

LK/LED-700/500 Type LED Surgical Shadowless Lamp

Technical Parameters and Product Introduction



1. Ultra-long service life:

Utilizing a new type of LED cold light source, the lifespan can reach over 60,000 hours, eliminating the need for bulb replacement. This is superior to traditional halogen lamps and meets the requirements of energy saving and environmental protection.

2. Perfect cold light effect:

Using a new type of LED cold light source, the spectrum contains no ultraviolet or infrared rays, resulting in no heat or radiation. The temperature rise on the doctor's head and the wound area is $\leq 1^{\circ}\text{C}$, with virtually no temperature increase.

3. Ideal design conforming to purification requirements:

The fully enclosed, streamlined, circular lamp head design conforms to aerodynamic principles, completely eliminating dead zones in the airflow of purified air, meeting the high-standard laminar flow requirements of modern operating rooms, and contributing to the sterile requirements of the operating room. The lamp shade is made of aluminum alloy, providing excellent heat dissipation; the surgical shadowless lamp head includes a sterile handle and a lamp head armrest, allowing medical personnel to move and adjust the lamp head from any angle, fully considering the flexibility of operation for medical personnel.

4. User-friendly interface design:

The lighting brightness can be adjusted according to the hospital's needs for different surgical lighting. A new LED touch LCD control panel is optional, allowing for the control of lighting on/off, contrast, color temperature, and brightness modes.

5. Superior deep illumination and perfect shadowless effect:

The overall design of the LED lamp head focuses the light beam into a high-brightness, uniform light column, ensuring a soft and uniform deep focus effect, guaranteeing the high brightness and depth illumination required for surgery.

6. Adjustable color temperature function:

The LK/LED-700/500 surgical shadowless lamp has six adjustable color temperature settings from 3000K to 6700K, making diagnosis more accurate and preventing eye fatigue for medical personnel during long working hours.

7. Excellent suspension system:

The lightweight, high-quality balance arm suspension system, with six sets of universal joint linkages, allows the surgical shadowless lamp head to rotate 360° without limitation. The sterile handle and 360° surrounding

armrest provide a comprehensive design to meet various height, angle, and position requirements during surgery, ensuring easy movement and accurate positioning.

8. Ingeniously Designed Focusing System:

Featuring manual focusing technology, it is simple and easy to operate, overcoming the technical difficulties in focusing LED surgical lights and achieving stepless focusing; the detachable handle can be sterilized at high temperatures ($\leq 134^{\circ}\text{C}$).

9. Bright and Uniform Illumination:

The light beam emitted by the LED light source is focused through specially designed high-performance lenses to create a light field in the surgical area that meets the needs of surgical illumination; the maximum illumination can reach 160,000 LUX. The brightness of the LEDs is controlled digitally and steplessly, and the illumination of each lamp head can be adjusted independently.

10. Extremely Low Failure Rate:

Each LED module contains 6-8 LED beads, and each module has an independent electronic control system. The lamp head has a very low failure rate, and the failure of a single LED will not affect the function of the lamp head.

11. Low Heat Generation:

A major advantage of LEDs is their low heat generation, as they emit almost no infrared or ultraviolet radiation.

12. Technical Parameters:

Model	LK/LED-700/500
Number of LED Bulbs	80/48
Illuminance (Lux)	40000—160000 / 40000—160000
Color Temperature (K)	3000—6700K adjustable / 3000—6700K adjustable
Light Spot Diameter (mm)	160-280
Dimming System	Stepless dimming system
Color Rendering Index	≥96
Illumination Depth (mm)	≥600
Temperature Rise at Surgeon's Head (°C)	≤1
Temperature Rise in Surgical Field (°C)	≤2
Color Rendering Index (CRI)	≥96
Color Reproduction Index	≥97
Maximum Irradiance	≤500 W/m² / ≅ 350W/m²
Power Supply Voltage	220V/50Hz
Minimum/Optimal Installation Height	2.5 meters / 3 meters

LK/LED-700/500 Model LED Surgical Shadowless Lamp

Configuration List (per unit)

Serial number	Accessory Name	Quantity	Unit	Remark
1	700 lamp head	1	set	
2	500 lamp head	1	set	
3	Disinfection handle	4	one	Two units each of standard and spare parts are included.
4	LED light assembly	1	set	The 700 lamp head has 80 LED beads.
5	LED light assembly	1	set	The 500 lamp head has 48 LED beads.
6	Balancing arm	2	set	
7	Rotating arm	1	set	双臂
8	Switching power supply assembly	2	set	
9	Fixed base	1	set	
10	Protective cover	1	set	
11	Tools included with the lamp	1	set	
12	Product certificate/Warranty card	1	set	
13	Instruction manual	1	set	

