

Product Description

Astralite®

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



Product Images



Product Features

Large Movement Range

Astralite® is designed so that the light head can be positioned all the way around the couch to examine all parts of the patient. The rotation allows easy positioning of the light beam from any angle

Long Life

LED life is greater than 50,000 hours which equates to more than 20 years of normal use.

Environmentally Friendly

Astralite® uses LEDs that are mercury free and do not contain CFCs, POPs, VOCs, halogens or other harmful chemicals.

Economical

Never having to change a bulb for the lifetime of the product means that Astralite® is highly economical. LED is substantially more efficient at producing more surgical quality light for less power.

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 Astralite® light head is sealed against the ingress of dirt and liquids to prevent contamination.

Silver Ion Antimicrobial Technology

Biomaster antimicrobial additive is moulded into the plastic lamp head parts and 'Ultra Fresh' is incorporated in the lamp head paint. Both of these additives have anti-microbial properties.

High Intensity Cold Light

Choose between the AL10 with 70,000 Lux at 1m or the even more powerful ALE10 with 100,000 Lux at 1m.

Adjustable Colour Contrast

The colour of the light can be adjusted depending on skin, tissue or wound to select the optimum lighting.

Large Illuminated Field

All models produce a large 250mm max. diameter light field with a 70-140cm working distance.

Sterilisable Handle Option

The standard handle is very easy to clean and accepts most disposable covers. A re-sterilisable handle is an optional item.

Model Number	Description
AL10MTA	Astralite 10 Series Lamp (70kLux) Mobile with Telescopic Column Built in PSU
ALE10MTA	Astralite PLUS 10 Series Lamp (100kLux) Mobile with Telescopic Column Built in PSU
AL10MTD	Astralite 10 Series Lamp (70kLux) Mobile with Telescopic Column Plug-Top Transformer
ALE10MTD	Astralite PLUS 10 Series Lamp (100kLux) Mobile with Telescopic Column Plug-Top Transformer

Technical & Performance Information:

Unless otherwise stated: All linear dimensions in mm, angles in degrees (±5°) and weights in kg

General System Information	AL10MTA	ALE10MTA	AL10MTD	ALE10MTD
Mount Type	Telescopic Mobile (AC)		Telescopic Mobile (DC)	
Lamphead 1	AL10	ALE10	AL10	ALE10
Weight (kg)	11	11	11	11
Conformity	CE (EU MDR 2017/745)			
Type of luminaire (to BS EN 60601-2-41)	Luminaire for diagnosis			
Medical Device Classification	I	I	I	I
Electrical Classification	I	I	I	I
Electrical Conformity	BS EN 60601-1; BS EN 60601-2-41			
System Max Power VA	25.4	33.5	25.4	33.5
Power Consumption @100% Intensity	17.5W	26W	17.5W	26W
Additional Information	Power Lead Supplied Loose with UK Plug (C13 to Type G)			

Mount	Telescopic Mobile (AC)	Telescopic Mobile (DC)
Column Height Adjustment (mm)	964-1665	964-1665
Base Width & Length (mm)	Dia 600	Dia 600
Weight of Mount (Including Column/Suspension Arm)	8	8
Total Arm Radius – Reach (mm)	290	290
Arm Rotation Lateral about Central Column Spindle (±5°)	-	-
Arm Angle Max Vertical Adjustment Up (±5°)	Fixed 70° from Vertical	
Arm Angle Max Vertical Adjustment Down (±5°)	-	-
Colour of Suspension Arms	White RAL 1910	White RAL 1910
Power Supply Unit Type	50W 24V DC	50W 24V DC
Supply Voltage	100-240VAC 50/60Hz (Fused via T 5AH 250V 5x20mm)	

Lamphead Photometric #		AL10	ALE10
Central Illuminance @ 1 metre (Lux max ±10%)		70,000 (8 Steps)	100,000 (8 Steps)
Field Diameter D ₁₀ @ 1 meter (mm)	Narrow beam [Wide beam]	149 [270]	149 [270]
Field Diameter D ₅₀ @ 1 meter (mm)	Narrow beam [Wide beam]	77 [89]	77 [89]
Light distribution d50/d10 (%) [@Narrow Beam]		52	52
Illuminated Area (cm ²)		254	254
Nominal Working Distance from Lamphead m		1	1
Colour Rendition Ra (Av R1-R8)		≥95	≥95
Colour Rendition R9 (red)		≥95	≥95
Colour Temperature (K)		See Adjustable Colour	
Adjustable Colour (Red Balance) (K)		3500 to 5000 K (6 Steps)	
Shadow Dilution:	Remaining Illuminance with		
	1 Mask (%)	n/a	
	2 Mask (%)	68	
	Tube (%)	100	
	Tube + 1 Mask (%)	n/a	
	Tube + 2 Mask (%)	56	
Depth of Illumination		L1+L2@60% (mm) 1200	
Number & Type of Lights per Lamphead		13 HD-LED®	13 HD-LED®
LED Life (hours)		>50,000	>50,000
Comfort Halo @ 1m (mm)		N/A	N/A
Radiant Energy (Irradiance per lux)		3.31 mW/m ² per lux	
Solid State Focusing Control		via Handle	
Intensity Control		on Keypad	
Shadow-less Light Technique		Multiple LED Elements	
Electronically Dimmable Light Intensity Range		5-100%	5-100%
Endoscopy Setting		n/a	n/a
Infrared Content		0	0
UV Content		0	0
Temperature Increase in Surgeon's Head Area		<1°C	<1°C
Luminous Efficacy (lm/W)		-	-
Keypad Orientation		n/a	n/a

Lamphead General, Mechanical & Electrical #		AL10	ALE10
Removable Sterilisable Handle		Yes (Sterilisable up to 137°C)	
Anti-Microbial Surfaces		Yes	
Light On/Off Switch Location		Keypad on Lamphead	
Ingress Protection Rating		IP54	
Lamphead Diameter (mm) Approx		296	
Lamphead Weight (kg) Approx		3	
Lamphead Yaw (°)		360°	
Lamphead Roll (°)		n/a	
Lamphead Pitch (°)		330°	
Power (VA)	Nominal [Max]	17.2 [25.4]	21.7 [33.5]
Power Consumption (W)	Nominal [Max]	8.5 [17.5]	13.2 [26]
Power Supply Unit Requirements (minimum)		Medical Grade 150W 24V DC	
Materials	Enclosure	Aluminium with Anti-bacterial coating	
	Lens Cover	Polycarbonate	
	Reflectors	ABS with metalized coating	

data per lamphead

See also Drawing: BSD_Astralite Mobile Systems Layout [15001]