

VOLISTA

GETINGE GROUP

Superior surgical light technology





VOLISTA surgical lights

Helping surgeons see well and perform better

You don't need to be an expert on surgical lighting to appreciate how VOLISTA goes above and beyond to give surgeons the best possible view of the entire surgical cavity over the course of lengthy surgical procedures.

With VOLISTA, Getinge Group incorporates exclusive light technologies that ensure maximum efficiency, enhanced performance, and uncompromised optics for the surgical team. These patented innovations, combined with energy savings and ease-of-use, provide an innovative new option for surgical illumination.



Innovative advantages allow surgeons to **operate at their best**



Control at any time.



Set it and forget it.



Enhanced ambient light.

Fulfilling the promise of LED technology—typical LED lightheades spread light in all directions which can be an ineffective way to shape a precise beam of light that surgeons require. By comparison, VOLISTA's HECOL lens design produces overlapping, divergent light beams that deliver unmatched, consistent illumination. This technology produces no hot spots, helping surgeons distinguish subtle differences in tissue color in both the center of the surgical site and within the surrounding cavity walls.

Why brighter is not better—surgeons understand that more light isn't always the best light; especially at peak intensity levels that often result in unwanted glare, extreme eye fatigue and distorted color perception. That's why VOLISTA's HECOL lens provides an evenly distributed deep column of light that surgeons prefer at more comfortable lower illumination settings.

It's one button easy—if additional light is required during the course of the surgery, our exclusive BOOST technology gives surgeons fingertip control to increase illumination to a pre-set intensity in just seconds while retaining all light parameters (CRI, depth of field, light field size). With another touch of a button, light intensity automatically returns to its previous setting, eliminating guesswork or trial and error.

Set it and forget it—what's more, VOLISTA's pre-focused light guides virtually eliminate the need for manual lighthead adjustments and refocusing, allowing surgeons to concentrate on their patients rather than the position of the light.

Solving the LED dilemma—VOLISTA also automatically compensates for an inherent characteristic of LED lighting. All LEDs can lose up to 30% of their illumination intensity after just two hours of surgery. But thanks to exclusive FSP (Flux Stability Program) technology, smart electronics increase the current to the light as needed to maintain the initial light output throughout the entire procedure. With VOLISTA, when you start with 130,000 LUX, you end with 130,000 LUX. Unlike other lighting systems, no intervention is required.

Tailored for your surgeries—for your MIS procedures, VOLISTA offers green ambient lighting at the center of the lighthead, improving your view of monitors during surgery.

Exclusive options provide **unmatched control**

In its standard configuration, VOLISTA has taken LED technology for surgical lighting further than it has ever gone before. But we didn't stop there, offering the next generation of illumination management solutions that redefines surgical lighting's potential to contribute to positive patient outcomes.

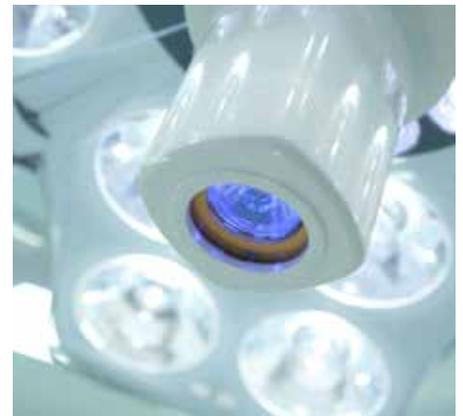
Automatic compensation for obstructed LEDs—by adding VOLISTA's optional Automatic Illumination Management System (AIM)*, the intensity of any single LED automatically is adjusted higher or lower depending on whether the system senses an obstruction by the surgeon or support staff positioned under the surgical light. In turn, AIM provides an extra measure of shadow control and consistent illumination whenever the LED array is partially obstructed. And it does so without any intervention by a member of the surgical team.

Automatic response to what the surgeon actually sees—until now, illumination intensity has been measured solely at the surgical site. But that's not always a true representation of the reflected light level available to the surgeon's eyes. That's because white tissue reflects more light and red tissue absorbs it. With this in mind, VOLISTA's optional Luminance Management Device (LMD)* integrated into the lighthead measures the intensity of the actual reflected light. So what you see is what you get, each and every time. No manual adjustments are necessary. It's like placing your surgical light on cruise control.

- Ideal working conditions
- Less eye fatigue for surgeons
- Designed to help facilitate better patient outcome due to optimal surgical environment



Patented AIM system provides stable illumination.



LMD ensures a true representation of surgical site.

* Only available with VOLISTA StandOP.

VOLISTA

More of what you are **looking for**

From patient outcomes to financial outcomes, every minute counts in the surgical suite—and VOLISTA was designed with the surgical team's valuable time in mind.

- Streamlined lighthead and drift-free, lightweight suspension are easy to maneuver and position.
- Intuitive touchscreen control is simple to use. Pre-sets capture surgeon and procedure preferences.
- Proactive alerts and maintenance reminders speed troubleshooting and help ensure long-term reliable performance.
- All primary functions can be controlled at the lighthead. Settings can be synchronized at the wall keypad.
- Redundant circuit board design and smart electronics help ensure a minimum of 50% illumination in the event of power fluctuations.



"X" shaped design is ideal for optimal laminar flow applications.



Intuitive, user-friendly touchscreen promotes ease-of-use.



Optional SATELITE® ceiling mount system

Versatility starts right here

SATELITE is a highly versatile, modular platform that accommodates your VOLISTA surgical light plus a wide range of flat panel monitors, cameras and lightweight equipment holders on a single ceiling mount—all ideally positioned near the surgical team. With SATELITE's versatile tri-mount design, equipment can be added or exchanged as your needs change, dramatically reducing downtime and future construction costs.

- SATELITE suspensions feature a large (1.57") internal diameter to accommodate the larger bundles required for advanced integration and multimedia applications.
- Cables are integrated into suspension arms to help improve hygiene and aesthetics.



Large internal diameter



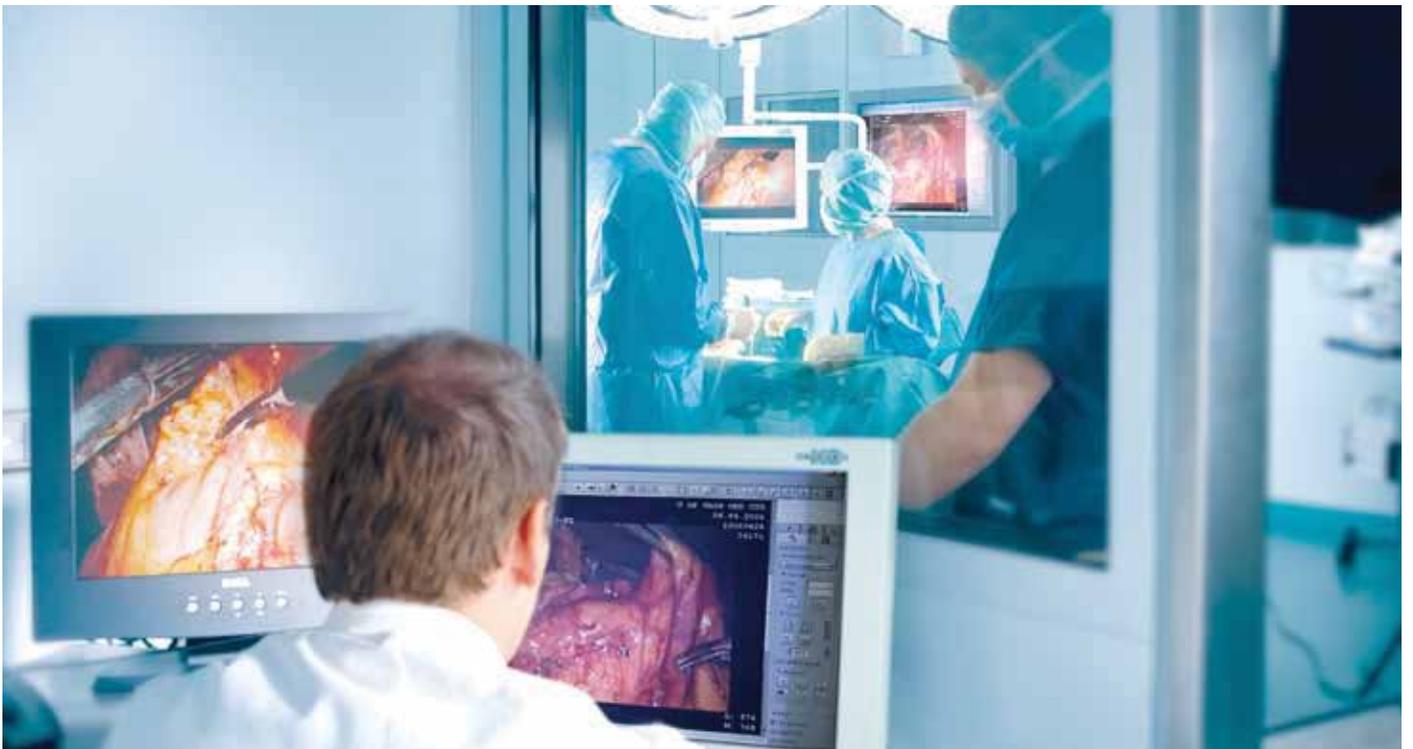
Modular suspension

Optional high-definition video

Exceptional color and image quality

VOLISTA gives you the option to specify a picture-perfect solution for video applications that can be integrated into the lighthead or positioned independently. High 2M pixel image quality and superb color rendering make it easy to distinguish subtle differences in tissue color and texture.

- Intuitive flexible controls facilitates video capture via the control panel or through wireless remote control.
- Serial link interfaces integrate with the OR platform.
- Slim profile allows for close positioning to the surgical field for unobstructed video capture.





Where sustainability meets ability

VOLISTA proves you don't have to compromise lighting performance or operational efficiency to minimize a product's impact on the environment. From product development and manufacturing through daily operation in the OR, VOLISTA reflects Getinge Group's commitment to build better—naturally.

- Minimal use of hazardous materials.
- Compact, efficient packaging reduces material use, reducing the carbon footprint.
- LED technology reduces energy consumption by 33% (compared with Halogen bulbs). Plus, VOLISTA LEDs have a lifespan of 60,000 hours or 30 years.
- Curved, smooth surfaces collect less dust to minimize the use of cleaners and disinfectant solutions.

Getinge Group design and service team

Experience the difference

For more than 175 years, we have been a trusted partner with healthcare professionals around the world to create customized clinical environments that help improve workflow, boost productivity and enhance patient care. From single-room renovations to comprehensive departmental and Hybrid OR designs, Getinge Group, through its Maquet brand of products, has a proven record of performance in meeting every design challenge.

- Initial micro-activity assessment analyzes space and equipment requirements, ergonomics, staffing levels and patient volume.
- Design recommendations reflect the ever-present need to improve staff and patient flow; facilitate future vertical or horizontal expansion; and account for the facility's communication systems.
- With the help of OR3D software, design recommendations are easy to visualize and compare.
- Once your equipment is installed, Getinge Group's certified service team offers the same great level of support you enjoyed during the project planning process to diagnose problems, order parts and dispatch service around the clock, 365 days a year.
- Regularly scheduled preventive maintenance plans help minimize equipment downtime and extend equipment life. Comprehensive (service/labor/parts) and partner plans are designed to meet your facility's budgetary requirements.



OR3D software rendering of OR room design.



Getinge Group's certified service team is your partner in maintaining your equipment.



*VOLISTA Access (ACE) Surgical Lighting.
Designed to provide surgeons the best
possible view of the entire surgical cavity
over the course of lengthy operating
procedures.*



*ALPHAMAXX Surgical Table.
Heavy-load operating table offering
maximum load capacity, maximum
flexibility and maximum comfort.*

Optimizing cleaning and disinfection

Even the paint has a purpose

Infection prevention is a critical component of patient safety and quality of care in the healthcare system today. Reduction of Hospital Acquired Infections (HAIs) is a central issue throughout the healthcare community, and a top priority.

Getinge Group is committed to help accelerate the elimination of HAIs through the design and application of our products. VOLISTA Surgical Lights are designed to meet the demanding

needs of the surgical team, and help optimize the cleaning and disinfection process.

VOLISTA is shown to help promote effective cleaning and disinfection. A recent study, conducted by the Biotech-Germade Laboratory, concluded that the paint utilized in the design of VOLISTA had significantly less microbial cells after cleaning and disinfection than standard paint.¹

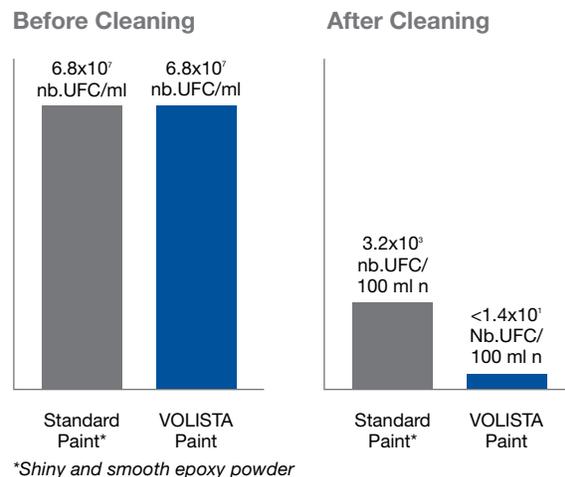
Biotech-Germade Study¹

Objective: The purpose of the study was to compare paint used on operating lights, including the VOLISTA Surgical Lights by Maquet (Getinge Group), in conjunction with remaining bacteria after cleaning and disinfection.

Method: The two paint samples were contaminated by depositing 50 µL of bacterial suspension, then cleaned using a dry steam decontamination process.

Conclusion: The number of viable *Staphylococcus aureus* CIP4.83 cells was reduced by at least 10⁵ with the paint used in the design of VOLISTA, compared with only 10³ for standard paint (shiny and smooth epoxy powder).

Measurement of Bacterial Concentration



1. Study data and certificate on file with Getinge Group.

Technical specifications

General Specifications

Specification	VOLISTA StandOP	VOLISTA Access
Number of LEDs	24	24
Brightness control	20% to 100%	10% to 100%
Light field diameter (patch size)	7.9 to 9.8 in	7.9 to 9.8 in
Life span	>60,000 hr	>60,000 hr
Lux	130,000 lx	130,000 lx
Lux with BOOST illumination	160,000 lx	160,000 lx
Green ambient light	Yes	Yes
Depth of field (L1 + L2)	20% at 43.3 in, 60% at 19.7 in	20% at 43.3 in, 60% at 19.7 in
Color Rendering Index	95 Ra	95 Ra
Color temperature	3,900 K	4,300 K
Radiant energy	3.5 mW/m ² .lx	3.5 mW/m ² .lx
Lighthouse power consumption	90W	90W
UL approval	Yes	Yes
Light control	Lighthouse handle and wall	Lighthouse handle and wall
AIM (Automatic Illumination Management)	Yes	No
BOOST illumination	Yes	Yes
FSP (Flux Stability Program)	Yes	Yes
LMD (Luminance Management Device)	Yes	No

Video Camera Specifications

Specification	HD	Full HD
CCD sensor	Cmos	Cmos
Signal system	720p	1080p
Effective number of pixels	1.430 Mio	2.380 Mio
Aspect ratio	16:9	16:9
Lens (zoom range)	12x	10x
Focal length	f=3.7 (Wide) to 44.4 (Tele) / 0.1 (Wide) to 1.0 (Tele)	f=3.8 (Wide) to 38 (Tele)/ 0.1 (Wide) to 0.8 (Tele)
Aperture	F1.6 to F2.5	F1.8 to F3.4
Antiflicker/Autofocus/Freeze/ Contrast Enhancement	Yes	Yes
Serial link interface	Wireless	Wireless
Location of camera	Center of the lighthouse	Center of the lighthouse
White balance	Auto/manual	Auto/manual
Video signal outputs	HD: 1x HDMI 1.4	HD: 1x HDMI 1.4
Camera head rotation	310°	310°

Configurations

Suspension arms



Access suspension.



StandOP suspension.



SATELITE modular system (up to 4 arms).



ROLITE Mobile Light.

Lightheads



VOLISTA Access 600 (single or double fork).



VOLISTA StandOP 600 (single or double fork).

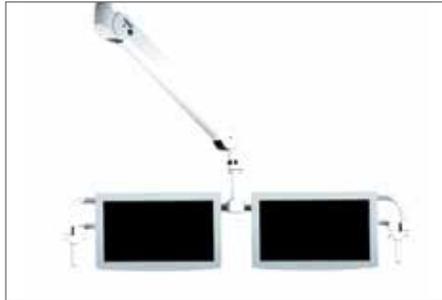


Optional with VOLISTA StandOP.

Multimedia equipment



Single flat panel holder screen (up to 30 in).



Double flat panel holder screen (up to 26 in).



ORCHIDE HD.



Wireless camera (full HD and HD ready).



red**dot** design award
winner 2013

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Getinge Group is a leading global provider of innovative solutions for operating rooms, intensive care units, hospital wards, sterilization departments, elderly care and for life science companies and institutions. With a genuine passion for life we build quality and safety into every system. Our unique value proposition mirrors the continuum of care, enhancing efficiency throughout the clinical pathway. Based on our first-hand experience and close partnerships, we are able to exceed expectations from customers—improving everyday life for people, today and tomorrow.