# Maquet Volista Surgical Light

See better, go further

GETINGE ✳

# Maquet Volista

## See better, go further

A successful surgical outcome is highly dependent upon the surgeon's ability to visualize and assess the wound.

By optimizing color rendering and minimizing colored shadows, Maquet Volista Surgical Lights maximize the value of your lighting investment.

**Putting patients first**

For more than a century, Getinge and its well-known brands — such as Maquet — have put patients first. It's why we remain committed to close clinical relationships that identify real-world healthcare challenges, and address them with cost-effective, clinically relevant solutions.

As one of the world's largest medical technology companies, we have the resources to help you:

- protect patients
- proactively avoid complications
- prevent ergonomic issues

Our comprehensive portfolio of medical technologies will support you and your patients throughout the clinical pathway, so you can deliver the best possible patient care.

# Maquet Volista

## See better, go further

**Full HD cameras**
Share best practices among surgeons, or document procedures for risk management with full HD clarity.

**Luminance Management Device (LMD)***
Maximize useful light and minimize eye fatigue caused by glare or reflexion with the LMD*.
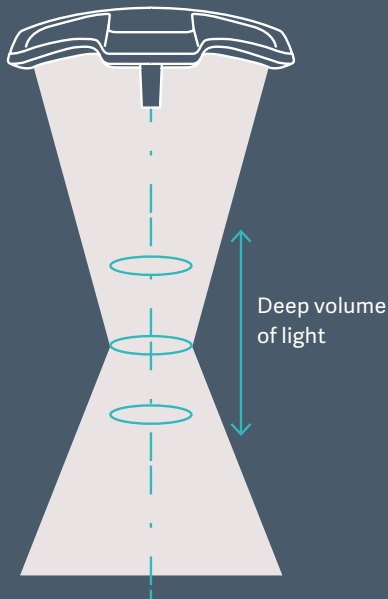
Maquet Volista 400

## Homogenous volume of light

A homogeneous column of useful light reaches into the deepest cavities, without readjustment.
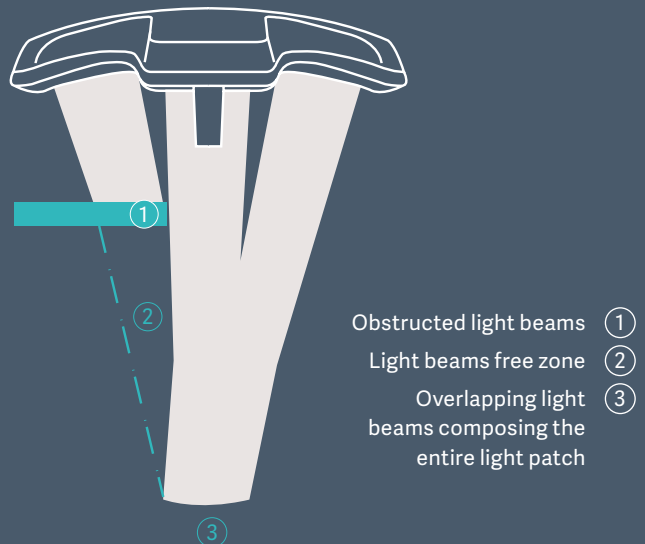
No need to reposition or manipulate the light head, the useful light is available from the surface of surgical site to the bottom of the cavity without any readjustment.

Deep volume of light

## Shadow Management

Due to the shape of the light heads, a good positioning leads to a very stable useful light.

When moving below the light heads, surgeons may block some LEDs but due to the perfect overlapping of all light sources, the light patch remains stable, homogeneous, keeping contour shadows for the needed three dimensional vision.

Obstructed light beams ①
Light beams free zone ②
Overlapping light ③
beams composing the
entire light patch

**Adjustable color temperature***

A patented three-level cold filter system allows for customization of color temperature to meet the needs of each surgical discipline.

**Automatic Illumination Management (AIM)***

AIM is designed to improve workplace comfort by reducing heat on the surgeon's head, while delivering consistent and effective illumination.

**Volista VisioNIR Mode***

The surgical light can remain on while using Fluorescence imaging devices.

Maquet Volista 600

\* Only available for Maquet Volista StandOP.

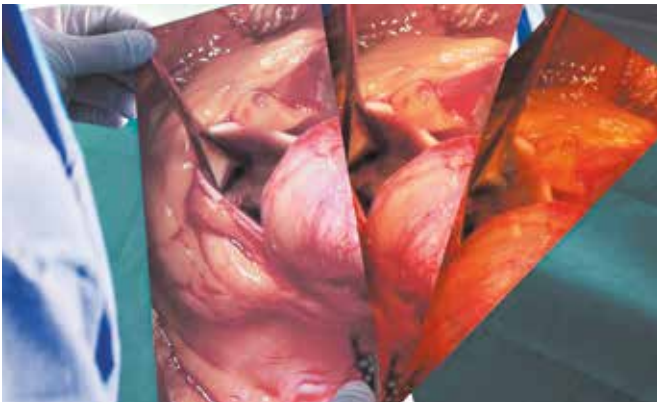## Delivering consistent and effective illumination

Automatic Illumination Management (AIM)† automatically compensates for obstructions to deliver additional light from unmasked LEDs. This unique and patented system minimizes shadows and offers consistent and effective illumination, without readjustment.

† Standard on Maquet Volista StandOP.

# Maquet Volista

## Much more than just a light

Surgery can be a high-stress job with long hours. Poor lighting can slow surgical progress and cause eye strain that can lead to fatigue-related errors.*



### Choose the best-suited color temperature[†]

Each surgeons visualization needs are different and each step of a procedure can require different color temperatures for improved tissue recognition, Maquet Volista Surgical lights offer a possibility to adjust from 3900K to 4500K to 5100K.

Our white LEDs and patented three-level cold filter system in our Maquet Volista StandOP adapts the color temperature without colored cast shadows, offering a stable color temperature whatever the chosen settings and whatever the aging of the product. The cold filters reduce the blue peaks that LEDs emit.



LMD offers total freedom of movement without any drop in luminance.

### Focus on your patient

The Luminance Management Device (LMD)[†] maintains optimum visual acuity and avoids difficulties in adapting to excessive variations in luminosity. Whether at the beginning or end of a procedure or from light to dark tissues, the luminance will be automatically adjusted according to your registered setting.

With LMD, there is no need to adjust the light anymore. The technology compensates to maximize useful light by adjusting automatically the illumination and maintaining compliant levels of irradiance even when two lightheads are overlapping.

* Peyrat P, Breysse J-P, Chambard C. *Interbloc.* 2021;40(1):35-38.
† Optional on Maquet Volista StandOP.

**Volista VisioNIR**

## Keep your surgical light on, and focused on the procedure, while performing NIR*-guided surgery during open cases

Thanks to Volista VisioNIR[†], the surgical staff will not be required to turn the surgical light on/off to be able to perform open surgeries using NIR fluorescence imaging systems. The Volista VisioNIR is designed to enhance surgeon focus and surgical workflow by removing the distraction of repositioning surgical lights during NIR-guided surgery. The Volista VisioNIR can help minimize the challenges for OR staff when all lights are turned off during NIR-guided surgery.

## Just keep the light on!

- A powerful solution to support surgeons while using fluorescence guided surgery.

- The surgical staff can stay focused on the patient during surgery. One less task for the circulating staff.

- Uninterrupted workflow as you can keep the surgical light on during the entire procedure.

- The ability to keep the OR light on provides better visibility of the operating room environment for the staff.

- Works simultaneously with the adjustable color temperature feature: while using Indocyanine Green (ICG) and NIR cameras, the surgeon can operate with the preferred color temperature. The dedicated NIR enhancement mode can improve the contrast on the screen and complies with autoflurescence.

- The dedicated NIR enhancement feature maintains the already good color rendering, with no change in shadow dilution or dimming.



## One solution: one filtered light

Thanks to the patented filter wheel developed on Maquet Volista StandOP, the light emitted from the LEDs is filtered to reduce the remaining NIR wavelengths.

Surgical light disturbing the fluorescence signal is eliminated. Maquet Volista VisioNIR and NIR-guided surgery cameras can be used simultaneously inside the operating room.

*Near Infrared.
†Available on Maquet Volista StandOP.

# Maquet Volista

## Perform surgery with safety in mind

Improving surgical safety is a goal for healthcare facilities worldwide. Maquet Volista operating lights have been developed with this goal in mind.

### Infection Prevention

Hospital-acquired infections delay patient recovery and place additional strain on the healthcare system. The Maquet Volista Surgical Light was developed to minimize the risk of cross-contamination.

### Antibacterial paint

Special paint coating that is designed to reduce bacterial colonization with disinfection.*

### Touch control panel

A smooth touch keypad is easy to clean, preventing cross-contamination to keep patients safer.

### Designed to improve intraoperative visibility

With a high color rendering of Ra 95, Maquet Volista gives surgeons a clear vision of the surgical site by delivering a natural and faithful color rendering.

### Enhanced visibility for minimally invasive surgery

Maquet Volista offers green ambient lighting at the center of the light head to minimize glare on monitors during MIS. The ambient light provides enough illumination to help surgical staff move safely in the darkened OR.
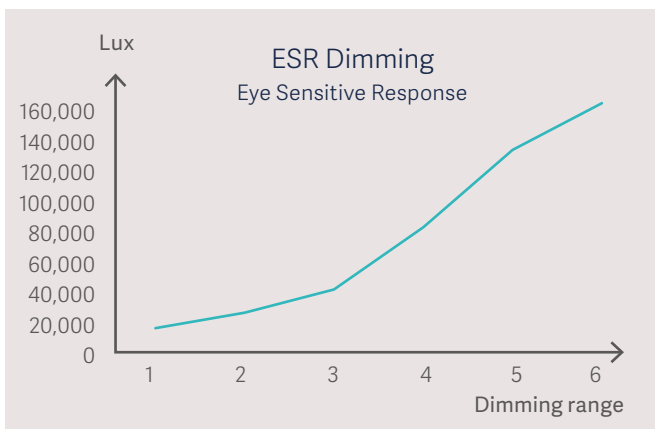
*Data on file.

## X- and Y-shaped lightheads

Ensure compatibility with laminar flow ceiling systems to reduce disruptive air patterns.*

## Stable illumination

LEDs can lose up to 20% of their intensity after just two hours. With the Flux Stability Program (FSP), smart electronics increase the current to maintain consistent light output throughout the procedure.

## Dimming sensitivity

With dimming following human eye sensitivity per Fechner's law, each dimming step is seen by human eyes with the same amount of light difference, in order to provide a smooth and adapted range of illumination.



## Compliant Irradiance

Protect delicate patient tissues by minimizing radiant energy at the surgical site. In nominal illuminance, two lightheads can be safely overlapped[†]. The boost function notifies the medical staff by a blinking LED that the amount of light used can potentially damage or desiccate tissues if two light patches are overlapped. The goal is to always provide the right information to surgeons in order for them to operate in total awareness and safety for the patient.

* Data on file.
† Based on the IEC 60601-2-41 standard.

# Fully adjustable to meet each surgeon's needs

With Volista, it's simple to adjust the light to the surgeon's specifications. From positioning to intensity, all elements of the lighting experience can be easily modified.



## Tilt handle: autonomy for sterile team

The optional "tilt" handle lets sterile staff adjust the light patch diameter during surgery.

- No assistance from the circulating nurse.

- Available as sterilizable handle, which can be easily cleaned in Getinge Washer-Disinfectors.



## Touch control panel: control at any time

All main functions can be controlled from the panel.

- On / Off.

- Standard lighting or ambient lighting and dimming.

- Adjustment of the light patch diameter.

- Zoom when a camera is installed.

- Warning and battery indicators (for battery backup systems only).



## Wall control panel

Centralized information can be accessed and controlled from the wall panel.

- Access to lighthead and camera settings

- Lighthead synchronization.

- Presets for storing favorites by surgeon or specialty.

- Assistance with preventive maintenance, including backup.

- Power supply testing.

- Self-diagnostics.

# Maquet Satelite Anchoring System

The number of OR technologies and tools is growing exponentially each year, yet only a finite amount of space exists near the patient.

Hospitals need a hygienic, cost-effective, long-term solution that can precisely position the lights, monitors and cameras of today, but with enough versatility to accommodate the technologies of tomorrow.

Maquet Satelite allows equipment to be positioned within reach of the surgeon. Equipment can be easily added, removed and upgraded to meet future requirements.

## Optimized workflows

- A central mounting hub delivers electrical and networking connectivity.
- There are no exposed wires or cables to interfere with workflows.
- An ergonomic design ensures that vital equipment is within reach.
- Tailored solutions are available for all surgical specialties.

## Modular and easily upgradeable

- A simple design streamlines upgrades and limits downtime.
- A versatile tri-mount design allows equipment to be added or exchanged as technologies evolve, reducing future construction costs.
- Compatible with all Maquet surgical lights, cameras, and flat screen holders.

## Your multimedia center

- Mount and network cameras of all types.
- Route full HD signals.
- Access patient records, MRI, video, and radiographic images at the surgical site.
- A large internal diameter accommodates the larger bundles required for advanced integration and multimedia applications.

## The hygienic solution

- Satelite is designed not to obstruct high air flow systems thereby minimizing turbulence over the surgical site.
- Sleek and rounded surfaces are easy to clean and disinfect.

# Maquet Volista

## Extended product range

### ◯ Multimedia equipment

**Single / Double Getinge Flat Screen Holder**

With the flat screen holder, one or two flat screens can be mounted where they're most needed—close to the surgeon.

**Full HD cameras**

HD images and videos can be shared instantly and with no visible latency. Share best practices among surgeons, or document procedures for risk management with full HD clarity.

Full HD cameras
(wired[†] and wireless)                    LMD*

**Quick Lock System**

The tool-free system allows full HD cameras and the LMD system to be quickly and easily connected and disconnected to be moved between surgical suites. The Quick Lock System minimizes the setup time between procedures, and maximizes use of cameras throughout the surgical suite.

## ⭕ Control Panels

**Intuitive touchscreen interface**

| Touchscreen | Capacitive wall keypad[†] | Lighthead keypad |
|---|---|---|



## ⭕ Suspension arms

Maquet SB suspension[†]: affordable suspension system that is lightweight and flexible.

Maquet SA suspension[‡]: increased load limits and designed for HD wired video camera (optional).



Maquet Satelite System[§]: versatile and open for future requirements.

Maquet Rolite: mobile system with touch screen, available wherever/whenever you want.



* Available only on Volista StandOP.
† Available only with Volista Access.
‡ Available only with Volista StandOP.
§ Available with both Volista Access and StandOP (3rd cupola only possible with Volista StandOP).

# Maquet Volista
## Technical data

| Optical characteristics | Maquet Volista StandOP | | Maquet Volista Access | |
|---|---|---|---|---|
| Lighthead | 400 | 600 | 400 | 600 |
| Illumination | 160,000 lx | | 160,000 lx | |
| Dimming range (%) | 6 steps with eye sensitivity response | | 6 steps with eye sensitivity response | |
| Light patch diameter | 7.9–9.8 in. / 20–25 cm | | 7.9–9.8 in. / 20–25 cm | |
| Depth of illumination at 60% | 19.7 in. / 50 cm | | 19.7 in. / 50 cm | |
| Color temperature | Adjustable (TK): (3 levels) 3,900K / 4,500K / 5,100K | | Fixed: 4,300K | |
| Volista VisioNIR Suitable with NIR cameras | Available with adjustable color temperature | | N/A | |
| Color rendering index (Ra) | 95 | | 95 | |
| Irradiance at nominal illuminance (W/m²) | <500 | | <500 | |
| LED life time | >60,000 hr.* | | >60,000 hr.* | |
| Ambient light | Available | | Available | |

| Shadow dilution | Maquet Volista StandOP† | | Maquet Volista Access | |
|---|---|---|---|---|
| Lighthead | 400 | 600 | 400 | 600 |
| With two masks | 50% | 58% | 45% | 50% |
| With one lateral mask | 77% | 86% | 71% | 75% |
| Additional options | AIM, LMD | | No | |

| Full HD cameras | Wired‡ | Wireless |
|---|---|---|
| Signal system | 1080i / 1080p | 1080p |
| Number of pixels | 2.12 megapixels | 2.12 megapixels |
| Zoom range | Zoom 42x | Zoom 42x |
| Video signal outputs | 2 x 3G - SDI | HDMI 1.4 |

\* In nominal mode.
† With LMD (Luminance Management Device) and AIM (Automatic Illumination Management).
‡ Only on Volista StandOP.

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