



I-LIGHT
SURGICAL ILLUMINATION SYSTEM

CLEAR VISUALISATION
FOR BETTER RESULTS

AYGUN[®]
SURGICAL INSTRUMENTS CO., INC.

Clear Visualization For Better Results

Leds offer better shadow control compared to conventional halogen bulbs. Halogen systems consist of a single bulb and multidirectional reflectors. Unfortunately, each direction requires a different setting and a different distance from the bulb. These differences may lead to unwanted "hot" and "cool" spots in the light pattern. A typical LED end-piece focuses LEDs at a single point. During this process it forms a block in order to avoid overlapping LEDs, therefore, LED points are round and consistent. There is no shadow cast on the patient during the surgery as the surgeons move in the lighted area. This can be tested with the surgeon moving their hands between the lamp and the operated area.

Performance	Units	LD5S	LD4S
Technology	-	LED	
Lighting at the center, Ec@ 100 cm	lx	160.000	120.000
Number of LEDs	pcs	60	48
Light field diameter	mm	220-320(adjustable 5 steps)	
Light field depth L1+L2 (@60% Ec)	mm	600	
Colour Renderig Index (CRI Ra)	-	min.90 (typ. 95)(R9: typ.90)	
Colour Temperature	K	4.500	
Electirical dimmability from/to	lx	60.000-160.000(6 steps)	40.000-120.000(6 steps)
Light parameters control	-	5" TFT LCD Touch Panel	
Service life	hrs	>54.000	
Handle	-	Removable and sterilizable	
Temperature increase in head area	C	< 1	
Rotation	°	360	
Radiant energy	mW/m ² lx	<3.4	
Shadowless	-	%99	
Endo light mode	-	yes (adjustable 5 steps)	

Electical Data

Power supply input voltage	V	100-240 VAC / 120-360VDC / 24VDC Backup or Battery	
Frequency of AC input voltage	Hz	50-60	
Power Consumption at Lighthead	W @ 24VDC	60	50

Mechanical Data

Light head weight	kg	19	17
Diameter of light head	mm	770	
Housing	-	Aluminum Alloy	
Design	-	Aerodynamically designed for Laminar Air flow	
Glass	-	Tempered Crystal Glass	
IP protection class	-	IP44	



I-LIGHT SURGICAL ILLUMINATION SYSTEM

Clear Visualization For Better Results

Aygün is furthering a number of R&D projects simultaneously thanks to its advanced R&D infrastructure, team of engineers and technical personnel specialized in their field. Thus, the company holds many patents and models actively used in the medical sector.



Maximum aerodynamic design for minimal turbulence

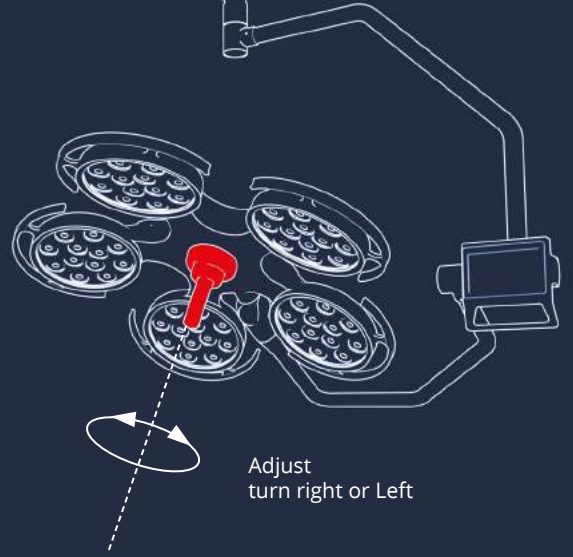
LCD User Interface


Advanced Multiple light beam configuration for shadowless illumination LED Technology

- Multiple Light Beam Configuration for Shadowless Illumination
- Improved Beam Technology
- No flicker effect
- Quality Light
- Super Optical Performance
- 5" TFT LCD Touch Screen Panel
- Memory function
- Easy to clean
- Endo Mode
- Ergonomic and practical design
- Laminar Air Flow
- Quick and comfortable usage
- Extra Protection

Quick and Comfortable Usage

Thanks to sterilizable handle, surgeon can do reposition easily and change the lighting field and ENDO mode quickly.



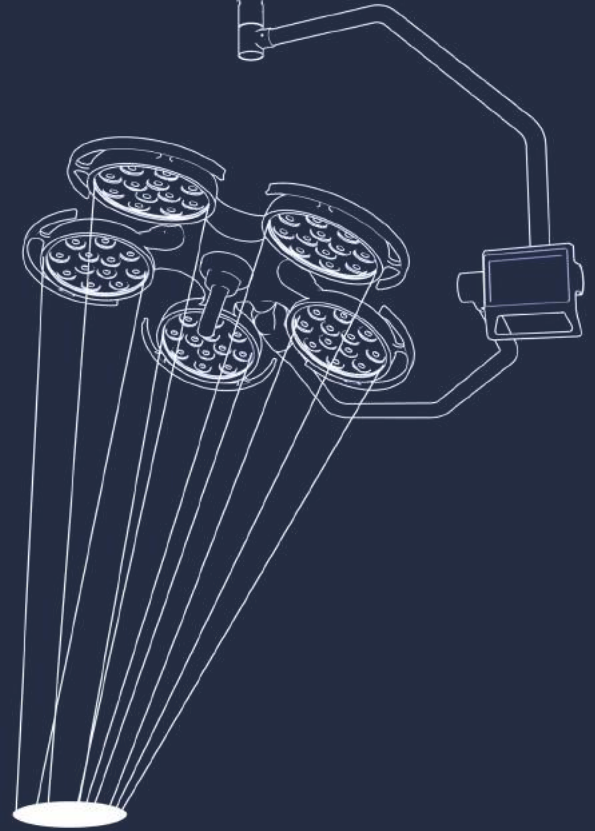


Multiple Light Beam Configuration for Shadowless Illumination

I-LIGHT boasts the ideal design for shadowless illumination thanks to its precise multiple light beam configuration.

Improved Beam Technology

Special lens technology designed for surgical lighting fully compatible with LED, provides homogeneous light field; when the light field is changed, the light intensity does not change.



Quality Light

Special alloy body design and LED driving technology minimize the heating of the light head. High quality LEDs with the lowest infrared or ultraviolet emissions, protects the patient from drying out of the tissue and provides a high quality working condition with the constant high-class lighting temperature to the operator.



No flicker effect

Thanks to the smooth LED driving technology no flicker effect is generated. Flicker effect can cause eye strain, headaches, blurred vision. Also light flicker causes corruption in photos or videos.



Super Optical Performance

Lighting functions are governed by microcontroller based electronic systems. By ensuring perfect LED and Lens compatibility, light quality is improved. By designed protected LED module, safer lighting is provided in case of failure of any LEDs the other LEDs are not effected. Each LED module can be replaced independently of the others and also they can be reached easily thanks to the independent Glass cover design of the Light head.



5" TFT LCD Touch Screen Panel

All functions used in the surgical light system are adjusted via the touch screen. Light intensity, focus and endo mode are set on the touch panel with animated feedback.

Easy to clean

Thanks to the smooth surface, it can be easily cleaned.



Memory function

When the product is energized, it is turned on with the last adjusted light parameters.



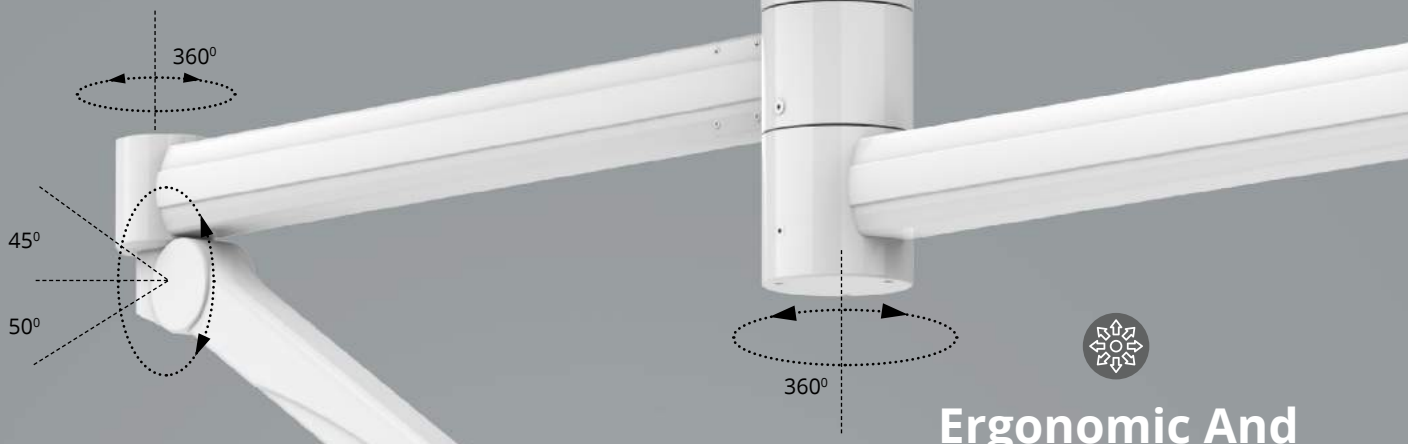


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Endo Mode

Provides the environment lighting necessary for endoscopic surgery with only one button and the system is switched back to the last surgical lighting settings with only one button.





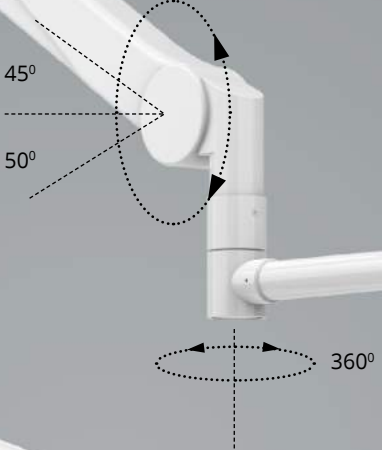
Ergonomic And Practical Design

Ergonomics are prioritized in product design, excellent mobility is provided.



Extra Protection

Positioned separate power supply system for each lighting head and designed protection system prioritized product safety

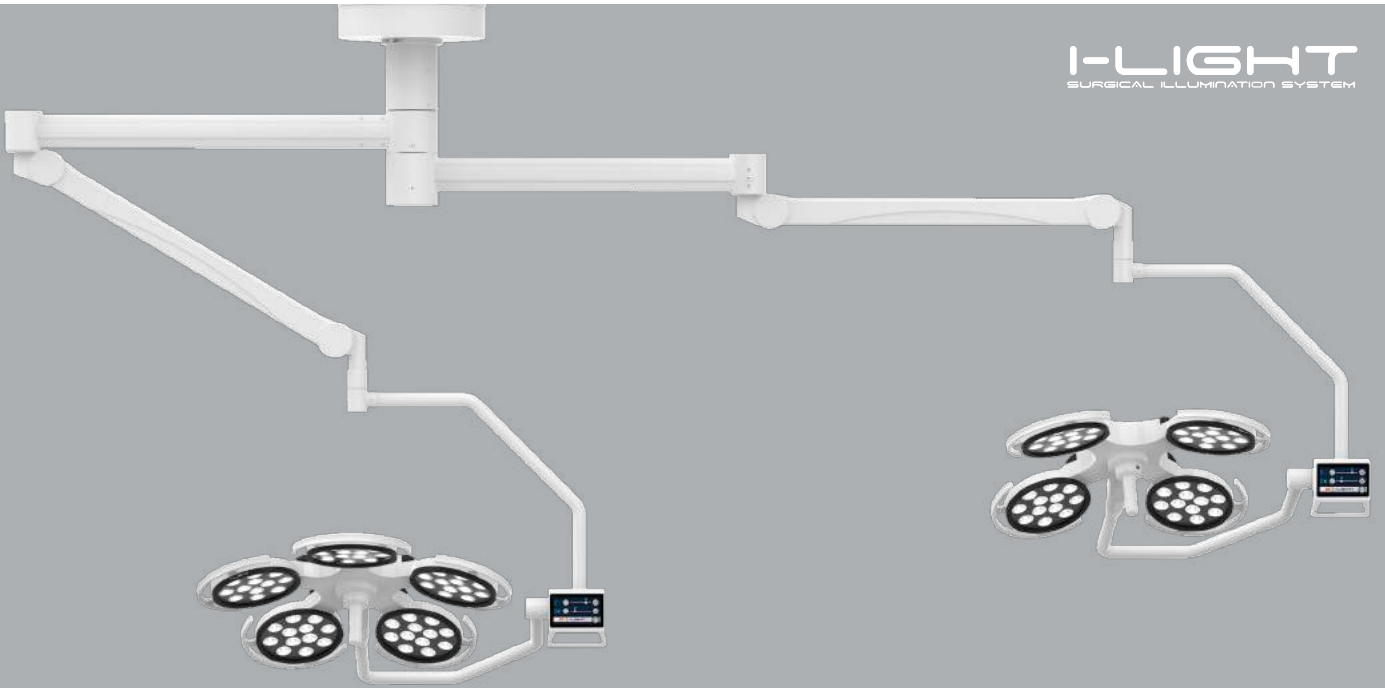


Laminar Air Flow

By means of design like a Drone, it is compliance with laminar air flow.



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LD54

POWER INPUT: 100 - 240 VAC
POWER CONSUMPTION: 150 VA
WEIGHT: 80 KG

LIGHT INTENSITY: 160.000 + 120.000 LUX
COLOR TEMPERATURE: 4,500 K
NUMBER OF LEDs : 60 + 48