

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 5 rotations allow 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
AL10CJ	Astralite mounted on a Ceiling Stem via 720 Swing Spring Arm
ALE10CJ	Astralite lamphead fixed to a ceiling-mounted suspension system
ALE1010TJ	Astralite lamphead fixed to a ceiling-mounted Tandem suspension system

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

General System	AL10CJ	ALE10CJ	ALE1010TJ
Mount Type	Ceiling Stem - Swing-Spring Arm		Tandem - Swing-Spring Arms
Weight (kg)	15.7		27.6
Lamphead 1	AL10	ALE10	ALE10
Lamphead 2	-	-	ALE10
Conformity	CE (EU MDR 2017/745)		
Type of Luminaire (to BSEN 60601-2-41)	Luminaire for diagnosis		
Medical Device Classification	I		
Electrical Classification	I		
Electrical Conformity	BS EN 60601-1; BS EN 60601-2-41		
System Max Power [VA]	25.4	33.5	33.5
Power Consumption @ 100% Intensity	17.5W	26W	52W

Mount Specification	Ceiling Stem - Swing- Spring Arm	Tandem - Swing-Spring Arm
Number of Arms	1	2
Ceiling Height Range (mm) [Max Ceiling Height with Cavity Spacer]	2539-3359 [4359]	2766-3536 [4536]
Weight of Mount (Including Suspension Arms) No Cavity Spacer	12.7	21.6
Arm 1 Lengths		
Horizontal/Suspension Arm [Total Reach] (mm)	800/750 [1550]	901/750 [1650]
Arm 1 Lateral Rotation of Horizontal about Central Stem Spindle (±5°)	360°	360°
Arm 1 Lateral Rotation of Spring Arm about Horizontal Spindle (±5°)	360°	360°
Arm 2 Lengths		
Horizontal/Suspension Arm [Total Reach] (mm)	-	901/750 [1650]
Arm 2 Lateral Rotation of Horizontal about Central Stem Spindle (±5°)	-	230°
Arm 2 Lateral Rotation of Spring Arm about Horizontal Spindle (±5°)	-	360°
Suspension Arm Angle - Max Vertical Adjustment Up (±5°)	45°	45°
Suspension Arm Angle - Max Vertical Adjustment Down (±5°)	45°	45°
Power Supply Unit Type Included	1 off Medical Grade 150W 24V DC	
Supply Voltage	100 - 240V AC 50/60Hz	

Lamphead Photometric #		AL10	ALE10
Central Illuminance @ 1 metre (Lux max ±10%)		70,000 (8 Steps)	100,000 (8 Steps)
Field Diameter	Narrow beam	149	149
D ₁₀ @ 1 meter (mm)	[Wide beam]	[270]	[270]
Field Diameter	Narrow beam	77	77
D ₅₀ @ 1 meter (mm)	[Wide beam]	[89]	[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 Ceiling Systems Layout [14978]