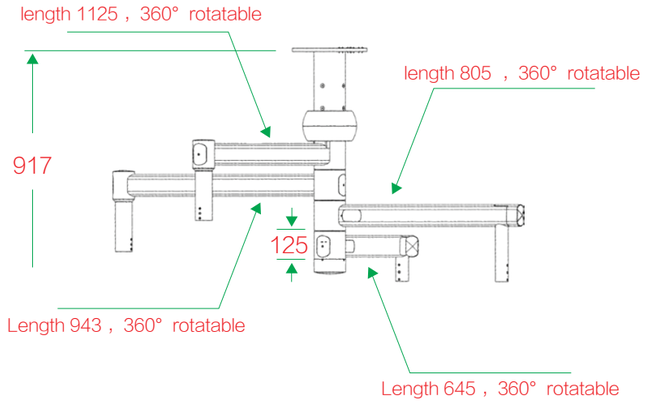
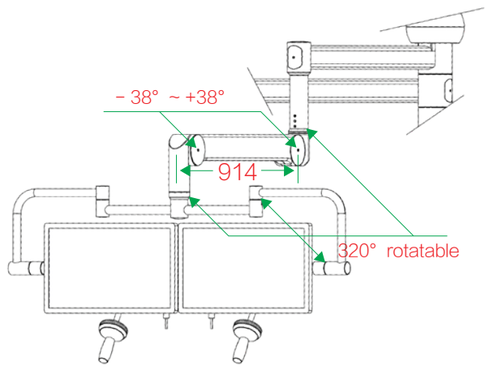
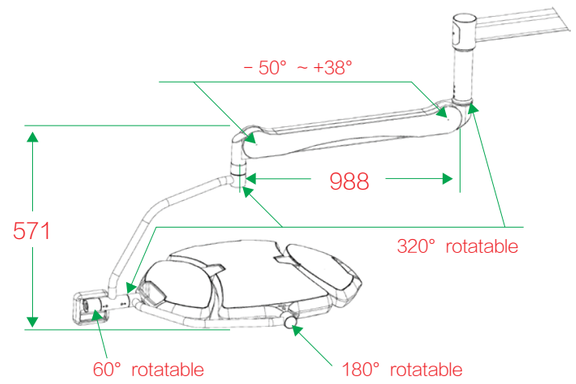
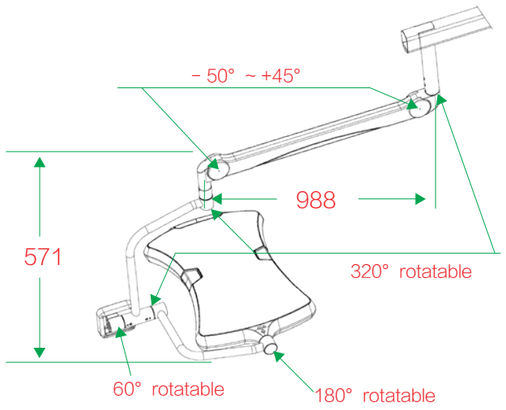
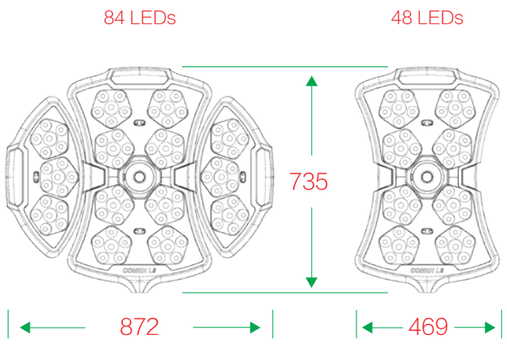
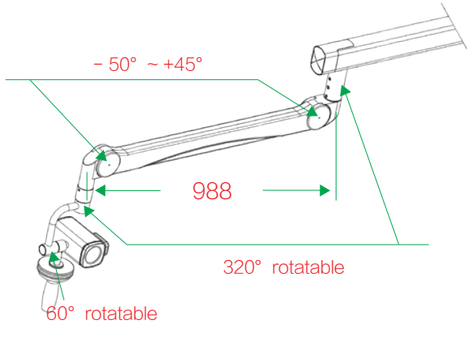


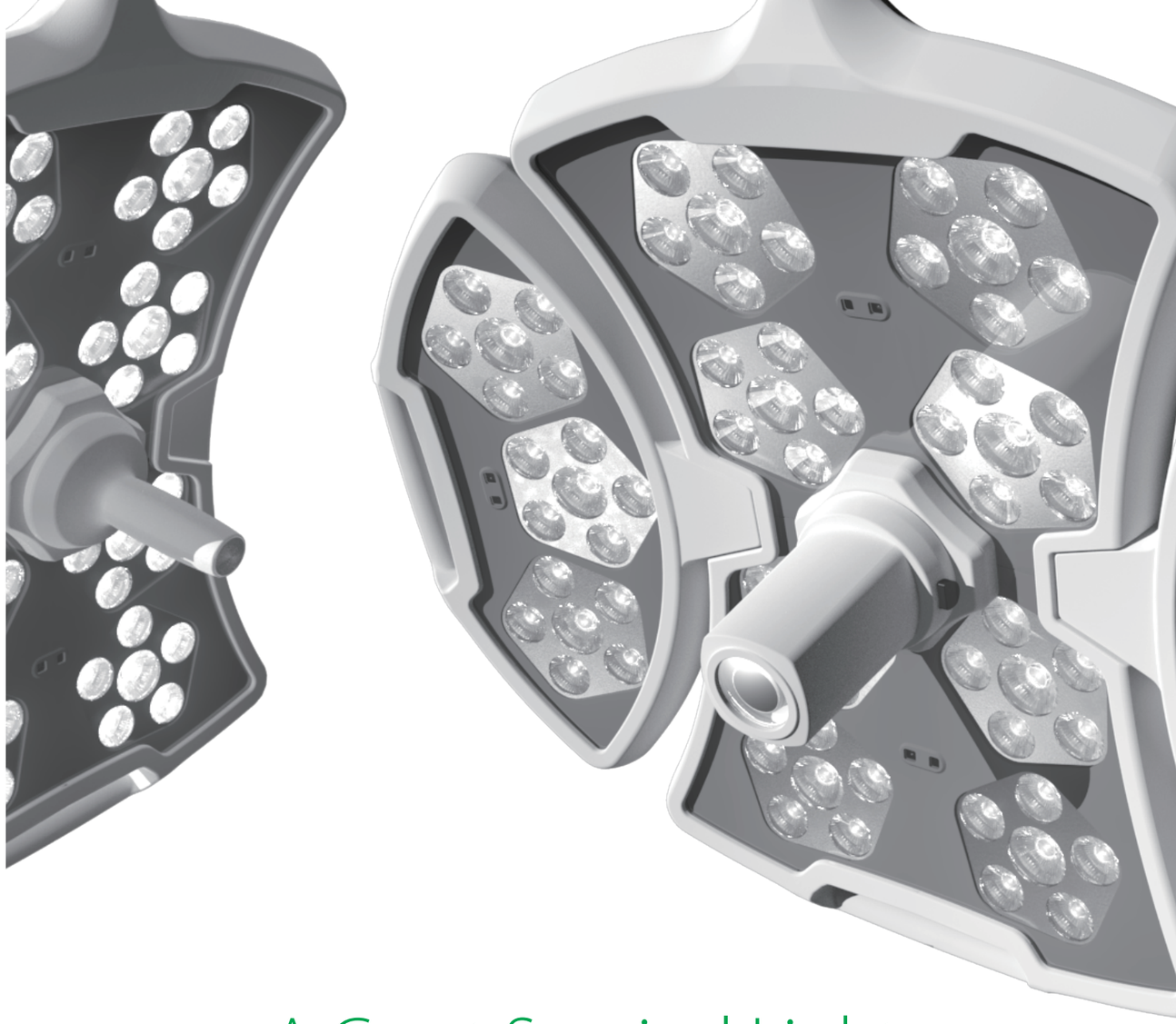












A Great Surgical Light should be Radiant

In the OR, it’s absolutely critical that the lighting conditions are optimal so you can visualize your work with complete accuracy. However, different surgeries have different lighting requirements. As a specialized piece of medical equipment, surgical lights are cutting-edge devices that come with complicated parameters. Choosing an excellent Surgical Light for your OR is made even more important by the demanding nature of the vast differences across surgeries. Expert opinions suggest picking a light based on Appearance, Performance, Quality and Technique, or something like our L6SC.

COMEN

CE

Shenzhen Comen Medical Instruments Co., Ltd.

P/N：EN-L6SC-12P-20200304-V1.2

Add: Floor 10, Floor 11 and Section C of Floor 12 of Building 1A & Floor 1 to Floor 5 of Building 2, FIYTA Timepiece Building, Nanhuan Avenue, Matian Sub-district, Guangming District, Shenzhen, Guangdong, 518106, P.R. China.

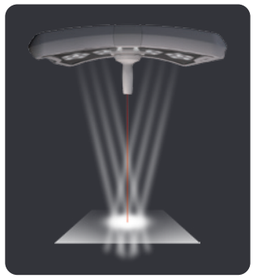
Tel:+86-755-2640 8879　400-700-9488　Fax:+86-755-2643 1232　Website: en.comen.com　E-mail: info@szcomen.com

Functions

6 major functions determine the perfection of surgical light :

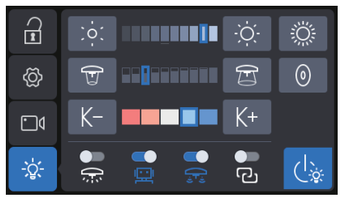
Auto-focus: During surgery, surgical lights are constantly being shifted around based on where the surgeon is standing. This results in the surgical light not being able to maintain the ideal 1 meter focus distance from the incision, greatly compromising accuracy and illumination.

The L6SC automatically adapts to the distance of the incision and always stays focused on the incision. Illumination is always restored to 100% of the optimal value derived through rigorous laboratory testing.



Stable Irradiance: In order to focus the light at certain points, LED surgical lights usually rely on turning off a set amount of LEDs to achieve this effect. This leads to situations in which the irradiance is compromised and has to be manually adjusted to compensate for lack of illumination.

Our Light Capacity Technology in the L6SC ensures that measured irradiance levels remain consistent with the set irradiance even at different light spot sizes.



Protective Illumination: Most surgical lights employ PWM technology for dimming by modulating pulse width. which causes strain on the eyes and also creates a ripple effect during recordings for remote consultation or teaching.

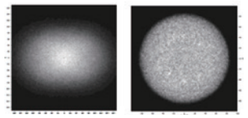
The L6SC uses DC dimming, which adjusts irradiance by drawing DC current away from the surgical light, ensuring clarity during recordings with none of the eye-strain.

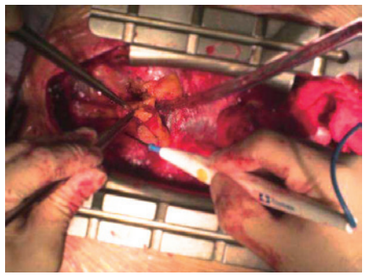


Other surgical lights video with ripple effect



L6SC clear and stable when recording





A Spot of Light :

In surgical situations requiring thoracotomy such as open-heart surgery, the reflection of metal such as hooks and retractors can be reduced or avoided by narrowing the light column.

With the L6SC, narrow Field of View during surgery will no longer be a concern with our adjustable light spot shapes and sizes.

Intelligent Shadow Management :

Even in LED lights, heat radiation is an unavoidable issue, especially after long periods of standing in the light, which may affect a surgeon's performance in the OR, not to mention lowered irradiance.

The L6SC bring to you reduced heat radiation, improved shadowless rate and stable irradiance. Our Intelligent shadow management avoid direct lighting on the surgeons to help them focus on their work. It works by automatically dimming the lights blocked by the surgeon and compensating for irradiance through adjusting the other lamps.





Multicolor Blending



Custom Modes

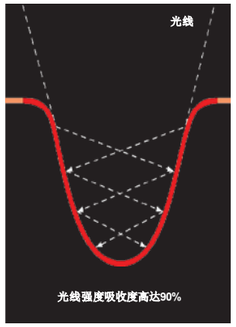
Color Temperature Adjustment :

The lighting requirements in different surgical procedures often differ very vastly due to differences in the tissues involved. For instance, orthopedics requires cold light sources, whereas heart surgery requires warm lightsources.

The L6SC has an color temperature adjustment function that can satisfy the requirements for different departments, along with up to 3 custom operating modes, which allows caregivers to configure color temperature, irradiance, and spot size. The best part refers the fexible switch between saved modes with just the touch of a button.

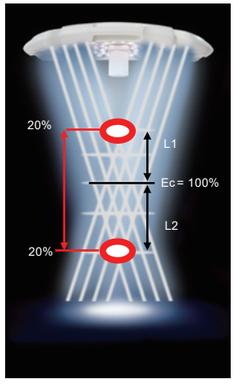
Performance The key performances of a surgical light:

Central Illuminance: Excellent surgical lights can provide different levels of luminous flux in order to satisfy different surgical illumination requirements, ensuring optimal illuminance to help surgeons navigate even the darkest cavities.



Irradiance: Irradiance refers to the amount photonic light energy at a given point. It is often used to evaluate light convergence capacity as well as heat radiation conversion in surgical lights. The L6SC is designed to minimise heat radiation and light diffusion for peak illumination.

Depth of Illumination: In order to penetrate deep cavity tissues, ca light beam must be able to achieve a central illuminance intensity of >20%. The L6SC excels in this aspect with its deeper Depth of Illumination.

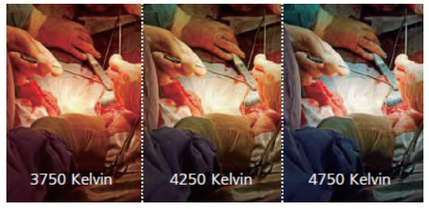


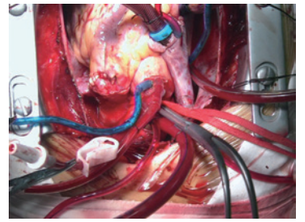
Intelligent Shadow Management: One of the more notable factors of a good shadow lamp is how it manages shadows. Tested using rigorous deep cavity testing standards, the L6SC surgical light is capable of holding up to the highest standards of shadow management, even during operations where both surgeons seemingly obstruct the light source.



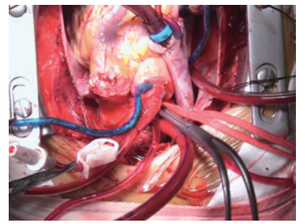
Color temperature (K): Color temperature is an important parameter of high-end surgical light. Different surgeries have different lighting requirements, especially different color temperature. L6SC is able to provide a wider color temperature adjustment range, more comprehensive color temperature adjustment during surgical operation.







Photographed by L6SC LED Surgical Light



Photographed by traditional surgical light

Color rendering index (CRI) (Ra):
This parameter is used for assess the color rendering performance of the light. R9 red rendering index is the key factor to impact the rendering performance of red tissue such as muscle, blood vessel, blood etc.

Performances	L6SC	Other similar high lever surgical lights
Depth of Illumination	⩾1500- 1900mm	⩾900~1300mm
Shadowless rate	⩾65%	45%~55%
Color temperature (K)	3800- 5500K adjustable	Color temperature for most surgical lights is not adjustable, a few can be adjusted form 4350-5500K.
Color rendering index (CRI) (Ra)	⩾98	90~95
Irradiance (mW/m2.lx)	⩽3.55 mW / (m^2 · lux)	⩽3.9~6 mW / (m^2 · lux)
Driving force for each joint	vertically ⩽55N Horizontal⩽25N	100N~200N

Mechanical performance

The core structures of the surgical light are LEDs and spring arm, which are also the two most concerned parts in clinical application.



LEDs:

- Best reliability
- Excellent color rendering performance
- Lowest infrared radiation
- Assist surgeons to perform accurate operation.
- Recognized as the top level surgical light in medical feild.
- Passed 70,000 hours lighting test, the LED of L6SC surgical light has an incredible lifespan of 15 years.

Spring arm:

In collaboration with one of the biggest names in the support arm industry, the L6SC employs the use of ACROBAT spring arms from ONDAL GmbH, who own a market share of over 70% in the spring arm industry.



- Multi-chips transducer connection design: in the process of power supply and signal transmission, all connected devices can be rotated smoothly without any restrictions.
- Parallel screw manipulation ensures alignment of end devices.
- Flexible height adjustment prevents the cantilever system from hitting the ceiling



Camera:

The L6SC is able to adopt both 1080p and 4K cameras from SONY.

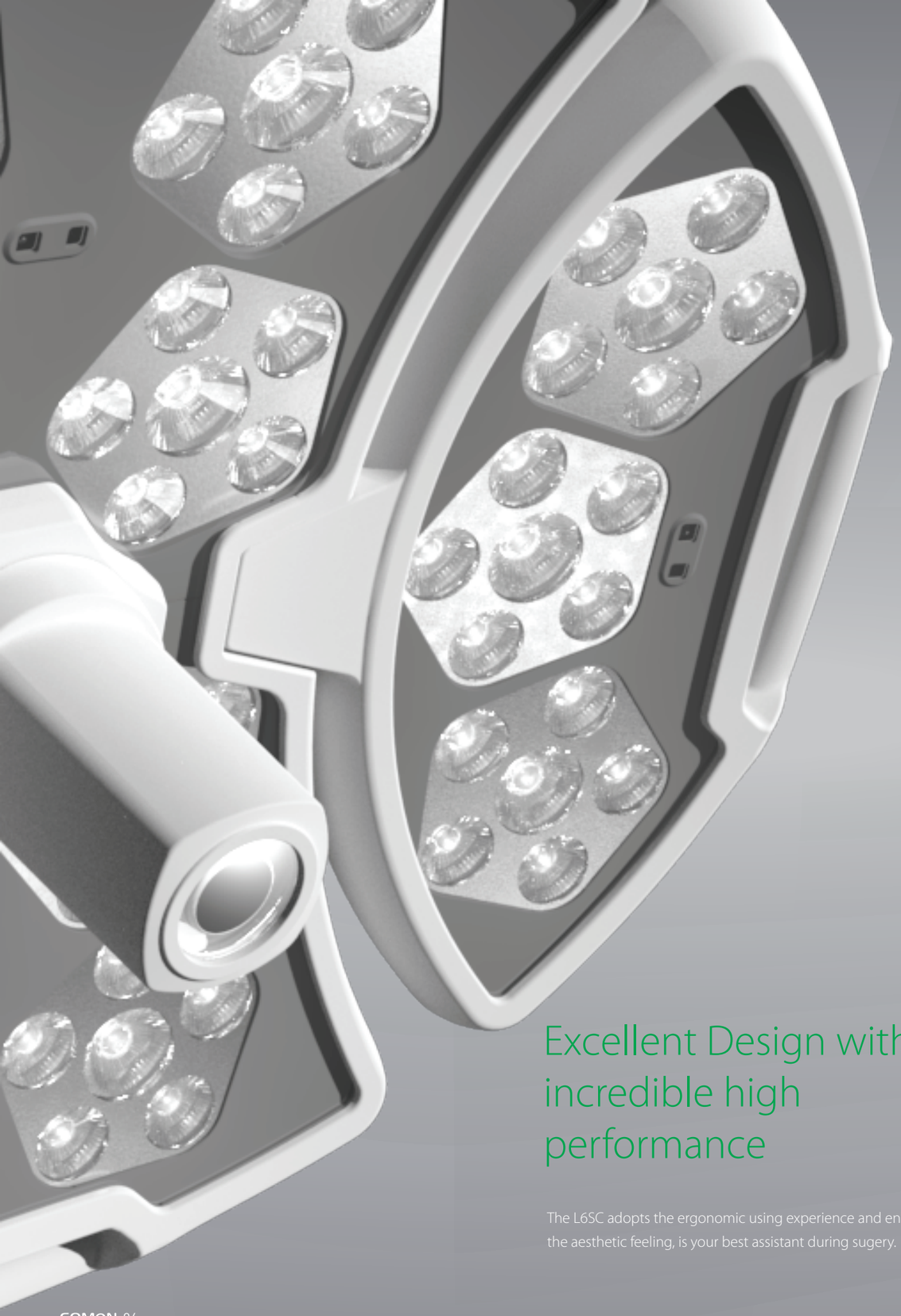
- Specialized Sony medical camera system with Exmor CMOS Image sensing 20x optical zoom and 12x digital zoom
- Autofocus system
- Perfect night-vision effectiveness with low luminance to 0.001Lux.
- 238 megapixel full HD video camera



Display system:

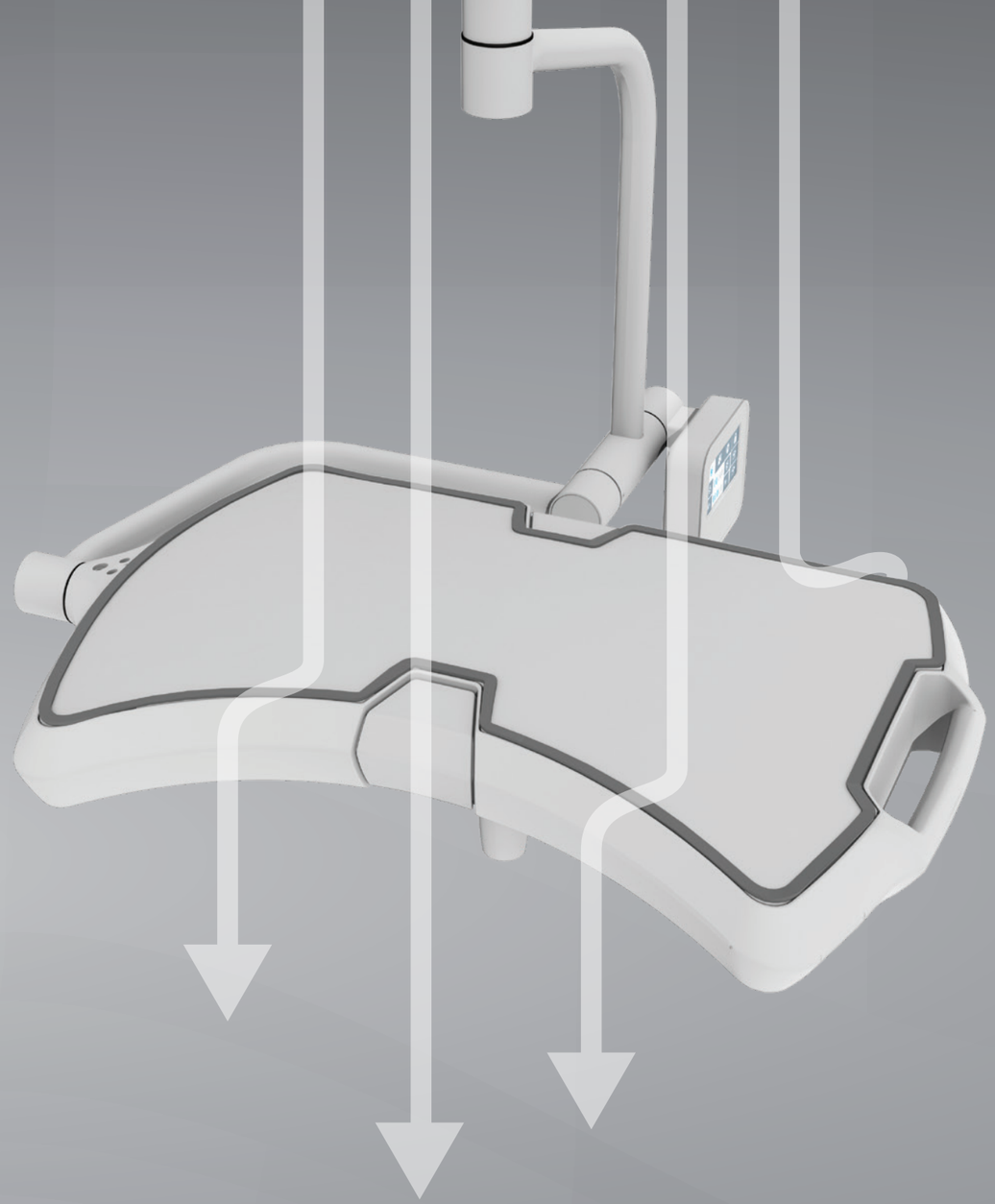
L6SC supports mainstream brands of surgical specialized display

- High brightness, contrast and resolution provide accurate and realistic images, and excellent perception for surgeons. It can also transmit the operation images without delay.
- With the new generation of 10 bit image processing algorithm, the display guarantee detailed and clear image without noise and is able to distinguish minor changes in the color of the tissue.
- Smooth surface with full screen protection, fan less design.



Excellent Design with incredible high performance

The L6SC adopts the ergonomic using experience and enhances the aesthetic feeling, is your best assistant during sugery.



The back panel with arc surface and hollow design is capable of preventing from dust and assist airflow in the laminar flow

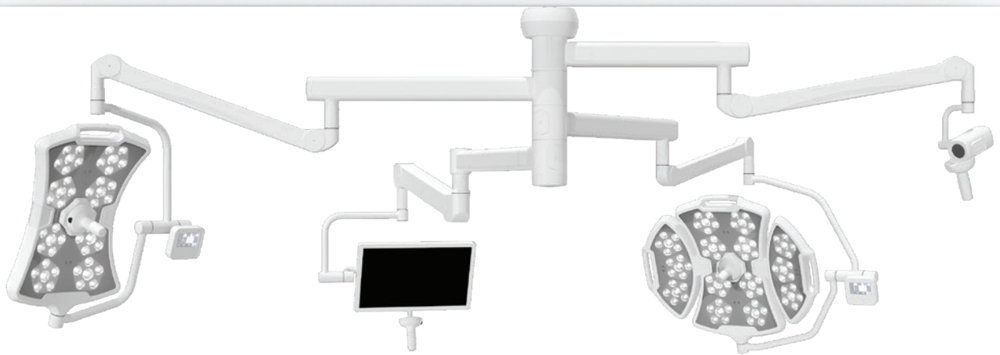
L6SC Recommended Configuration



Recommended configuration for surgical operating rooms



Recommended configuration of teaching operating room



Recommended configuration of compound operating room and lumpectomy operating room

L6SC is customized and specifically designed for digital OR, hybrid OR, interventional OR and Cardiothoracic OR.

L6SCA/L6SCB Recommended Configuration



Single light L6SCB
Recommended configuration for obstetric operating room



Single light L6SCA
Recommended configuration for outpatient operating room