

Operation microscope OMS-800 / OMS-850

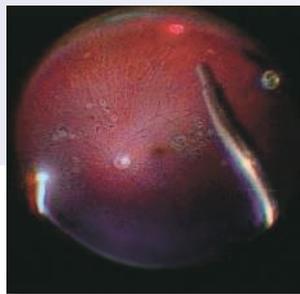


Brilliant Wide Field

OMS-800/850:

Leading the way in operation microscopes.

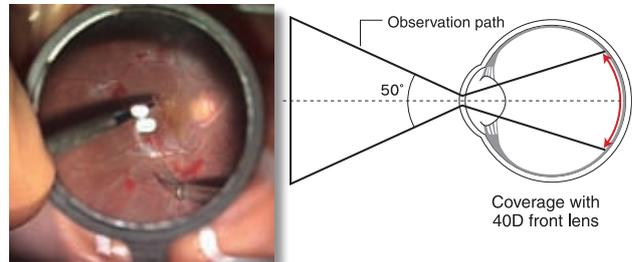
The OMS-800, known by its breakthrough technology that allows bimanual vitrectomy, introduces a pioneering innovation in the field of vitreo retinal surgery. The new and remarkable wide field lens expands the field of view and allows the surgeon to visualize out as far as the Ora Serrata while still maintaining a clear and precise observation of minute and subtle detail in the surgical field. Topcon, in its pursuit for perfection, continues to develop the OMS-800 and OMS-850 range in order to make them even more user-friendly, consistent with the tradition of high quality standards within TOPCON that makes us the World Leader in Ophthalmic Equipment.



High resolution, remarkable depth of focus, excellent stereoscopic observation and wide field.
All those are the steps that lead to "Clear View"

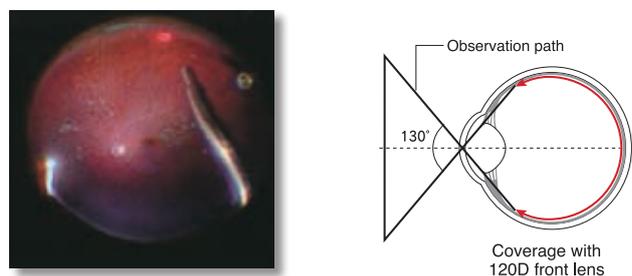
High resolution, wide field and stereoscopic observation

State-of-the-art optics enhance the stereoscopic image even under low illumination, producing a high resolution image with superb depth of focus. This is particularly noticeable during cataract surgery, where bright red reflex and fine detail observation are of highest importance. A good distinction of the nucleus and cortex is easily achieved with the OMS-800.



130 degrees' view field, wide enough to observe the Ora serrata.

The remarkable wide view field is possible thanks to the sophisticated 120D front lens, a new addition to the OMS-800 accessory list. This wide view lens used with endoillumination demonstrates its convenience as an alternative for wide view contact lenses, in VIT for core and peripheral area, or in photo coagulation.

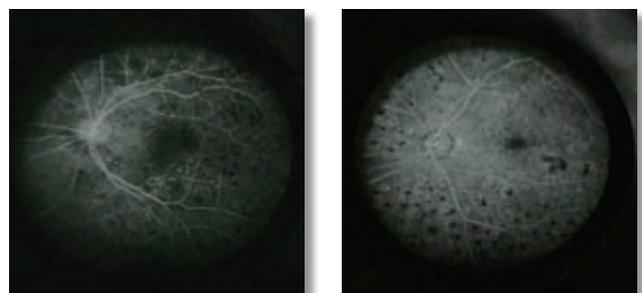


- OFFISS lens unit has an independent focus mechanism. OMS-800 has a separate focus mechanism for the OFFISS unit. This means that the microscope unit can be brought into focus without altering the position of the OFFISS lens, making alignment of the optical system much easier and faster.
- Wide angle stereoscopic images are easily obtained.
- VIT and photo coagulation are possible without the use of 15 degrees' or 30 degrees' wide view contact lenses.
- Since the assistant surgeons are not required to hold or change a wide view contact lens during surgery, the overall length of the procedure is substantially reduced.
- The lens on the head of the OFFISS unit is detachable. This makes installing the front lens quick and easy.
- OFFISS is useful even after fluid-air exchange.

A newly developed feature allows the observation of intraoperative Fluorescein Angiography.

Intraoperative fluorescein observation is possible by attaching FAG filter unit in OMS-800 OFFISS. With this technique, even eyes that have not been studied pre-operatively, can be examined during the procedure and its post-surgical status.

* available with OMS-800/850 OFFISS only.



* When the 120D lens is in use, endoillumination with fiber optics is necessary. Therefore, in this instance, bimanual operation can not be performed.

OFFISS offers a New Scope of Possibilities in Intravitreal Surgery



Ease of operation by bi-manual technique, wider field of vision and effortless stereoscopic view. Vitrectomies are now easier, safer and faster.

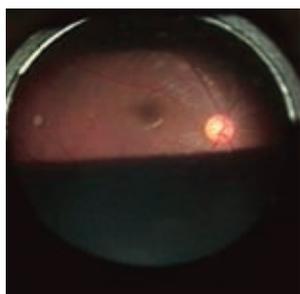
TOPCON has developed a state-of-art observation system for vitrectomy procedures that does not require the use of fiber optic illumination. This new concept for vitreous surgery is called "OFFISS" which stands for "Optical Fiber Free Intravitreal Surgery System". By eliminating the need for fiber optic illumination, the surgeon is now able to use both hands for manipulating surgical instruments during vitrectomies, such as scissors and forceps, intraocular probes and forceps, or twp forceps.

"In some cases, fiber optic illumination may be required.



Amazingly wide visual field

Clear, natura1 stereoscopic view Unlike conventional methods, OFFISS provides illumination over the whole operative field, even illumination the peripheral area. This results in safer and more efficient intraocular operations.



Reduced flare

The built in slit illumination allows high contrast observation of the retina with minimum flare or distortion.

Clear, natural stereoscopic view

Excellent stereoscopic view is attained even in patients with small pupils, thanks to the unique built-in stereo-variator, feature found only in the OMS-800 OFFISS.

Low illumination intensity enables clear observation, and leads to safer operations

Superbly designed optics allow adequate illumination using appropriate wave-length efficiency and eliminating harmful or unnecessary brightness. Low light intensity is also useful in preventing light-hazard. The incorporated IR cut filter also aids in the reduction of phototoxicity.

Increased working distance

OFFISS provides exceptional working distance between the 40D non-contact lens and the patient's eye.



Unparalleled image quality during simultaneous cataract and vitreous surgery

With the advancement of cataract surgery, including techniques such as phacoemulsification, increasing numbers of vitrectomy surgeons are performing simultaneous cataract

and vitreous surgery. By adopting a three-direction illumination systems, the OMS-800 provides an improved red-reflex and better shadow-contrast even in situations with low lurninance.

Space-saving design provides large working area

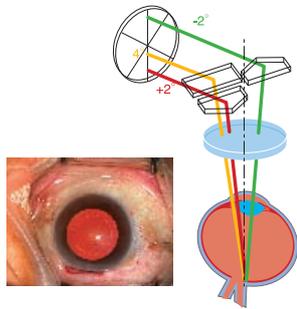
The stable, compact base and long support arm of OMS-800 provides a comfortable working area for both the surgeon and the assistant.

Wide array of illumination angle

Three different types of illumination angles are available to meet any lighting needs during surgery. Each mode can be easily selected from the footswitch.

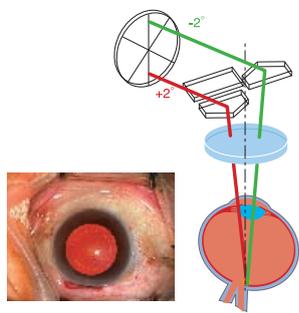
Full illumination (+4°, +2°, -2°)

In this mode, the illumination, brightness, stereoscopic view and shadow contrast are perfectly balanced for superior observation clarity. The illumination is always convenient regardless of the position of the patient's eye.



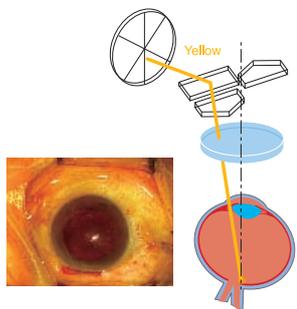
Plus and minus 2° (+2°, -2°)

This illumination mode creates a good red reflex, and is very useful in anterior capsulotomy.



Plus 4° with Yellow Filter (+4°)

The combination of this illumination and yellow filter is of special advantage for preventing phototoxicity in long procedures.



Electromagnetic Locking System

Reliable electromagnetic brakes enable the surgeon to quickly position the optical head during surgery.



Dual Motorized Focusing Mechanism

A dual motorized focusing mechanism allows the optical head to be quickly elevated during surgery and then brought back to the working position without losing focus. This feature is particularly useful during IOL insertion and other procedures that momentarily require more space between the patient and the microscope.

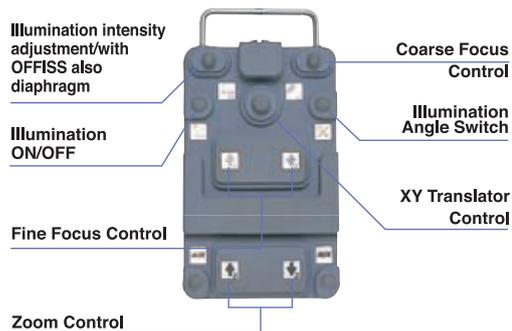
Comfortable operating position

The ergonomically designed optical head with built-in beam splitter allows the surgeon to maintain a comfortable posture throughout the surgery. A key component to this comfort is the variable angle binocular tubes that allow for the setting of a personal viewing from 45 to 90 degrees. The flexibility assures a comfortable operating position even when using OFFISS.



Multifunction footswitch enhances operating efficiencies

The multi-function footswitch permits the surgeon to control almost all of the OMS-800 functions without having to remove their hands from the operative field. Without any hand movement, the surgeon can alter the illumination intensity, zoom magnification, focus, illumination angle selection and X-Y positioning. On conventional microscopes, many of these functions have to be done by an assistants. The layout of the controls on the footswitch is conveniently arranged in the most popular positions.



Anti-stain coating lens

OMS-800 employs anti-stain, water-shedding coating for its objective lens and eyepiece. The essential components remain clean and maintain its optical quality for longer time.

Easy illumination bulb exchange

The illumination bulb can be easily and immediately replaced by a rotating lever located in the lamp house. A warning lamp indicates when the spare lamp is burned out to insure always an operational bulb available.

An option that further enhances the OMS-800 performance

Allowing for intraoperative fluorescein angiography observation.

FAG filter unit

Intraoperative fluorescein observation is possible by attaching FAG filter unit in OMS-800 OFFISS. With this technique, even eyes that have not been studied pre-operatively, can be examined during the procedure and in its post-surgery status.

Switchable beam splitter

By switching the lever, the beam will be split by 80/20 or 50/50. When 50/50 is selected, TV camera will receive clearer images making the mode useful for documentation and teaching. (When 80/20 is selected. 80% beam will pass to the surgeon's eyepiece.)

* FAG filter unit is applicable only with OMS-800 OFFISS and switchable beam splitter.

NOTE: Switching beam splitter is a factory option and cannot be retrofitted to existing units. Therefore the switching beam splitter must be specified when ordered.



Variable angle assistant microscope

The assistant microscope provides the viewer with bright, crisp images. The angle of the binocular eyepieces is adjustable from 45 to 90 degrees, offering the assisting surgeon a comfortable viewing angle. In addition, separate focus adjustment is possible for assistant surgeon.



45 to 90 degrees variable



45 degrees inclined fixed



TV relay lens

The TV relay lens permits the attachment of a CCD camera that is useful for documentation and educational presentations. The relay lens allows the most popular 1/2 Inch & 1/3 Inch CCD cameras with either a C-mount or bayonet mount to be connected to the OMS-800.

Front lens set Standard components

- 40D front lens & sterilizable case
- 120D front lens & sterilizable case
- Front lens holder
- Anterior segment observation lens & sterilizable case
- Sterilizable box



*Each front lens can be ordered separately.



type 120D



type 40D



OMS-800 Pro

Electromagnetic brakes and sophisticated electronics confer the OMS-800 Pro the flexibility to perform virtually any type of ophthalmologic surgical procedures.

*Please note that the OFFISS mechanism can not be installed on the OMS-800 Pro



OMS-800 OFFISS

OFFISS offers a new scope of possibilities in intravitreal surgery. Equipped with the OFFISS front lens mechanism, electromagnetic brakes and sophisticated electronics, this model is the highest standard for intra vitreal surgery, as well as other ophthalmic procedures.



OMS-800 Standard

Equipped with most of the state-of-the-art features characteristic of the 800 line, the OMS-800 Standard answers the need for a simpler, easy to use operation microscope. Manual brakes and ease of mobility make the OMS-800 an affordable yet advanced unit for all ophthalmic uses.

Ceiling model



OMS-850 OFFISS / Pro

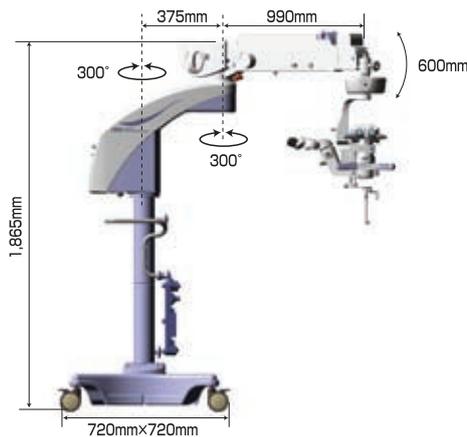
The Ceiling model OMS-850 enables to utilize the operation theater floor efficiently. A cable pole is included as standard components so that several cables from TV or operation equipment could be corded neatly.

Specifications

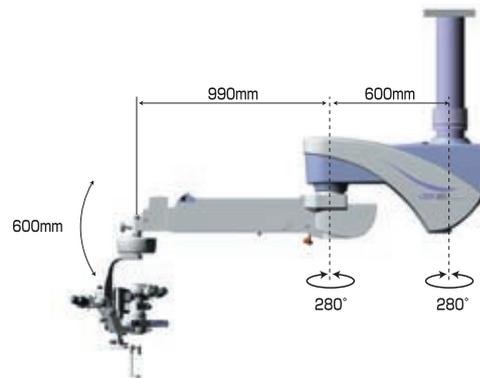
	800 OFFISS	800 PRO	800 STANDARD	850 OFFISS	850 PRO
Type	Galileo type				
Magnification selection	Continuous zoom				
Eyepiece	12.5X				
Binocular tube	Parallel				
Objective lens	f = 200 mm				
Magnification indications	4.2 / 5 / 6 / 7 / 8 / 9 / 11 / 13 / 15 / 17 / 19 / 21				
Total magnification	4.2X - 21X				
Maximum arm load	6-18 kg	6-18 kg	9-21 kg	6-18 kg	6-18 kg
Accessory capacity	4,4 kg	6,1 kg	9,6 kg	4,4 kg	6,1 kg
Power voltage	AC100-120 50/60Hz, AC220-240V 50/60Hz				
Power input	280VA				
Illumination bulb	Halogen 100W				
Weight	250 kg	247 kg	244 kg	226 kg	223 kg
Offiss	Yes	N/A	N/A	Yes	N/A
Magnetic locking	Yes	Yes	N/A	Yes	Yes
Apochromat	Yes				
Dual focus system	Yes	Yes	N/A	Yes	Yes
Illumination angle	All ($\pm 2^\circ$, $+4^\circ$) / $\pm 2^\circ$ / Yellow filter ($+4^\circ$)				

* OMS-800/850 OFFISS and Pro without "Dual Focus system" are also available.

Dimensions OMS-800



Dimensions OMS-850



Photos courtesy of:

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* Subject to change in design and/or specifications without advanced notice.

IMPORTANT In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.

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