons view, the red reflex illumination is optimized for the main surgeon's optics.

Eyeieces	10x
Objective	F=200mm
Total magnifications	3.3x, 5.4x, 8.7x
Real fields of view	Ø60mm, Ø37mm, Ø23mm



### Fixed Coaxial Monoscopic Assistant's Microscope

- Providing the same coaxial image and red reflex illumination as the main surgeon.
- Mounted using the O11-03 Beam splitter, with the optics in/out switching lever, ideal when 100% light is required by the main surgeon.



### C-mount Adapter

- CCD camera system can be mounted using O11-03 Beam splitter and O08-11 C-mount camera adaptor for integration with surgical video documentation systems.
- O08-11 C-mount camera adaptor is equipped with an adjustable aperture for regulating light.



### Monitor Arm & Camera Control Rack

- LCD monitor can be mounted on the upper microscope arm with O06-29 Monitor arm.
- Camera control unit can be mounted on the lower microscope pole with O06-30 Camera control rack.



### Fundus Observation Devices Adaptations

- Oculus BIOM and Haag Streit EIBOS adaptations are available.

\*For compatibility details, please contact your local distributor or our Sales Department.