

# COMPANY BROCHURE

SHANDONG EXPERT MEDICAL EQUIPMENT CO., LTD.

# **OPERATING SHADOWLESS LAMP**

16 years professional manufacturer Expert medical ,Medical expert

#### SHANDONG EXPERT MEDICAL EQUIPMENT CO., LTD.

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#### COMPANY BROCHURE CLEAR AT A GLANCE





Expert ZF700/500 whole reflector halogen lamp





Lightweight balance arm suspension system, the balance arm is the German Ondal brand, which is light and flexible, meets the different height and angle requirements of the operation room



Imported Germany OSRAM lamp beads as shadow-less light source, with low maintenance cost, low energy consumption, and almost no temperature rising on the lighting surface, which determines the selling values of shadow-less lamp.



The lamp head torch is made of aluminum, which is a rare advanced component of China manufacturers. Under the high efficiency of the shadow-less lamp, it can release the heat in the lamp body.



The fully ultra-thin aluminum lamp covering and the streamlined lamp head design meets the requirements of the clean laminar flow operating room, which is conducive to the cleaning and maintenance.



Taiwan's well-known leading brand MEAN WELL power supply, long service life, high reliability, in line with medical electrical industry standard testing, more environmentally and safe, stable output, strong antiinterference.



Full ABS control system, beautiful and durable, adopts microcomputer digital integrated control system, the light can be step-less dimming, the adjustment range can reach 10%-100%, equipped with bulb failure indicator light alarm function, it is a relatively advanced control panel of China.



The detachable disinfection handle is made of high-strength ABS, which can be disinfected and sterilized at a high temperature of 135 °, ensure the durability and reliability of the handle.



The modern surgical shadow-less lamp must be met various of clinical requirements, such as surgeons requires accurate and efficient lighting effect, head nurses requires simple cleaning, and the accessories can be sterilized and hygienic. The fundamental mission of the surgical shadow-less lamp is to obtain the most suitable lighting in working area. We will help customers to obtain better visual effects and allow doctors to obtain a safer and less fatigued working environments.

#### **MULTIPLE TYPE SELECTION**

LED series, flower series, overall reflection series and mobile series surgical shadowless lights are available for customers to choose from.

#### **DIVERSIFIED CONFIGURATION**

According to user needs, it is combined into a variety of configurations that satisfy customers, which can be combined with the operating table system.

#### ADOPT NEW BALANCE ARM SUSPENSION SYSTEM

Multiple sets of universal joint linkage, 360° all-round design can meet the needs of various heights, angles and postures during surgery, and the positioning is more accurate and convenient.

#### SUSTAINABILITY WITHOUT COMPROMISING PERFORMANCE AND EFFICIENCY

90% of Xinyuchen surgery shadowless lamps are made of aluminum alloy, which can be reused without consuming more raw materials. Simple packaging can reduce the amount of materials used and waste generated, as well as carbon emissions in transportation. Smooth curved surface prevents dust deposition and reduces the loss of cleaning products when cleaning.

#### SUPER DEEP LIGHTING, PERFECT SHADOWLESS EFFECT

Imported high-performance lamp beads, efficient space layout, energy-saving effect under the same illumination is better than other internationally renowned brands. Adopt the world's leading patented technology to achieve the harmony and unity ofillumination, color temperature and color index. The reasonable space layout design can achieve the ideal lighting effect and super deep lighting under the cover of the doctor's head and shoulders.



The imported transmission system can effectively ensure the operation of the equipment and avoid problems caused by poor contact, not only ensures the stability of transmission, but also reduces the maintenance cost in the later period.

# /he operation shadowless lamp



LED 720/520 surgical lamp adopts the multi-focusing design of reflective bowl, each reflective bowl contains three illuminants, the light source in the reflective bowl is properly convergent to the surgical area, plus the illuminant composed of German original Osram lamp beads, forming a good shadowless effect.







#### >>>PARAMETER<<<

MODEL	LED720	LED520
Light quantity	108PCS	54PCS
Illuminance (Lux at 1M apart)	180000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1000	≥ 1000
Brightness adjustment range	10-100%	10-100%
Color Restoration Index (RA)	≥ 98%	≥ 98%
Red reduction index (R9)	≥ 97%	≥ 97%
Operating radius (MM)	≥ 2200	≥ 2200
Temperature rise of the surgeon's head (°C )	≤ 0.5	≤ 0.5
Temperature rise in operating rabge (°C )	≤ 1.5	≤ 1.5
The power input	100-240VAC,50HZ	100-240VAC,50HZ
Optimum mounting height	2800mm-3000mm	2800mm-3000mm
Rotation range°	0° -360°	0° -360°
Working radius (MM)	600-1800	600-1800
Average lamp life (H)	≥100000	≥ 100000
Input (VA)	400	400
Lamp power	3W/3V	3W/3V











LED700/500 series operation lamp is the most cost-effective one. Long service life of LED, reaching 80,000 hours without changing lamp beads, which is 40 times longer than halogen lamp. An imported LED cold light source is adopted as operation lighting. As a genuine cold light source, there is almost no temperature rise at the doctor' s head or the wound. The color rendering is as high as 97%, which increases the color difference between blood and other tissues and organs of the human body. The color temperature can be adjusted, which helps relieve the doctor' s visual fatigue and improve the quality of surgery.

### >>>PARAMETER<<<<

MODEL	LED700	LED500
Light quantity	80PCS	48PCS
Illuminance (Lux at 1M apart)	180000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1200	≥ 1200
Brightness adjustment range	1-100%	1-100%
Color Restoration Index (RA)	≥ 97%	≥ 97%
Red reduction index (R9)	≥ 97%	≥ 97%
Operating radius (MM)	≥ 2200	≥ 2200
Head temperature rise (°C)	≤1	≤1
Temperature rise of operation field working area(°C )	≤2	≤2
Optimum mounting height	2800mm-3000mm	2800mm-3000mm
Working radius (MM)	600-1800	600-1800
Average lamp life (H)	≥ 80000	≥ 80000
Bulb power (VA)	400	400
Lamp power	1W/3V	1W/3V
Power supply	220V±22V 50HZ±1HZ	220V±22V 50HZ±1HZ















LED700/500L luxury series of surgical shadowless lamps, newly added intelligent shadow compensation, lamp head mutual control, unlimited remote control, electric focusing, one-button endoscopic mode and color rendering index R9 red light source and R11 green light source lighting functions. The appearance is light, thin and elegant, Germany imported Osram lamp beads, original Ondal balance arm, a variety of color temperature adjustable, to meet the needs of various operations.







#### >>>PARAMETER<<<<

MODEL	LED700L	LED500L
Light quantity	48PCS	30PCS
Illuminance (Lux at 1M apart)	180000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1200	≥ 1200
Brightness adjustment range	1-100%	1-100%
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Operating radius (MM)	≥ 2200	≥ 2200
Temperature rise of the surgeon's head (°C )	≤1	≤1
The temperature rise of the working area of the surgical field (°C)	≤2	≤2
Power supply voltage	220±22V,50HZ±1HZ	220±22V,50HZ±1HZ
The best installation height	2800mm-3000mm	2800mm-3000mm
Rotation range°	0° -360°	0° -360°
Working radius (MM)	600-1800	600-1800
Average lamp life (H)	≥ 100000	≥ 100000
Input power (VA)	400	400
Lamp power	3W/3V	3W/3V









LED700/500 new type shadowless lamps, newly added intelligent shadow compensation, lamp head mutual control, unlimited remote control, electric focusing, one-button endoscopic mode and color rendering index R9 red light source and R11 green light source lighting functions. The appearance is light, thin and elegant, Germany imported Osram lamp beads, original Ondal balance arm, a variety of color temperature adjustable, to meet the needs of various operations.



### >>>PARAMETER<<<<

LED700	LED500
84PCS	59PCS
160000	140000
4000-5700	4000-5700
110-280	110-280
≥100	≥ 100
10-100%	10-100%
≥ 98%	≥ 98%
≥ 97%	≥ 97%
≥ 80000	≥ 80000
≤ 0.5	≤ 0.5
≤ 1.5	≤ 1.5
100-240VAC,50HZ	100-240VAC,50HZ
2800mm-3000mm	2800mm-3000mm
≥ 2200	≥ 2200
-	84PCS   160000   4000-5700   110-280   ≥ 100   10-100%   ≥ 98%   ≥ 97%   ≥ 80000   ≤ 0.5   ≤ 1.5   100-240VAC,50HZ   2800mm-3000mm











# 05/EXPERT-LED5+5 (5) common type five petal surgical shadowless lamp

Petal series operation shadowless lamp is also a kind of LED, because the lamp head is petal-like, special shape. The petal series surgical shadowless lamp can move up and down, left and right, to meet the needs of different heights and angles in the operation. The entire shadowless lamp is composed of multiple high-brightness white LED lamp beads. Several lamp beads are connected in series to form a group, which is called highbrightness light-emitting diode; when the lamp bead fails, the other lamp beads of the shadowless lamp can still work normally.

### >>>PARAMETER<<<

MODEL	LED5	LED5
Light quantity	92PCS	92PCS
llluminance (Lux at 1M apart)	160000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Depth of Focus (MM)	≥ 1200	≥ 1200
Illumination adjusting range(%)	1-100	1-100
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Radius of operation(MM)	≥ 2200	≥ 2200
Head temperature rise(°C )	≤1	≤1
Field Work Area Temperature Rise(°C )	≤2	≤ 2
The power supply voltage	$220V{\pm}22V~50HZ{\pm}1HZ$	$220V{\pm}22V~50HZ{\pm}1HZ$
Optimum mounting height	2800mm-3000mm	2800mm-3000mm
Average lamp life (H)	≥ 80000	≥ 80000
Bulb power	1W/3V	1W/3V
Radius of work(MM)	600-1800	600-1800
The input power (VA)	400	400

















Petal series operation shadowless lamp is also a kind of LED, because the lamp head is petal-like, special shape. The petal series surgical shadowless lamp can move up and down, left and right, to meet the needs of different heights and angles in the operation. The entire shadowless lamp is composed of multiple high-brightness white LED lamp beads. Several lamp beads are connected in series to form a group, which is called highbrightness light-emitting diode; when the lamp bead fails, the other lamp beads of the shadowless lamp can still work normally.

### >>>PARAMETER<<<

MODEL	LED720	LED720
Light quantity	51PCS	51PCS
llluminance (Lux at 1M apart)	180000	180000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Depth of illumination (MM)	≥ 1200	≥ 1200
Brightness adjustment range(%)	1-100	1-100
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Temperature rise of the surgeon's head (°C)	≤1	$\leq 1$
Temperature rise at surgical working are (°C )	≤2	≤ 2
The power supply voltage	$220V{\pm}22V~50HZ{\pm}1HZ$	$220V{\pm}22V~50HZ{\pm}1HZ$
Best Mounting Height(MM)	2800mm-3000	2800mm-3000
Average bulb life (H)	≥ 100000	≥ 100000
Radius of operation (MM)	≥ 2200	≥ 2200
Radius of work(MM)	220V±22V 50HZ±1HZ	220V±22V 50HZ±1HZ
Optimum mounting height	600-1800	600-1800
Input power(VA)	400	400















# () **EXPERT-LED5+5** Luxury type four petal surgical shadowless lamp

Petal series operation shadowless lamp is also a kind of LED, because the lamp head is petal-like, special shape. The petal series surgical shadowless lamp can move up and down, left and right, to meet the needs of different heights and angles in the operation. The entire shadowless lamp is composed of multiple high-brightness white LED lamp beads. Several lamp beads are connected in series to form a group, which is called highbrightness light-emitting diode; when the lamp bead fails, the other lamp beads of the shadowless lamp can still work normally.

### >>>PARAMETER<<<

MODEL	LED5	LED5
Light quantity	56PCS	56PCS
llluminance (Lux at 1M apart)	160000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1200	≥ 1200
Brightness adjustment range(%)	1-100	1-100
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Temperature rise of the surgeon's head (°C ) $$	$\leq 1$	≤1
Temperature rise at surgical working are (°C )	≤ 2	≤ 2
Power supply voltage	220V±22V 50HZ±1HZ	220V±22V 50HZ±1HZ
The best installation height	2800mm-3000mm	2800mm-3000mm
Working radius(MM)	600-1800	600-1800
Operating radius (MM)	≥ 2200	≥ 2200
Average lamp life (H)	≥ 100000	≥ 100000
Lamp power	1W/3V	1W/3V
Input power(VA)	400	400

















Petal series operation shadowless lamp is also a kind of LED, because the lamp head is petal-like, special shape. The petal series surgical shadowless lamp can move up and down, left and right, to meet the needs of different heights and angles in the operation. The entire shadowless lamp is composed of multiple high-brightness white LED lamp beads. Several lamp beads are connected in series to form a group, which is called highbrightness light-emitting diode; when the lamp bead fails, the other lamp beads of the shadowless lamp can still work normally.

#### >>>PARAMETER<<<

MODEL	LED5	LED5
Light quantity	76PCS	76PCS
Illuminance (Lux at 1M apart)	160000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1200	≥ 1200
Brightness adjustment range(%)	1-100	1-100
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Temperature rise of the surgeon's head (°C )	$\leq 1$	≤1
Temperature rise at surgical working are (°C )	≤ 2	≤ 2
Power supply voltage	220V±22V 50HZ±1HZ	220V±22V 50HZ±1HZ
The best installation height	2800mm-3000mm	2800mm-3000mm
Bead life (H)	$\geqslant 100000$	≥ 100000
Radius of work(MM)	600-1800	600-1800
Operating radius (MM)	≥ 2200	≥ 2200
Average lamp life (H)	≥ 80000	≥ 80000
Lamp power	1W/3V	1W/3V
Input power(VA)	400	400

















Unique multi-mirror reflector technology, through precise computer design, each 700 lamp body has 3584 pieces, 500 lamp body has 2150 pieces of multi-function filter reflector surface, using special optical coating materials, so that the lighting effect tends to be perfect. Uniform light beam, eliminating glare; excellent cold light effect, the temperature rise under the lamp holder does not exceed 2 °C during long-term surgery.







### >>>PARAMETER<<<<

MODEL	ZF700	ZF500
llluminance (Lux at 1M apart)	180000	160000
Color temperature(K)	4300±500	4300±500
Spot Diameter (MM)	100-300	100-300
Illumination depth (MM)	≥ 1200	≥ 1200
Brightness adjustment range(%)	1-100	1-100
Color Restoration Index (CRI)	≥ 97%	≥ 97%
Color reproduction index (RA)	≥ 97%	≥ 97%
Temperature rise of the surgeon's head (°C)	≤1	≤1
Temperature rise at surgical working are (°C )	≤2	≤ 2
Power supply voltage	220V±22V 50HZ±1HZ	220V±22V 50HZ±1HZ
The best installation height(MM)	2800-3000	2800-3000
Average lamp life (H)	≥ 1500	≥ 1500
Working radius	600-1800	600-1800
Operating radius (MM)	≥ 2200	≥ 2200
Main and sub bulb switching time (S)	≤ 0.1	≤ 0.1
Lamp power	150W	150W
Input power(VA)	400	400











LED series examination lamps are designed for the used in outpatient examination and small surgery, mobile design is easy to use. It has the characteristics of color temperature that is different from ordinary surgical auxiliary lighting sources, and the high color rendering of Ra  $\geq$  97 increases the color difference between blood and other tissues and organs of the human body.



### >>>PARAMETER<<<<

MODEL	LED200
llluminance (Lux at 1M apart)	40000
Color temperature(K)	4300
Spot Diameter (MM)	50
Depth of Focus (MM)	800
Brightness adjustment range(%)	1-100
Color Restoration Index (CRI)	≥ 97%
Color reproduction index (RA)	≥ 97%
The power supply voltage	220V±22V
Operating radius (MM)	≥ 2200
Average service life (H)	≥ 80000
The light bulb power	1W











