**Operating Microscope OM-19**

**Serving your vision**

**Specifications**

**Dimensions**

- **Microscope**
  - Magnification changer: Motorized zoom type (zoom ratio 1:6)
  - Objective: F=200mm
  - Eyepieces: 10x (high-eyepoint & wide field)
  - Binoculars: Tiltable binocular tubes F=170mm
  - Total magnifications: 3.4x to 20.4x
  - 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)

- **Illumination**
  - 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

- **Arm & Base**
  - Mount: Floor stand
  - Maximum arm extension: 1260mm
  - Arm vertical stroke: 500mm
  - Base size: 700mm x 740mm

- **Others**
  - Weight: 163kg
  - Power consumption: 110VA
  - Power supply: AC 100-230V, 50/60Hz

**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=200mm, the working distance is optimized for vitreoretinal surgery, providing a clearer and sharper view with a larger depth of focus.

- **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 bright 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.

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New technologies from Takagi's experience in precision instruments and high-end medical equipment bring you the OM-19, the latest in operating microscopes. With its new red reflex illumination system, it offers exceptionally bright reflected light from the fundus, enabling surgeons to perform cataract surgery with ease. The standard objective lens of F=200mm optimizes the working distance for vitreoretinal surgery, providing a clearer, sharper view with a larger depth of focus. The two independent LED light sources allow for separate adjustment of light intensity for red-reflex and coaxial illumination. A high-luminance LED ensures bright and sharp light from the fundus combined with the new red reflex illumination optical system. The blue light reduction feature, with the blue correction filter, makes the projected light soft and comfortable for the patient's eye. This advanced operating microscope is the product of Takagi's commitment to precision and excellence in medical equipment. For more information, visit our website: [www.takagi-j.com](http://www.takagi-j.com) or contact us at info@takagi-j.com.
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 Surgeon’s unique preference.

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

Ergonomics Tailored for You

Tiltable Binocular Tubes
- Tiltable binocular tubes with an angle of move from 0° to 45° to suit the height and posture of the operating surgeon.
- Tiltable angle 15° straight to 180° inverted.
- High-update high eye-point multi-coated eyepiece delivering a bright and Sharp view.

Easy-to-see Operation Panel
- Light intensity for coaxial and red-reflex illumination can be adjusted independently.
- 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.
- Foot switch configuration of the focusing upper Plasma and zoom In/Out can be changed according to the Surgeon’s individual requirements and applications.
- 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.
- Rotatable assistant viewable through right and left directions with mountings.
- High/low adjustable manually in three steps.
- Tiltable binocular tubes equipped as standard, which can incline -45° to 45°.
- Magnification through the assistant’s binocular tubes can be adjusted between x3.3, x5.4, and x8.7.

Eyepieces: 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 O08-22 or O08-11 C-mount camera adaptor for integration with surgical video documentation systems.
- O08-11 is equipped with an adjustable aperture for regulating light, O08-22 comes with a fixed aperture.

Monitor Arm & Camera Control Rack
- LCD monitor can be mounted on the upper microscope arm with O06-39 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 our local distributor or our Sales Department.

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