



# Maquet Volista Surgical Light

A clear vision for patient safety

This document is intended to provide information to an international audience outside of the US.

GETINGE 





# Maquet Volista

## Get a clear view of the surgical site

A successful surgical outcome is deeply rooted in the surgeon's ability to visualize and assess the wound.

By optimizing color rendering and minimizing colored cast shadows, Maquet Volista Surgical Lights improve patient safety and 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, and prevent ergonomic issues that are common in medical settings.

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

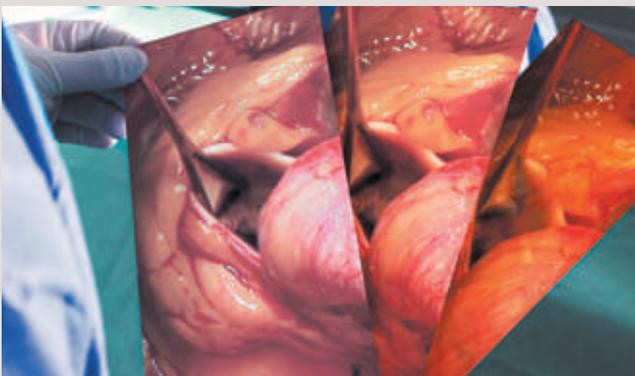
At a glance

## Adjustable color temperature\*

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



Maquet Volista 400



## Adjustable color temperature\*

- Customized to meet the needs of each procedure
- Stable color temperature through aging
- Only one type of white LEDs



## Full HD wireless camera

- Image sharing in HD quality
- Optimize understanding and learning



**Full HD wireless camera**

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



**Luminance Management Device (LMD)\***

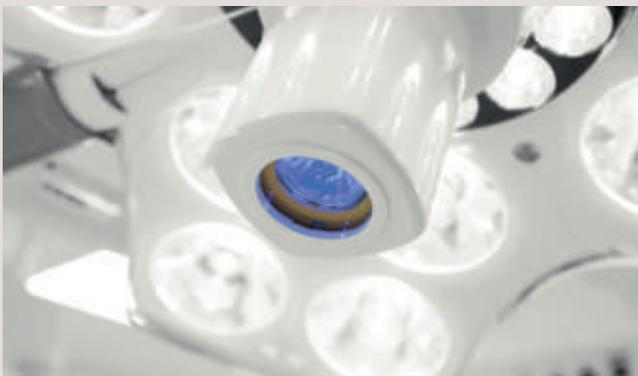
Maximize useful light and minimize eye fatigue caused by glare or reflexion with the LMD

**Automatic Illumination Management (AIM)\***

AIM improves workplace comfort. Reduce heat on the surgeon's head while delivering consistent and effective illumination

Maquet Volista 600

\* only available for Maquet Volista StandOP



**Luminance Management Device (LMD)\***

Automatically adjusts the luminance according to distance and tissues



**Automatic Illumination Management (AIM)\***

- Automatically compensates to minimize shadows
- Stable useful light
- Move freely
- Less heat on surgeon's neck



# Improving intraoperative visibility

Good lighting is a critical part of clear assessment and safe treatment. With the Maquet Volista Surgical Light, we're helping surgeons do what they do best.

## Improving safety during surgical procedures

The white LEDs used in Maquet Volista deliver the most natural and faithful color rendering. With optimal color rendering (Ra 95), Maquet Volista gives surgeons a clear look at the surgical site, enabling the most appropriate interpretation and diagnosis. Long-life LEDs ensure more than 60,000 hours of uninterrupted illumination, minimizing downtime and maintenance.

### Eye protection

With dimming following human eye sensitivity.

### Safe irradiance

Protect delicate patient tissues by minimizing radiant energy at the surgical site. In nominal illuminance, two lightheads can be safely overlapped.

### Smart electronics

All LEDs are independently controlled by smart electronics, ensuring maximum illumination even in the event of an individual LED failure.



### Stable color temperature

Our white LEDs and patented three-level cold filter system in our Maquet Volista StandOP adapts the color temperature without colored cast shadows.

**BOOST**

160,000 Lux

### Boost mode

The boost function offers reserve illumination capacity up to 160,000 Lux to prevent complicated situations. This genuine reserve illumination is available whenever it's needed.



## Reducing hospital-acquired infections

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 to improve patient outcomes.

### Easy-clean paint

Maquet Volista Surgical Lights are coated in a special paint that minimizes bacterial adhesion and facilitates manual cleaning to prevent germ spread.

### Touch control panel

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



### X- and Y-shaped lighthoods

The streamlined X- and Y-shaped lighthoods ensure compatibility with laminar flow ceiling systems to prevent the spread of airborne bacteria.

# Improved working conditions can lead to better patient outcomes

Surgery is a high-stress job with long hours. Poor lighting can slow surgical progress and cause eye strain that can lead to fatigue-related errors. Improve outcomes for patients and staff with high-quality surgical lighting.

## **Consistent and stable illumination**

Better lighting quality can improve conditions for patients and staff. Getinge has designed a high quality surgical light to deliver stable, shadow-free illumination.

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

**Luminance Management Device (LMD):** LMD technology could be integrated into the Maquet Volista StandOP lighthead, measuring intensity of reflected light from red and white tissue. The technology compensates to maximize useful light and also prevents safety by adjusting automatically the luminance and maintaining safety levels of irradiance even when two lighthead are overlapping.

**Automatic Illumination Management (AIM):** The AIM system in Maquet Volista StandOP automatically compensates for obstructions to deliver additional light from unmasked LEDs. AIM minimizes shadows and offers consistent and effective illumination, without readjustment.

**Homogeneous light volume:** A column of useful light reaches into the deepest cavities, without readjustment.

## **Minimizing errors by reducing fatigue**

Eye fatigue caused by glare, shadows, and inadequate color rendering can cause physical and cognitive stress. Minimizing fatigue can result in better patient outcomes and improved staff satisfaction.

**Ambient light:** Maquet Volista offers green ambient lighting at the center of the lighthead to minimize glare on monitors during minimal invasive surgeries. The ambient light provides enough illumination to help surgical staff move safely in the darkened OR.







# Fully adjustable to meet each surgeon's needs

With Maquet 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
- Also 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 if a camera is set
- Warning and battery indicators

## Lighthouse control panel: centralized command aid



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

- Access to lighthouse and camera settings
- Lighthouse synchronization
- Presets for storing favorites by surgeon or specialty
- Assistance with preventive maintenance, including backup
- Power supply testing
- Self-diagnostics



# A complete medical technology provider

At Getinge, we know more than just lighting. We are experts in complete room concepts for your hospital. We analyze workflows to plan and build rooms from floor to ceiling; design tables and other infrastructure to improve workplace ergonomics; establish efficient instrument

reprocessing systems that reduce the risk of cross-contamination; and offer enhanced data management solutions that improve workflow. We offer complete concepts from a single source, tailored precisely to your technical and economic requirements.

Getinge products streamline data management, improving access and efficiency to help you make better clinical decisions.



### Comprehensive OR integration

The control center for your OR, Tegrís, unifies video, imaging, data sharing and storage to increase safety and efficiency.

### Full HD wireless camera

HD images and video can be shared instantly and with no visible latency using a dependable encrypted transmission protocol. Share best practices among surgeons, or document procedures for risk management with full HD clarity.



### Getinge Flat Screen Holder

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



### Quick Lock System

The tool-free system allows wireless 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.

### Intuitive touchscreen interface

The wall keypad allows the synchronization of the cupola to meet specific surgeon or specialty preferences.



Let us help you maximize the functionality of your OR.

# Maquet Satellite Anchoring System

– the system for your needs

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 Satellite allows equipment to be positioned within reach of the surgeon, concealing wires and cables to improve safety and hygiene. 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 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

- Satellite is designed not to obstruct laminar flows to prevent germ spread
- Sleek and rounded surfaces are easy to clean and disinfect



# Maquet Volista

## Product range

### Multimedia equipment

Single/Double<sup>1</sup> Getinge Flat Screen Holder



Maquet Orchide HD<sup>1</sup>



Wireless camera (Full HD and HD)



LMD<sup>2</sup>



Touchscreen wall keypad



Capacitive wall keypad<sup>3</sup>



Lighthouse keypad



### Suspension arms

Maquet SB Suspension<sup>3</sup>



Maquet Volista StandOP Suspension<sup>4</sup>



Maquet Satellite Anchoring System<sup>5</sup>



Maquet Rolite



<sup>3</sup> Available only with Volista Access

<sup>4</sup> Available only with Volista StandOP

<sup>5</sup> Available with both Volista Access and StandOP (3<sup>rd</sup> cupola only possible with Volista StandOP)

# Maquet Volista

## Technical data

Optical characteristics	Maquet Volista StandOP		Maquet Volista Access	
Lighthouse	400	600	400	600
Nominal illuminance $E_c$ (lx)	130,000		130,000	
With Boost mode	160,000		160,000	
Dimming range (%)	10–100% with eye sensitivity response		10–100% with eye sensitivity response	
Light patch diameter (cm / inch)	20–25 / 7.9–9.8		20–25 / 7.9–9.8	
Depth of illumination at 60% (cm / inch)	50 / 19.7		50 / 19.7	
Color temperature (K)	Fixed: 3,900 Adjustable: (3 levels) 3,900–4,500–5,100		Fixed: 4,300	
Color rendering index (Ra)	95		95	
Irradiance at nominal illuminance ( $W/m^2$ )	< 500		< 500	
LED life time (h)	> 60,000*		> 60,000*	
Ambient light	Available		Available	
Shadow dilution	Maquet Volista StandOP**		Maquet Volista Access	
	400	600	400	600
With two masks	66%	86%	49%	52%
With one lateral mask	100%	100%	71%	75%
Additional options	AIM, LMD		no	
Cameras	HD camera data		Full HD camera data	
Signal system	720p		1080p	
Number of pixels (megapixels)	1.43		2.38	
Zoom range	Zoom 48x Overridable to 144x		Zoom 40x Overridable to 120x	
Video signal outputs	HDMI 1.3 on HDMI connector		HDMI 1.3 on HDMI connector	
Transmission	Wireless		Wireless	

\* In nominal mode

\*\* With LMD (Luminance Management Device) and AIM (Automatic Illumination Management)



# Financial solutions to meet your needs

## Getinge Financial Services

As an integrated solutions provider, Getinge offers you a mix of broad industry commitment and financial expertise that is outstanding in the medical technology sector. We operate globally, yet we place great emphasis on a strong local presence to understand your country-specific requirements and challenges.

### Finding the right solution for you

Our strong and long-standing relationships with Export Credit Agencies (ECAs) and a dedicated pool of partners enable us to offer you a wide range of financing solutions. With Getinge Financial Solutions (GFS) as your partner, you can benefit from competitive rates and a solution adapted to your needs.

#### ECA-covered Supplier credit\*

Getinge Financial Services works closely with several ECAs and a dedicated pool of partners to help you secure financing with flexible terms and often with better conditions than what you would expect from local funding.

- This additional credit line will not affect your existing credit line with your local bank.
- You only begin paying off the loan after the fulfillment of delivery conditions.
- This leaves resources free for your other investments.

#### Hire Purchase Program\*

Hire Purchase offers you the full use of the equipment even before ownership is transferred. This flexible solution is ideal for projects requiring a high capital investment, such as surgical lights.

- Own the equipment at the end of the contract.
- Ownership is transferred upon the last payment.
- Suited for projects of all sizes.

### Together, we will make your project a success

With Getinge as a partner, you can rely on the best possible service. Both your Getinge sales representative and your GFS contact will support you from your initial product information request, right through to the closing of your project.

\* Availability of program dependent on country and subject to credit approval, please check with your sales representative



Getinge is a global provider of innovative solutions for operating rooms, intensive care units, sterilization departments and for life science companies and institutions. Based on our firsthand experience and close partnerships with clinical experts, healthcare professionals and medtech specialists, we are improving the everyday life for people – today and tomorrow.

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