This is the moment we work for.

OPMI LUMERA 700
A unique microscope for cataract and retina surgery
The moment you can see every last detail with perfect clarity. This is the moment we work for.

### Technical data

**OPMI LUMERA 700**

**Surgical microscope**
- Microlabeled zoom system with apochromatic lens, zoom ratio: 1:6
- Zoom objective: f = 200 mm (optionally also f = 175 mm or f = 225 mm with support ring)
- Broadband illumination: optionally available: LED illuminator, 190 mW laser base
- Focus range: 70 mm (optionally also 12.5 mm)

**Light source**
- SCI: Coaxial and full-field illumination (patent pending)
- Fiber optic illumination SuperLux ®
- Xenon short arc reflector lamp with HaMode filter
- Backup lamp in lamp housing, can be slid into position manually
- LED fiber optic illumination:
  - Near daylight color temperature
  - 50,000 hour lifetime at 50 % light intensity
  - HaMode filter
  - 25 % gray filter
- For all light sources:
  - Blue blocking filter
  - Optional: Fluorescence filter

**Slit lamp**
- Slit widths: 0.2 mm, 2 mm, 3 mm, 4 mm
- Slit height: 12 mm

**XY coupling**
- Travel range: max. 61 mm x 61 mm
- Automatic centering at the touch of a button

**Video monitor**
- 22” LCD display
- Resolution: 1,680 x 1,050

**Stand**
- Maximum permissible weight load of the spring arm: When the surgical microscope is attached to the arm without a lamp, eye-piece or objective lens and the XY coupling is also attached, in maximum of 9 kg of additional accessories can be attached to the spring arm

**Compliance**
- CE
- USA
- Class 2 LED Device as per IEC 60825-1:2001

### Technical data

**OPMI LUMERA 1000**

**Focus range with LH175 lens holder:**
- 31 mm (position of intermediate image)

**Focus range with LH200 lens holder:**
- 38 mm (position of intermediate image)

**Rotation angle of lens revolver and holder:**
- 0°–360°

**Lenses included**
- 60 D, 128 D

**Weight**
- RESIGHT 500 (manual): 0.45 kg
- RESIGHT 700 (motorized): 0.50 kg

**Safety range**
- At least 110 mm

**FCP-WL wireless foot control panel**
- Power supply: 3 x 1.5 V Baby C batteries, alkaline manganese
- Transmission frequency: 2,402 ... 2,480 MHz
- Battery life: Around 2–6 months depending on how much the foot control panel is used

**OPMI LUMERA 700**

**MADE BY CARL ZEISS**
OPMI LUMERA® 700
For premium performance in the OR

New operating techniques. High patient expectations. Rising cost pressures in the OR. You and your operating microscope are facing more and more demands all the time. So to provide you with optimal support during anterior and posterior eye surgery, OPMI LUMERA 700 boasts an exhaustive range of customization options – as well as the utmost in optical quality.

The cornerstone of an integrated workplace in the OR
OPMI LUMERA 700 reflects our vision of an integrated workplace, one in which individual systems work together and act as a single solution. A workplace where ophthalmic devices share information, and offer additional functions when used in combination. OPMI LUMERA 700 is available in a several configurations, offering different sets of features, so you can choose exactly the level of support you need in the OR.

1 In combination with CALLISTO eye®.
2 Integrated Data Injection.
For all cataract and retinal surgeons

Perfect visualization of the eye
- SCI technology for a precise, detailed view of the eye
- Apochromatic ZEISS optics
- DeepView, the depth-of-field management system, for optimizing the scope for maximum depth of field or light transmission
- Superlux® Eye, xenon, LED and halogen light sources
- Integrated keratoscope

Maximum patient safety
- Retina protection filter and device
- Double backup if a light source breaks
- Manual mode for all key functions

Simple to operate
- Modern, cableless design
- Freely configurable, wireless foot control panel
- Read microscope settings on the overhead display
- Fast focus for switching rapidly between different focal planes
- Magnetic brakes for easy positioning
- Compact park position

Especially for retinal surgeons

An outstanding view of the retina
- RESIGHT® fundus viewing system for superb visualization of the retina
- Invertertube® for ergonomic sitting posture
- Workflow steps for predefining the system settings and camera settings you need
- Integrated slit illumination

For an optimal workflow

Across-the-board integration for teachers and presenters
- An assistant microscope, the magnification of which can be linked to the main microscope or remain independent
- Integrated HD/SD video chain comprising a camera, 22” monitor and video recording via USB

For the utmost precision

Innovative assistance functions
- View assistance functions such as Z ALIGN for aligning toric IOLs, K TRACK, Incisions/LRI, plus microscope settings directly in the eyepiece with IDIS²
“The depth of field, the contrast and the red reflex impress me time and again. With OPMI LUMERA 700, I know I can see every detail.”

Cataract surgeon

Cataract surgery
Perfect visualization and straightforward operation

With OPMI LUMERA 700, even the finest anatomical details are clearly visible, and the red reflex is high in contrast and stable. Thanks to its revolutionary Stereo Coaxial Illumination (SCI) technology and legendary ZEISS optics, OPMI LUMERA 700 allows you to visualize the most minute detail, even under difficult situations like small pupils, so you can easily remove remaining cortex tissue in the capsular bag.

This sophisticated surgical microscope ensures only the best results, so procedure times are shorter and patient throughput is higher. You can save individual workflow steps for specific working conditions and switch to them at a moment’s notice. And with DeepView, the depth-of-field management system, you can switch from maximum light transmission to maximum depth of field at the touch of a button.

When used in combination with CALLISTO eye, OPMI LUMERA 700 also offers innovative tools such as Z ALIGN, which assists in aligning toric IOLs. These functions ensure maximum precision during surgery.

In addition to SCI illumination, OPMI LUMERA 700 boasts numerous features, such as an integrated keratoscope, which are tailored to the precise needs of the cataract surgeon. You can also use the fluorescent filter to inspect incisions and verify that they are tightly closed. For the utmost in patient safety, OPMI LUMERA 700 also includes built-in UV, IR and blue blocking filters plus a retina protection device, all of which are available for all three light sources.

SCI technology delivers revolutionary views of the eye. Even with advanced cataracts, the different structures of the anterior segment are clearly recognizable.
SCI technology
- Stereo Coaxial Illumination for high contrast so that every detail is clearly recognizable, even with advanced cataracts.

Integrated keratoscope
- Visualize corneal curvature without interrupting the surgery to adjust equipment.

Integrated assistant microscope
- Allows the second surgeon to synchronize their level of magnification with the main microscope, depending on their role in the operation.

Overhead display
- Shows you the current settings at a glance.

Fast focus
- Use the foot control panel to switch rapidly between two different focal planes, such as when folding the IOL before implanting it.

A selection of light sources
- Xenon Superlux Eye: for an especially natural, true-color image.
- LED: a particularly long-lasting light source.
- Halogen: the established light source.
Retina surgery
Enjoy a superb view of the retina

OPMI LUMERA 700 and the RESIGHT 700 fundus viewing system allow you – the retinal surgeon – to clearly recognize every detail of the retina. And as these products work together seamlessly, they offer unparalleled convenience in the OR. When RESIGHT is slid in, the microscope reacts by automatically adjusting the camera settings, Invertertube settings, lighting and speed of motion to the correct values for retina surgery. You can also save system settings for individual workflow steps in the surgery and activate them at a moment’s notice during the surgery by using the foot control panel. This frees up the OR team, minimizes the potential for error and ensures efficient workflows in the OR.

Switching between RESIGHT and the microscope image couldn’t be simpler, as both systems use the same focal plane. So you no longer need to refocus the microscope.

The outstanding optical and transmission quality of both the microscope and RESIGHT means you see every detail of the retina.

1 Applies to RESIGHT 500 and RESIGHT 700.
“As the microscope and the fundus viewing system work together seamlessly, I no longer have to keep interrupting the surgery to bring the image into focus.”

Retinal surgeon

**Integrated slit illumination**
- Four slit widths and a slit direction of left or right. It simplifies membrane peeling and vitrectomy using a contact glass, without the hassle of fitting extra accessories.

**Fast focus**
- Integrated fast focus function. This allows you to continue the operation quickly after moving the microscope, such as after introducing an endoscopic light source.

**RESIGHT fundus viewing system**
- **RESIGHT 700** for hands-free focusing via the foot control panel.
- **RESIGHT 500** for manual focusing.
- Long service life and low operating costs, as only a small number of the optical components need to be re-sterilized and re-prepared.
- **Vario objective** for uninterrupted work on the same focal plane
- **Innovative lens turret** for quick, convenient, sterile access to a second lens of a different magnification.
- **Safety mechanism** for optimal patient protection: the fundus viewing system immediately closes automatically if it accidentally touches the patient’s eye.
“I can prepare OPMI LUMERA 700 for the next procedure with just a few movements. Even when switching between cataract surgery and retinal surgery.”

Workflow for teachers and presenters
Integrate everything you need into a single system, including the video chain

Now you can integrate a full HD or SD video chain comprising a camera, 22” monitor and USB recording into your surgical microscope. Whatever you decide, the results speak for themselves: high-quality video recording that shows the microscope’s view of the operating field – ideal for teaching and presenting. You can also save videos to a portable storage medium quickly and easily, so you share recordings with others.
As the entire video chain is integrated into OPMI LUMERA 700, your workplace is free of tiresome cables and accessories that need to be assembled or fitted to the microscope before they can be used. This sophisticated microscope gives you all the freedom you need and makes work easier for the entire OR team by supporting workflows in an intelligent way. You – the surgeon – can read the most important microscope settings at a glance on the overhead display. And your OR team can easily save the settings needed for different types of surgeries and activate them whenever needed.
Ceiling mount
- Spans large distances and features a smooth, motorized lift function that makes it possible to quickly switch between the working and park position. This means you have a lot of headroom, both in the working position and the extremely compact park position.

22" monitor
- For a large video display and space-saving, cable-free integration in the operating room. It can be attached to a ceiling mount or floor stand.

Assistant microscope
- Features a zoom function that can be synchronized with the main microscope or controlled separately. It’s excellent for teaching, or for difficult procedures requiring two surgeons.

Overhead display
- Shows the surgeon the microscope settings at a glance, at all times.

Inverter tube
- This facilitates an upright, ergonomic posture, stress-free work and rapid changeover from cataract to retinal surgery and vice versa. Both an electrical and manual version are available.

Wireless foot control panel
- Freely configurable for every user, and ultra-tactile for intuitive operation. It has no annoying cables, so can be freely positioned in the OR.
“The superimposed assistance function help me carry out every step of a surgery with the utmost precision and give my patients the best vision possible.”

Surgeon

Assistance functions

Benefit from perfect support that ensures only the best results

OPMI LUMERA 700 works seamlessly with the CALLISTO eye modular assistance system. The CALLISTO eye touchscreen is suitable for use in sterile conditions and acts as a central interface to control the surgical microscope and view diagnostic images in the OR. CALLISTO eye also boasts innovative assistance functions that enable you to operate with maximum precision. So you can give your patients the best possible vision faster and more simply than ever before.

IDIS, the Integrated Data Injection System, displays visual assistance functions in the eyepiece of your OPMI LUMERA 700, so all the information you need is literally looking you in the eye. This avoids unnecessary head movements and means you can concentrate even more closely on the procedure.¹

¹ If you already have OPMI LUMERA 700, you can upgrade it to include IDIS under certain conditions.

CALLISTO eye and IDIS from OPMI LUMERA 700 allow you to view visual assistance functions directly in the microscope eyepiece. This ensures maximum precision, such as when aligning toric IOLs.

CALLISTO eye and associated assistance functions are not available in the United States.
**INNOVATIVE ASSISTANCE FUNCTIONS**

**Incision/LRI assistant**
- Superimpose templates of individual, planned incisions and limbal relaxing incisions to ensure precise surgery.

**Rhexis assistant**
- Superimpose individually scalable rings to assist during capsulorhexis, so you can open the capsular bag safely and easily.

**Eye tracking**
- Track eye movements with CALLISTO eye. This ensures the position of the superimposed visual aids always stays the same in relation to the eye.

**Z ALIGN**
- Define reference and target axes and display them onscreen and in the eyepiece, ensuring you align toric IOLs safely and precisely.

**K TRACK**
- Visualize corneal curvature in combination with a keratoscope, so you can reduce astigmatism in corneal transplantations.

**View data in the eyepiece**
- View superimposed assistance functions in the eyepiece, for stress-free, ergonomic work with fewer interruptions and head movements.
“CALLISTO eye is the right step toward creating a future of intelligent, networked devices.”

Ophthalmologist

A worthwhile investment
Make a choice for the future

OPMI LUMERA 700 is the first step in creating an integrated OR workplace with a central control interface and a variety of assistance functions. Not only that, you can continue to upgrade and add to the system – making OPMI LUMERA 700 a valuable investment in the future. Wherever you work, OPMI LUMERA 700 brings benefits to your OR:

In hospitals where different operating teams use the same OR to perform anterior and posterior eye surgery, surgical staff benefit from a solution that’s easy to use, flexible, and guarantees efficient patient processing.

And in ambulatory surgical centers with high patient throughput, both surgeons and patients can benefit from innovative devices representing outstanding quality, such as OPMI LUMERA 700.

Advanced teaching facilities can also benefit from OPMI LUMERA 700. Its sophisticated technology makes treating difficult cases easier, and the high-quality video and built-in assistant microscope are perfect for teaching and presenting.

Individual solutions
OPMI LUMERA 700 is flexible, can be fitted on a ceiling mount or floor stand, and supports individual configuration for different surgeries and surgeons. In other words, you can tailor it precisely for use in your outpatient clinic or OR.

Built-in upgradability
You can upgrade OPMI LUMERA 700 and integrate it with tomorrow’s devices at any time. This allows you to benefit from the latest innovations and stay up to date.

Premium quality
At Carl Zeiss Meditec, we guarantee optical quality of the highest standards. And we never stop working to improve our products and see that they meet the highest technological standards, both now and in the future.