

# Astramax HD-LED®

Surgical Light



# HD LED®

# Astramax HD-LED® Surgical Light



*"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.







**HD  
LED®**

## High-Definition Surgical Lighting

*"HD-LED is a breakthrough technology with vastly better performance than standard definition LED or conventional surgical lights."*

### Full Spectrum Colour Rendition

The only surgical lighting with near perfect colour rendition across the full visible spectrum. Natural white light picks out all the visible colours for your eyes so you can clearly see without eye strain.

- Easy to distinguish small differences in tissue
- All the colours are strong and vibrant
- Reduced eye strain by making the light do the work instead of the eye



### Fat Beam Illumination

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
- Avoids visual distraction by reducing high contrast in the illuminated area
- Adjust the beam size to suit your working area to eliminate peripheral distraction



### Red Balance Control

With the highest  $R_g$  red colour rendition of any other product, Astramax HD-LED® provides optimum visualisation of red tissues. Red balance enhancement compensates for our natural weakness in distinguishing shades of red and is user adjustable to fine-tune the light to match our own red vision and the surgical conditions.

- Enhanced visualisation of red tissues
- Improved differentiation between tissues of similar colour
- You can adjust the light colour to match your own optical colour response



# Astramax HD-LED® High Performance Compact Surgical Light



## Slim, Compact and Powerful

Ultra slim and light-weight lamp head enables smooth, fast and precise positioning during procedures. Astramax HD-LED® is a compact yet powerful surgical light with an impressive 150,000 Lux output comparable with much larger surgical lights.

## Long Life

Astramax HD-LED® life of >60,000 hours equates to more than 20 years of normal use.

## Environmentally Friendly

HD-LED lights use up to 70% less energy than conventional medical lighting. HD-LED lights have the highest lighting performance with the smallest energy consumption.

LEDs are also mercury free, do not contain CFCs, POPs, VOCs, halogens or other harmful chemicals and are ROHS compliant.

## Large Illuminated Area

A large illuminated area of 320mm diameter makes it easy to illuminate large areas of tissue to target the light onto the wound.







## Shadow Control

By spreading the LEDs across the lighting surface, a much better distribution of light is provided from the lamphead. This enables excellent shadow control to under-light obstructions during procedures.

## Large Movement Range

Astramax HD-LED® lamp head is mounted on multi-movement arm mechanisms capable of positioning the lamp head within an exceptionally wide envelope of movement. The lamp has 5 rotations to allow easy positioning of the light beam from any angle.



## Economical

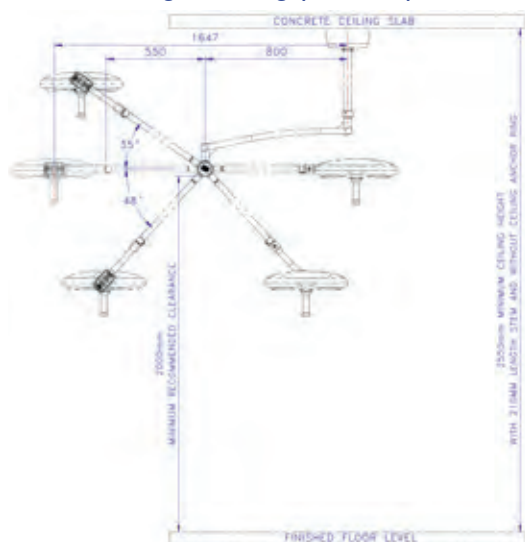
Astramax HD-LED® provides exceptional performance at a competitive price with minimal running costs. Using less than 50 watts of power and with >60,000 hours of LED life, Astramax HD-LED® continually saves money on energy and maintenance.

## Infection Control

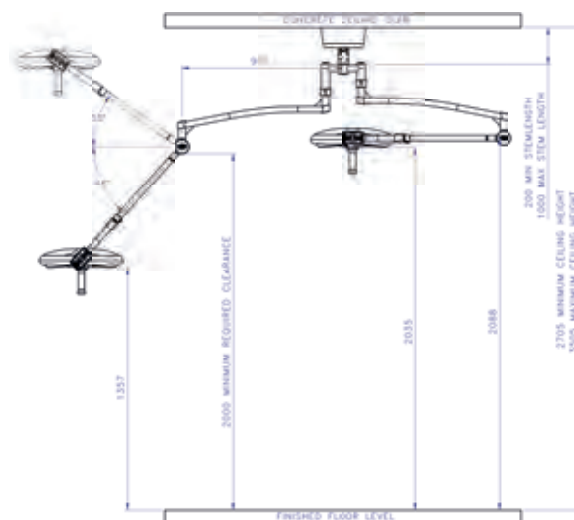
The lamp head is sealed to IP54 to protect from ingress of dirt and fluids. The smooth surfaces of the lamp head allow for easy disinfection. The lamp head is manoeuvred using a sterilisable handle.



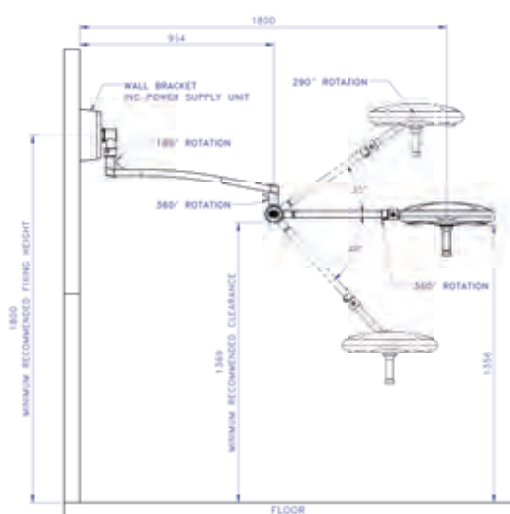
### Single Ceiling (AM30CJ)



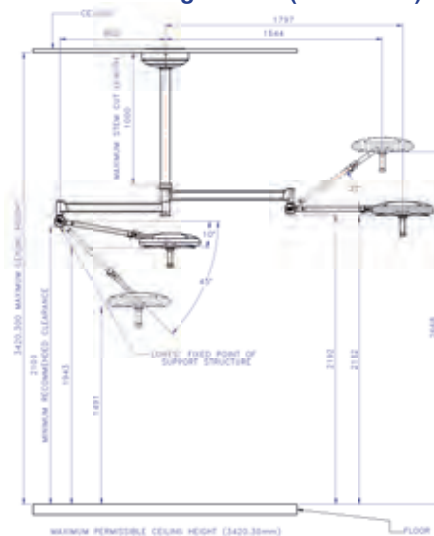
### Tandem Ceiling Mount (AM3030TJ, AM3010TJ)



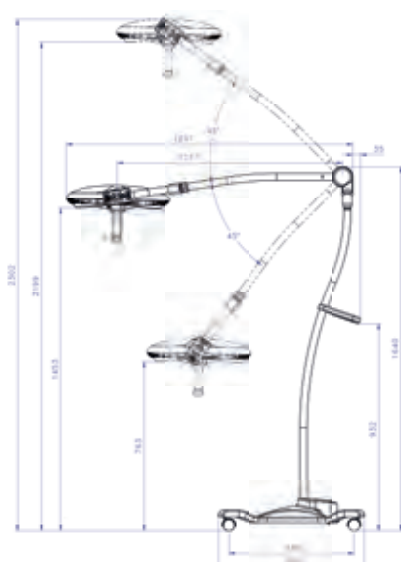
### Single Wall Mount (AM30WJ)



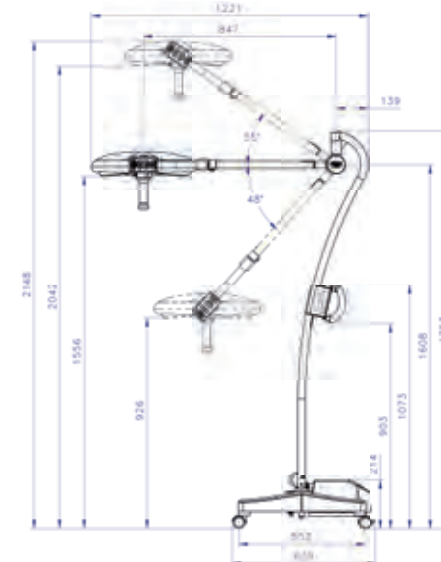
### Duo Ceiling Mount (AM3030D)



### Single Mobile (AM30M0)



### Single Mobile with Battery Back Up (AM30MEL)





Red Balance Control				
Enhanced Red II	Enhanced Red I	Optimum Red	Reduced Red I	Reduced Red II
3,100°K	3,300°K	3,700°K	4,200°K	5,000°K

The % of visible red light can be increased or decreased to optimise the visualisation of red tissues.  
Colour temperature is variable from 3,100°K – 5,000°K.

CRI
R <sub>a</sub>
95

Full Spectrum Colour Rendition							
R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	R <sub>7</sub>	R <sub>8</sub>
99	97	93	93	98	96	94	92

RED
R <sub>9</sub>
95

### Colour Rendering Index R<sub>a</sub>

Colour Rendering Index (R<sub>a</sub>) is a measure of how well a light source reproduces colours.

### Near Perfect Colour Rendition Across the Visible Spectrum R<sub>1</sub>-R<sub>8</sub>

HD-LED has near perfect colour rendition for all 8 colour measurements used to calculate general Colour Rendering Index (R<sub>a</sub>). The “strong red” colour so important for visualisation of red tissues is not included in the R<sub>a</sub> measurement.

### Enhanced Red Balance R<sub>9</sub>

R<sub>9</sub> indicates visible red colour reproduction which is a critical parameter for surgical lights.

### Technical Data

Light Intensity (at 1m)	150,000 Lux
Adjustable Colour Range (Red Balance)	3,100°K – 5,000°K
Colour Rendition Index R <sub>a</sub>	≥95
Colour Rendition Index Red Colour R <sub>9</sub>	≥95
Field Size D <sub>10</sub> at 1 metre	150 to 320mm (variable)
LED Life	>60,000 Hours
Supply Voltage	100 – 240 Vac 50/60 Hz
Power Consumption at Full Power	<50W
Radiant Energy	3.31 W/m <sup>2</sup> /Klux

### Exceeding Standards

Brandon Medical is certified as an ISO 13485 and ISO 9000 manufacturer, the global standard for medical device manufacturers. Brandon Medical Astramax HD-LED® lights conform to IEC 60601-1, IEC 606011-2 and IEC 60601-2-41



Part Number	Description
AM30CJ	Astramax Ceiling Mounted Surgical Lamp
AM30WJ	Astramax Wall Mounted Surgical Lamp
AM30MO	Astramax Mobile Mounted Surgical Lamp
AM30MEL	Astramax Mobile Mounted Surgical Lamp with Emergency Power Supply Unit
AM3030TJ	Astramax Tandem Ceiling Mounted Surgical Lamp
AM3010TJ	Astramax Astralite Tandem Ceiling Mounted Surgical Lamp
AM3030D	Astramax Duo Ceiling Mounted Surgical Lamp



UK Customs  
Approved Exporter  
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Astramax HD-LED® can be associated with Brandon Medical's wide range of products.

Operating Theatre Lights and Battery Back Up

Minor Surgical Lights

Examination Lights

Theatre Control Panels

PACS Workstations

IPS Isolated Power Systems

UPS Uninterruptible Power Systems

Medical Gas Pendants and Accessories

Ultra Clean Ventilation Canopies

Operating Table and Accessories

Digital Audio Video Solutions

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