

Quasar® eLite

High Performance Surgical Lighting



HD
LED®

Quasar® eLite Unique Benefits



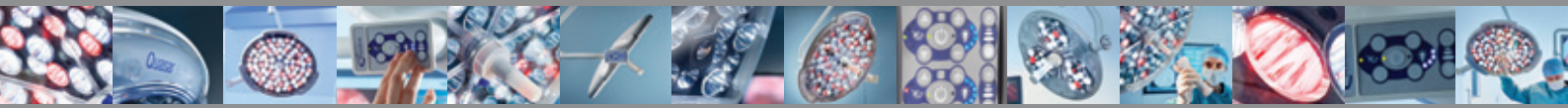
“Brandon Medical is a UK manufacturer and designer of world-leading technology for operating theatres, critical care areas and primary care institutions. For over 70 years, Brandon Medical has provided healthcare professionals with reliable, high-quality and affordable medical equipment. Continuous investment in our products allows us to meet the ever-changing needs of our customers, the healthcare industry and the patients it serves.”



Lights to suit all of your clinical needs

Brandon Medical provides a comprehensive range of LED medical lights to suit all of your clinical needs. Brandon Medical's LED medical lights use the latest innovations in LED lighting technology to provide you with better performance and lower lifetime costs. The choice of medical lights we offer vary in light intensity, light colour, mounting structures and price so you can choose a light that meets all of your clinical examination needs.





Why Quasar® eLite?

Near Perfect Colour Rendition with Red Balance Control

For the best visualisation of tissue during surgery.

Fat Beam Technology

The largest light beams of any current product with high intensity across the full beam width.

Unique Comfort Halo

A soft halo of light to reduce eye strain from high contrasts of light intensity.

Designed to Minimise Infections

Easy to clean, sealed light head, remote controls and anti-microbial coatings.

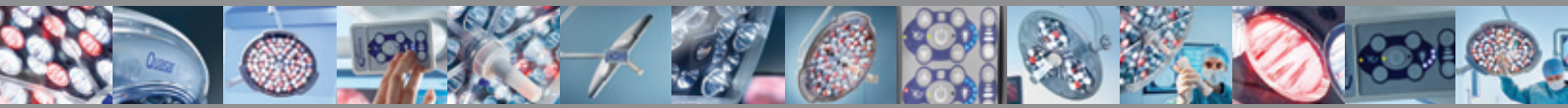
HDI-SDI Camera “Inside”

Integrated cameras are fully enclosed inside the light head for cleanliness and reduced cost.

Premium Quality Movement

Low weight light head and perfectly balanced arm system.

Quasar® eLite High Performance Surgical Lighting

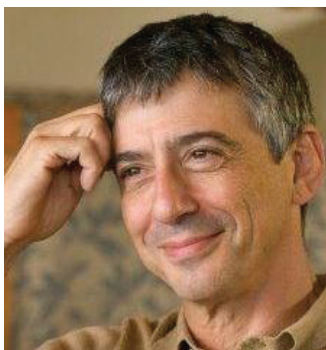


Colour Shadows

Quasar® eLite uses carefully placed reflectors to eliminate colour separation or 'colour shadows' normally associated with combining different coloured LEDs.

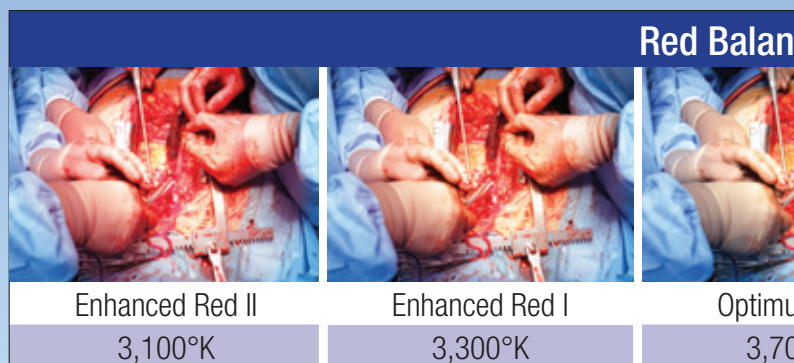
Why Red LEDs?

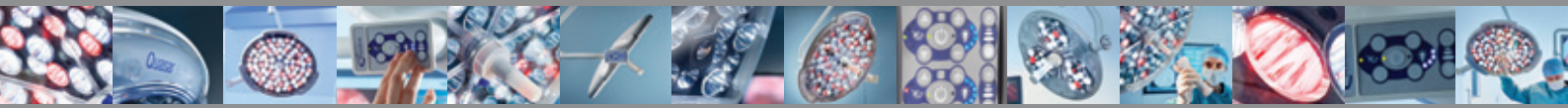
Red light is crucial to see small differences in tissue. Quasar® eLite combines red and white LEDs to provide the optimum balance between efficiency and colour rendition.



Prof. Jonathan Sackier
(FRCS, FACS)
Clinical Director, Brandon Medical

“Surgeons need “good lighting” but we are largely unaware what makes a surgical light “good”. Since working with Brandon Medical, I have learned that it’s about the colour of the light, the uniformity of the light field and the ability to adjust the colour balance, not just about how bright it is! It’s amazing how much research, knowledge and technology Brandon use in the design of their OR lights.”





Quasar® eLite and Mediclean® UCV
KIMS Hospital, Kent UK



Perfect Light (HD-LED)

Quasar® *eLite* is the only surgical light with near perfect colour rendition across the full visible spectrum. It features the highest R_9 colour rendition of any product and ensures strong and vibrant visualisation of tissues.

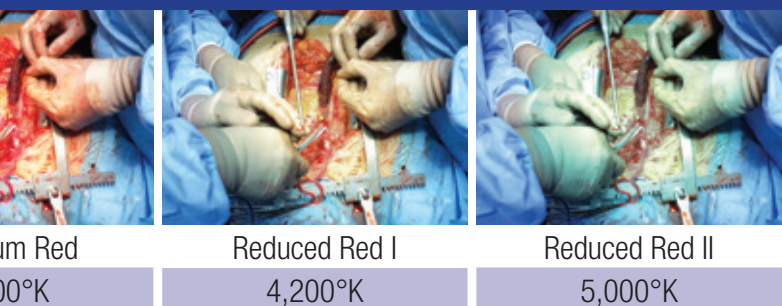
UCV Integration

Quasar® *eLite* is designed to work with all UCV ceilings, with minimum air turbulence and thermal lift. The lights have been independently tested to DIN 1946 Part 4 (12-2008) and comfortably exceed the requirements.

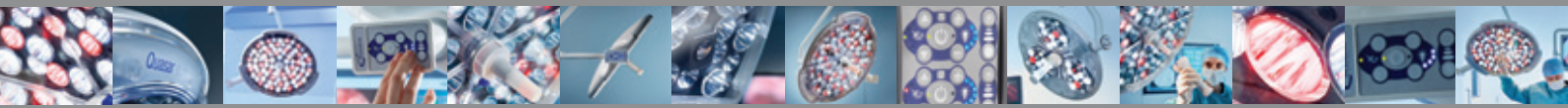
Red Balance Control

A unique feature to Quasar® *eLite*, Red Balance Control, provides the user with the option to adjust the balance of red light to match their own optical colour response. This allows the user to fine-tune the light ensuring minimal eye strain by making the light do the work instead of the eye.

Balance Control



Quasar® *eLite* High Performance Surgical Lighting



Fat Beam Technology

Quasar® *eLite* provides the very best light beam quality of any other product. Higher light flux ensures the biggest beams of light in the business, bigger illuminated fields and more light across the full width of the illuminated area.

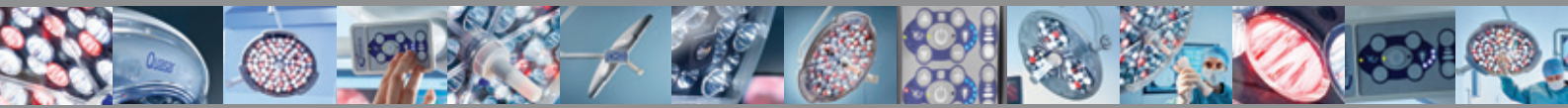
- High light intensity across the full illuminated area for uniform vision
- Large wound sites can be easily examined
- Beam size is adjustable to user preference
- 420mm maximum beam diameter

	d_{10}	d_{50}
Narrow Beam	200mm	120mm
Wide Beam	420mm	250mm

Comfort Halo

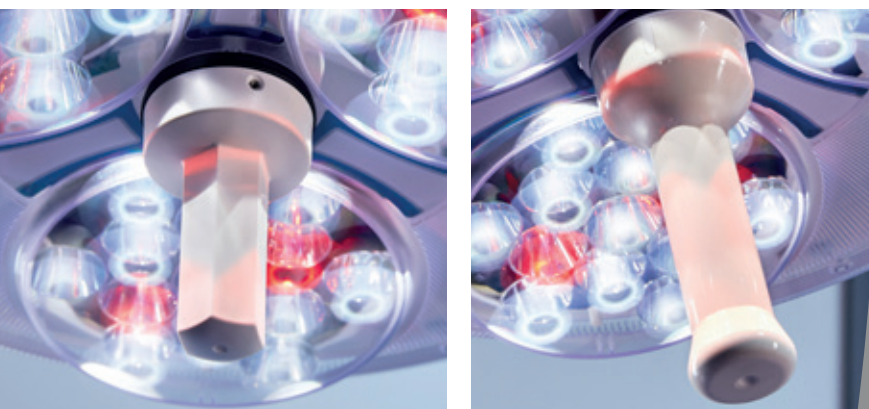
Quasar® *eLite* has been specifically designed to reduce eye strain for the user. The unique Comfort Halo forms an intermediate corona to create a more gradual change in contrast between the area illuminated by the operating light and general theatre lighting.





2 Handle Options:

Choose either the standard re-sterilisable handle covers, or our handle for disposable covers.

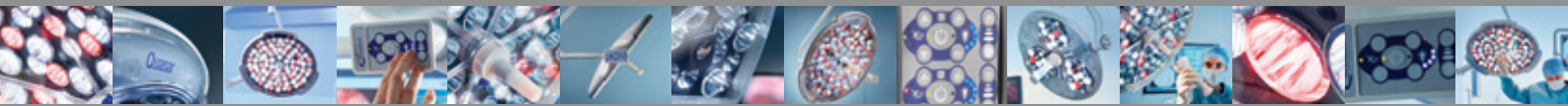


3 Light Head Options:

- Qe60 Major Light Head
- Qe6H Major Light Head with Integral HD-SDI video camera
- Qe30 Satellite Light Head



Quasar® *eLite* AV & Infection Control



HD-SDI Camera System “Inside”

Quasar® *eLite* can be personalised to include optional features such as HD Cameras that are fully embedded into the lamp head. The HD-SDI system produces outstanding picture quality on large monitors and provides a foundation for Brandon Medical’s Symposia® systems.

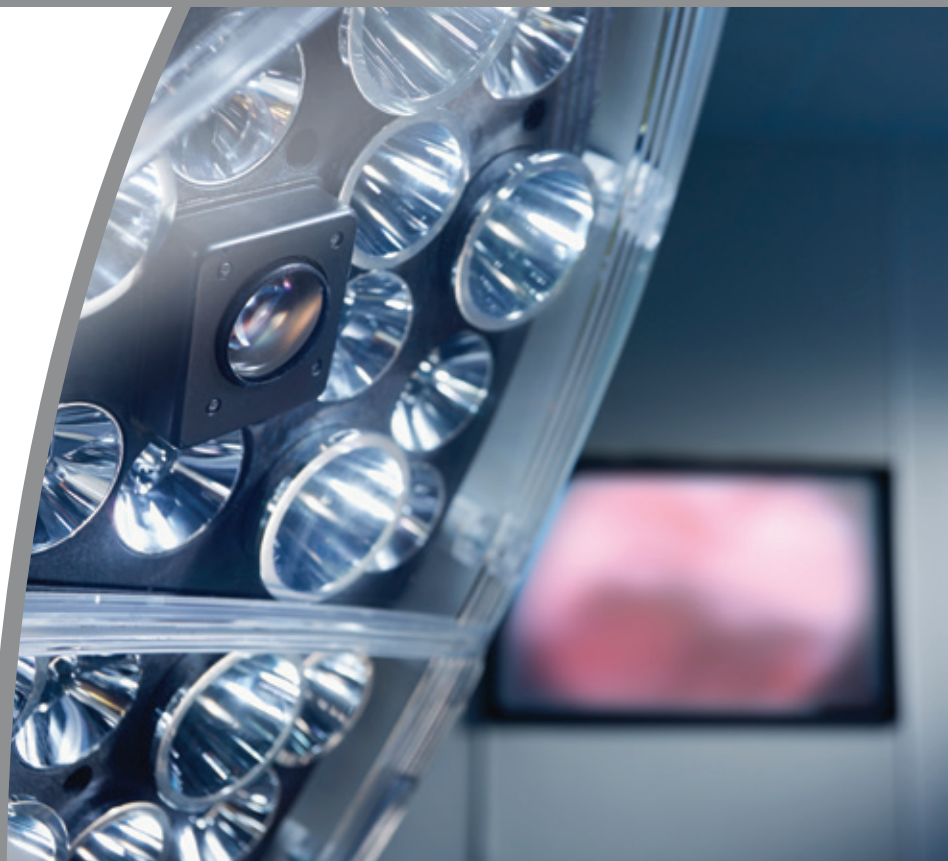
Elimination of “Visual Banding”

High definition cameras can detect the modulation frequencies of LED lights. This causes visual horizontal bands on the display monitors.

Quasar® *eLite* eliminates visual bands by accurately synchronising the frequencies of the LED modulation and the shutter speed of the HD camera system.

Media Arms

A full range of media arms can be combined with Quasar® *eLite* to support video, PACS, data and touch screen control.





Designed to Minimise Infections

Quasar® *eLite* has been designed to minimise infections. Anti-microbial additives are used to destroy harmful bacteria. The smooth, continuous surfaces are easy to wipe clean, with split lines kept to a bare minimum.

The Quasar® *eLite* light head is sealed against the ingress of dirt and liquids to prevent contamination, whilst the central handle with removable sterile cover allows for easy positioning.



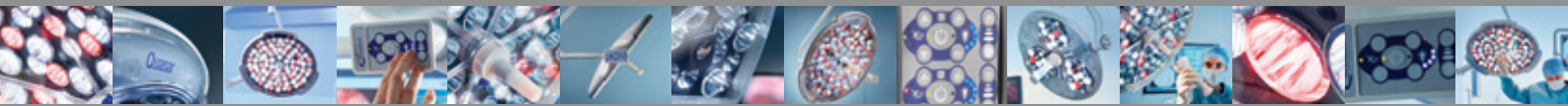
Polygiene®
Safer to Touch



Dr. Andrew Kemp
Consultant Infection Control Nurse

“ The surface of the lamp is easily the best I have seen to clean. The Quasar® *eLite* creates a significantly lower risk than any other operating lamp I have reviewed. ”

Quasar® eLite User-Friendly



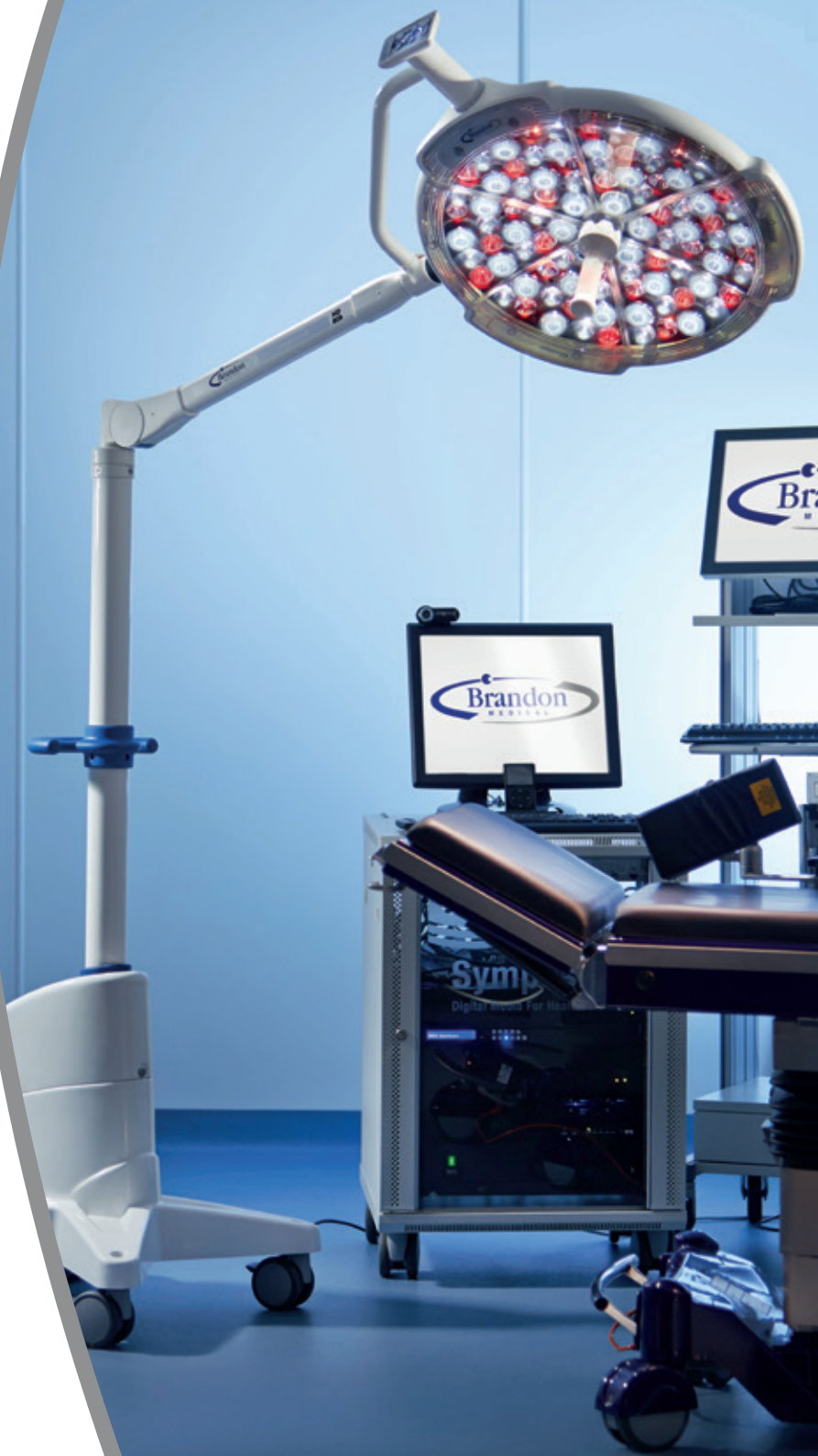
Manoeuvrability

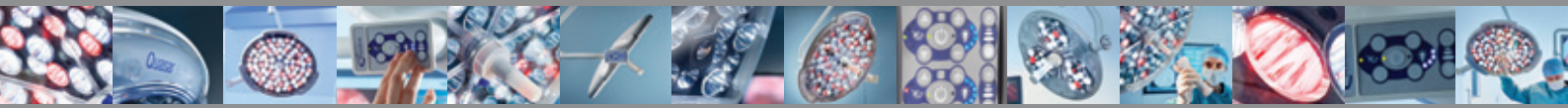
Ergonomics have been a major factor in the design process of Quasar® eLite resulting in a light with unparalleled user benefits:

- Light head edges form 'virtual handles'.
- Low-weight light head allows easy positioning.
- Six rotations light head.
- Needle roller bearings suspension system.

Robustness

- >60,000 hours LED Life.
- Hard wearing, custom designed bearings.
- Six individual light engines ensure continuous illumination in the event of module failure.





Intuitive Lighting Controls

Quasar® *eLite*'s ergonomic lighting control systems provide clear and intuitive adjustment of all lighting functions by the surgical team. This can be done at the light head, or outside of the sterile field via a secure wireless wall mounted control system.

Functions include:

- Electronic lighting control from the light head keypad.
- Focus (field size) adjustment from the keypad
- Sterilisable handle and wall mounted control
- Red Balance Control to optimise the visualisation of red tissue.
- Light intensity control with endoscopy setting (5%).

Wireless Wall Mounted Control Unit

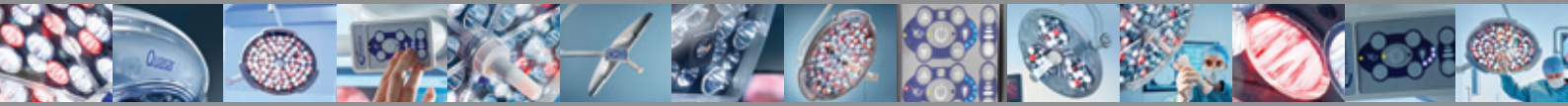


Minimal Environmental Impact

- The highest lighting performance with the smallest energy consumption.
- Estimated CO₂ reductions of at least 1.25 tonnes per year.
- LED life more than 60,000 hours.
- HD-LED does not use mercury, lead, cadmium, CFCs POPs, VOCs or halogens.



Quasar® eLite Multimedia & Integration



Multimedia & Integration

Integrated Equipment Solutions for Operating Theatres & Intensive Care

Brandon Medical offers a complete, integrated package of the highest quality clinical equipment and has a unique expertise in providing integrated solutions.

Medical Lighting

- Operating Theatre Lights
- Minor Surgical Lights
- Examination Lights
- Illuminated Magnifiers

Control & Power Systems

- Isolated Power Systems
- Emergency Power Supplies
- Theatre Control Panels

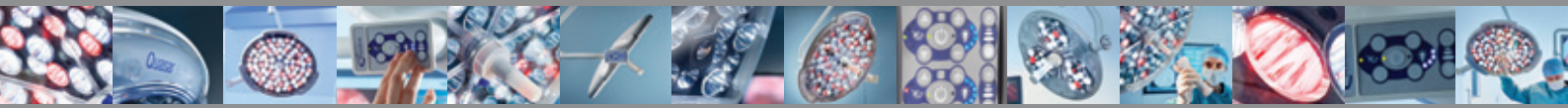
Medical Architectural

- Operating Theatre Pendants
- Intensive Care Pendant Systems
- Ultra Clean Ventilation
- Media Bridges

Medical AV Systems

- Integrated Digital AV Environments
- Digital OR Solutions
- Surgical Skills & Anatomy Training Centres





Integrated Audio & Visual

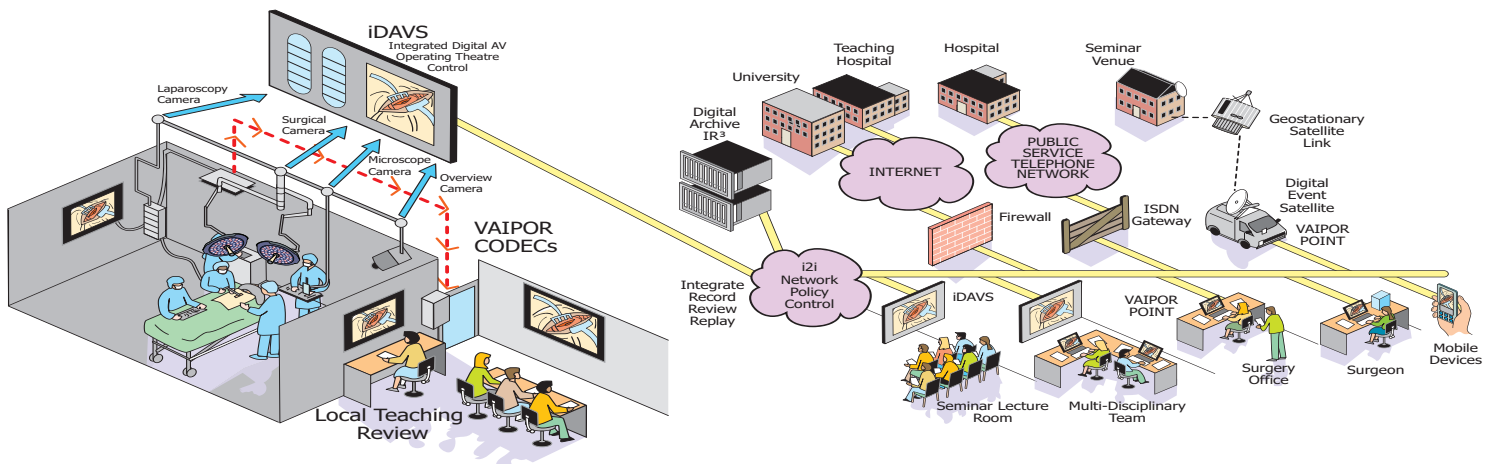
Quasar® *eLite* is specifically designed for the integration of the latest AV technology, including Brandon Medical's award-winning Symposia® systems.

- Fully integrated and enclosed HD cameras
- Single and double monitor mounting arms
- Heavy duty monitor arms
- Local controls, remote controls and software controls (via IP)

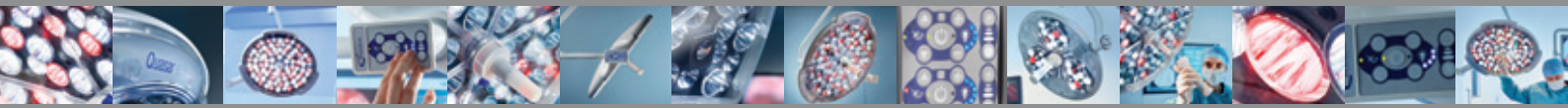


Symposia® is an integrated Digital AV system that produces the highest quality images, video and audio. It includes all the infrastructure to collect, review and display medical AV data with full 2-way audio and video communication.

Multi-medical installations range from simple video camera installations to complete hospital solutions and intranet telemedicine systems.



Quasar® eLite Technical Data



Qe60 and Qe6H



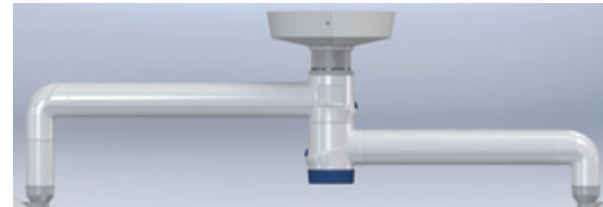
Qe30

Light Quality Characteristics	Qe60	Qe30
Light Intensity (Lux)	160,000	160,000
Number of Light Sources	90	39
Light Field Diameter (d10 Distance of 1m)	200-420mm	150-320mm
Light Field Diameter (d50 Distance of 1m)	120-250mm	90-160mm
Beam Uniformity (d50/d10 Ratio)	0.6	
Comfort Halo (at 1m)	2,000mm	1,500mm
Colour Rendition Index R_a	95	
Colour Rendition (Red) R_g	95	
Colour Temperature	3,100°K to 5,000°K (5 Steps)	

Electrical & Mechanical Characteristics	Qe60	Qe30
Nominal Power Consumption	2.07A/48W	1.7A/41W
Radiant Energy	<3.31mW/m ² .Lux	
Degree of Protection: Light Head	IP54	
LED Life	>60,000 Hours	

Part Number	Description
Qe60	Quasar® eLite Qe60 single light
Qe6H	Quasar® eLite Qe6H single light with HD-SDI camera
Qe30	Quasar® eLite Qe30 single light
Qe6060	Quasar® eLite Qe60 satellite with Qe60 satellite
Qe6H60	Quasar® eLite Qe6H with HD-SDI camera and Qe60 satellite
Qe6030	Quasar® eLite Qe60 with Qe30 satellite
Qe6H30	Quasar® eLite Qe6H with HD-SDI camera and Qe30 satellite
Qe606030	Quasar® eLite Qe60 with Qe60 and Qe30 satellites
Qe6H6030	Quasar® eLite Qe6H with HD-SDI camera, Qe60 and Qe30 satellites
Qe603030	Quasar® eLite Qe60 with two Qe30 satellites
Qe6H3030	Quasar® eLite Qe6H with HD-SDI camera and two Qe30 satellites

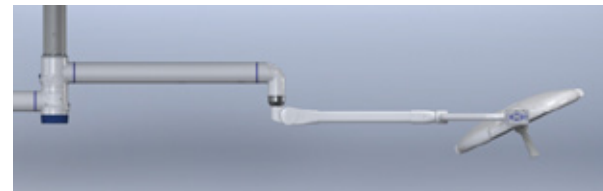
*Specifications may vary by +/-10%



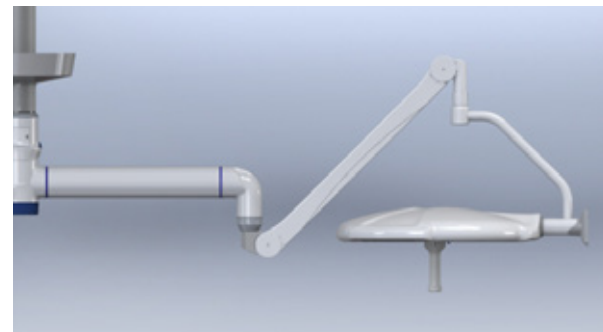
Available in Single, Double and Triple Arm Systems.



Standard Double Cardanic Yokes

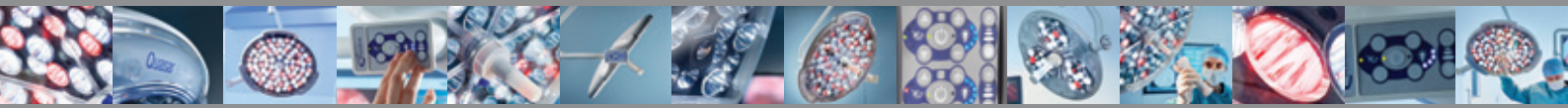


Low Ceiling Yoke

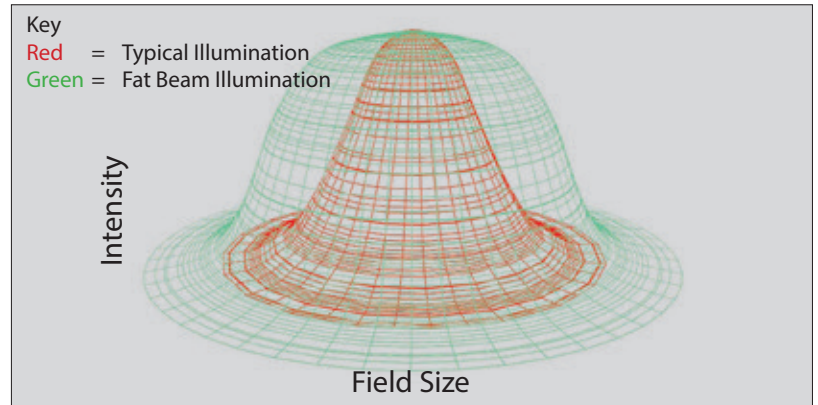
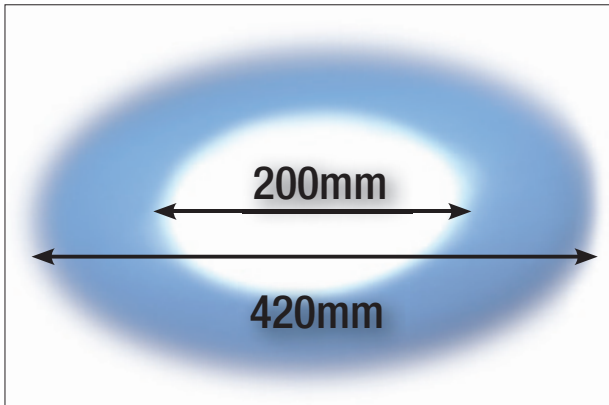


Single Cardanic Yoke

Quasar® eLite is available in a variety of mounting combinations to suit the needs of the surgical environment. HD camera options can be integrated into the slim light head and a range of suspension arms are also available for the perfect integration in hybrid operating theatres and low ceiling theatres.




Fat Beam Technology



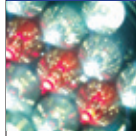
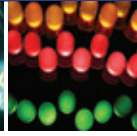

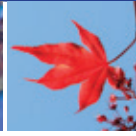

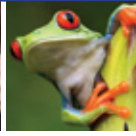


- High light intensity across the full illuminated area for uniform vision
- Avoids visual distraction by reducing high contrast in the illuminated area
- Adjust the beam size to suit your working area to eliminate peripheral distraction

CRI



R_a
95

Full Spectrum Colour Rendition

							
R_1	R_2	R_3	R_4	R_5	R_6	R_7	R_8
99	97	93	93	98	96	94	92

RED



R_9
95

Colour Rendering Index R_a

Colour Rendering Index (R_a) is a measure of how well a light source reproduces colours.

Near Perfect Colour Rendition Across the Visible Spectrum R_1 - R_8

HD-LED has near perfect colour rendition for all 8 colour measurements used to calculate general Colour Rendering Index (R_a). The "strong red" colour so important for visualisation of red tissues is not included in the R_a measurement.

Enhanced Red Balance R_9

R_9 indicates visible red colour reproduction which is a critical parameter for surgical lights.

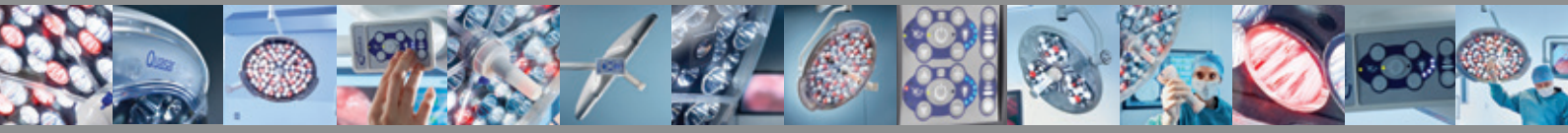


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Approved Exporter
Status GB 16164/13



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION





Quasar® *eLite* is part of the Brandon Equipment Package.

- Operating Theatre Lights and Battery Back Up
- Minor Surgical Lights
- Examination Lights
- Theatre Control Panels
- IPS Isolated Power Supplies
- UPS Uninterruptible Power Supplies
- PACS Workstations
- Medical Gas Pendants and Accessories
- Ultra Clean Ventilation Canopies
- Operating Table and Accessories
- Digital Audio Video Solutions

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