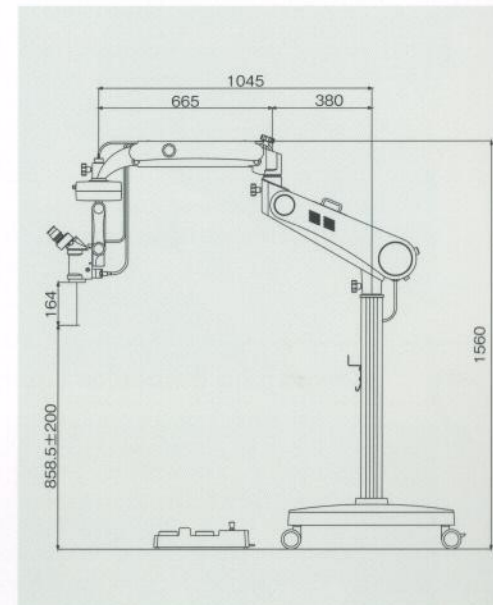


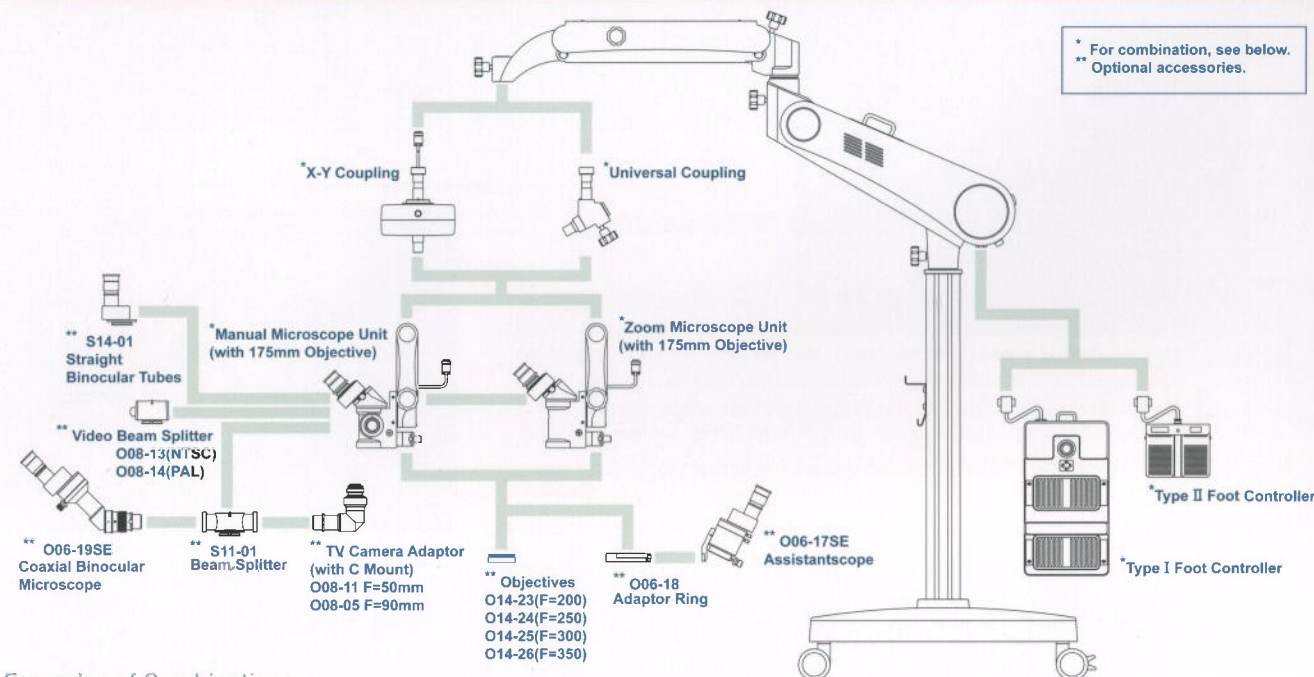
## Specifications

Microscope	Magnification changer	Motorized zoom type (zoom ratio 1:5) 5-step manual type
	Objective	F=175mm (apochromatic corrected optics)
	Eyepieces	12.5x (high-eyepoint & wide field)
	Binoculars	45-degree binocular with converting optics F=125mm 4.28x to 21.4x (zoom microscope head)
	Total magnifications	3.6x, 5.4x, 8.9x, 14.3x, 22.3x (manual microscope unit)
	Real fields of view	φ 52.5mm to φ 10.5mm (zoom microscope head) φ 63mm, φ 42mm, φ 25.2mm, φ 15.8mm, φ 10.1mm (manual microscope unit)
	Focusing stroke	30mm
Illumination	X-Y movement stroke	±25mm in each direction (with centering function)
	System	Cold light coaxial illumination by fiber light guide
	Light source	15V 150W halogen lamp
	Field of illumination	φ 55mm
	Field of red reflex illumination	φ 15mm
	Illumination control	Continuous adjustment
	Filters	Heat-absorbing, UV(permanent feature built-in), Blue-cut, Retinal protection
Arm, base	Mount	Floor stand
	Maximum arm extension	1045mm
	Arm vertical stroke	400mm
	Base size	640mm x 640mm
	Weight	82kg
Others	Power consumption	400VA
	Power supply	AC120V, AC230V ; 50/60Hz

## Dimensions



## System Chart



## Examples of Combinations

Configuration Number	Voltage	Coupling (Selectable)	Microscope (Selectable)	Foot Controller (Selectable)
OM8XZ1120	AC120V	X-Y Coupling	Zoom Magnification changer	Type I Foot Controller
OM8XZ1230	AC230V	X-Y Coupling	Zoom Magnification changer	Type I Foot Controller
OM8XM1120	AC120V	X-Y Coupling	Manual Magnification changer	Type I Foot Controller
OM8XM1230	AC230V	X-Y Coupling	Manual Magnification changer	Type I Foot Controller
OM8UZ1120	AC120V	Universal Coupling	Zoom Magnification changer	Type I Foot Controller
OM8UZ1230	AC230V	Universal Coupling	Zoom Magnification changer	Type I Foot Controller
OM8UM1120	AC120V	Universal Coupling	Manual Magnification changer	Type II Foot Controller
OM8UM1230	AC230V	Universal Coupling	Manual Magnification changer	Type II Foot Controller

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

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# Operating Microscope OM-8



Aiming at new levels in quality





Step

**1 Select the Microscope Unit**

Choose one with motorized zoom magnification changer or with manual magnification changer according to your needs.

The newly designed microscope has the red reflex illumination system built-in (the previous models used an attachment), reducing the overall size of the microscope unit. The unit also is equipped with a motorized focusing system that offers maximum focusing stroke of 30mm, allowing the surgeon to focus precisely on the spot required using the foot controller. The objective is 27% larger in diameter compared with that of the previous models, achieving a brighter illumination system.

**Microscope with Zoom Magnification Changer**

The newly developed motorized zoom magnification changer used in the OM-8 provides a wide range of magnification from 4.28x to 21.4x. By using the Type I Foot Controller, the motorized focus and zoom can be controlled with precision, ensuring a comfortable operating environment.

**Microscope with Manual Magnification Changer**

With OM-8's newly developed manual magnification changer, the surgeon can select the most suitable magnification for each operation from 5 steps (total magnification of 3.6x, 5.4x, 8.9x, 14.3x, or 22.3x).



Step

**2 Select the Coupling Unit**

Choose X-Y Coupling or Universal Coupling according to the configuration selected.

**X-Y Coupling**

The  $\pm 25\text{mm}$  stroke both in X and Y directions allows the surgeon to cover an extensive area in a cataract operation. With the introduction of an upgraded X-Y stage (the same mechanism as used in the higher model, OM-18), reliability in positioning has been further improved.

**Universal Coupling**

Use the Universal Coupling if not selecting the X-Y Coupling. Also use the Universal Coupling for microscopes configured for ENT use.

Step

**3 Select the Foot Controller**

There are two types of Foot Controllers. Choose Type I or Type II according to the configuration selected.

**Type I Foot Controller**

Type I Foot Controller is the default selection where the Zoom Microscope and/or the X-Y Coupling are selected. The Type I Foot Controller allows 8-way operations: Main lamp on, Main lamp off, X direction movement, Y direction movement, Focusing up, Focusing down, Zooming up, and Zooming down. There also is a water-resistant version of the Type I where the layout of the focus and zoom pedals can be selected to suit user's preference.

**Type II Foot Controller**

Use the Type II Foot Controller in configurations where the X-Y Coupling is not used. The electric motorized focusing system allows the surgeon to focus precisely on the spot required.

**Operating Microscope****OM-8**

In the Operating Microscope, OM-8, a new system is introduced where the customer chooses suitable component units according to their needs when ordering their microscope.

Step

**1 Select the Microscope Unit**

Step

**2 Select the Coupling Unit**

Step

**3 Select the Foot Controller**



## 1 Apochromatic Objective

In the optics of the microscope, light that has been transmitted through the prism is dispersed into seven colors. This dispersion causes chromatic halos and fringing in images as well as blurred images. Apochromatic correction corrects the wavelengths that cause such aberrations.

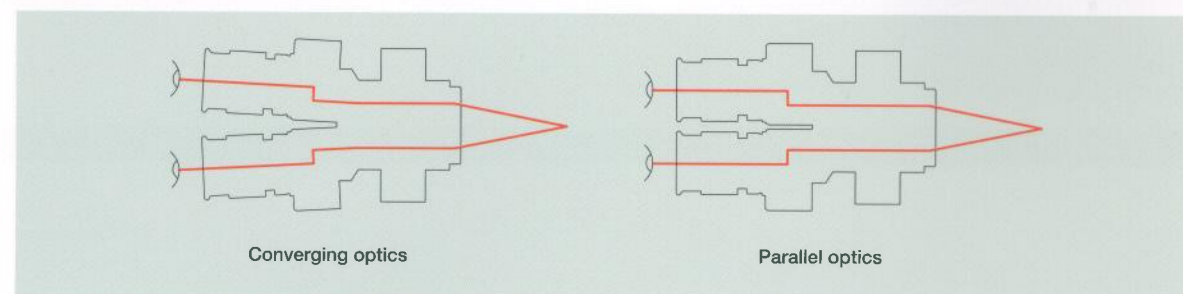
With the apochromatic correction, the OM-8 has reduced chromatic halos and fringing, further improving resolution and contrast.



## 2 Converging Binocular Tubes

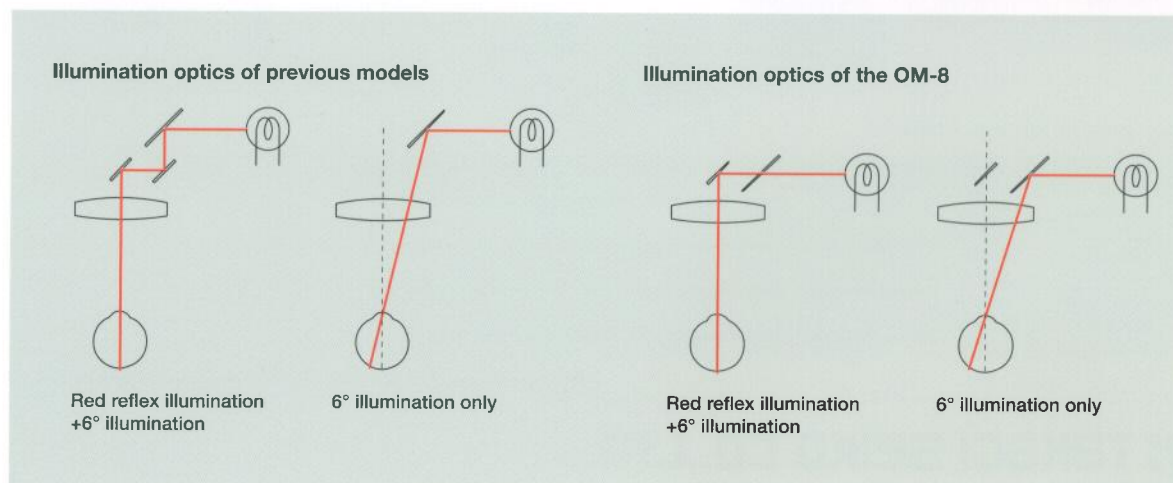
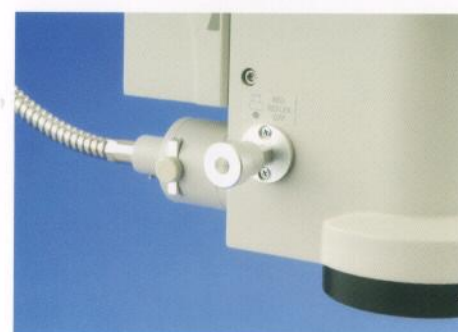
The high- eyepoint eyepieces used in the OM-8 as a standard feature enable a wider visual field. For optics, high grade multi-coated lenses are used, delivering crisp bright images.

The converging binocular microscope, with visual axes slanted inward by 6°, provides surgeons who may have experienced double-vision in other models with easier fusion and a natural eye position for operations. Interpupillary distance can be easily adjusted with the dial-style knob.



## 3 Equipped with the Red Reflex Illumination IN/OUT Switching Mechanism

The illumination optics for red reflex is now integrated inside the microscope, whereas it used to come as an attachment in our previous models of this class. The objective lens is 27% larger in diameter compared to that of our previous models, achieving a brighter illumination system. Use of the red reflex illumination system which enhances the red reflex together with 6° illumination ensures an even more comfortable lighting environment for cataract operations.



## 4 Lamp Unit

A spare lamp is fitted in the Lamp Unit. Therefore, if the main lamp is blown during use of the microscope, switching to the spare one can be done very quickly.

The Lamp Unit is placed on the upper side of the arm. Furthermore, both main and spare lamps are fitted within one unit, making the structure simple. This style resulted in simplified wiring and improved design.

Switching to the spare lamp can be easily done by sliding the Lamp Unit out, turning it around, and placing it back in.



## 5 Improved Transportability and Arm Storage

### Ease of Transportation and Secure Lock

Thanks to new state-of-the-art wheels, transportability has been further improved. The OM-8 can be moved across different floor levels with ease. Wheel locks secure the unit when it needs to be fixed after transportation.

### Excellent Storage

By folding the counter-balanced arm, the OM-8 can be stored in a limited space. There are now hooks for the Foot Controller and cables, making storage even more convenient.



## 6 Microscopes for ENT Use

By composing the microscope with the Straight Binocular Tubes and the Universal Coupling, the OM-8 can be configured for ENT use. We can provide the microscope with any of the following objectives fitted as requested : 200mm, 250mm, 300mm and 350mm. Contact our Sales Department for details.