





# LED OPERATION LIGHT





#### LED OPERATION LIGHT

Challenging tasks require special solutions. The innovative Labstac LED operation light give you benefits of cuttingedge LED technology in a uniquely effective manner. We focus on providing LED lights that are more color-accurate, more flexible, more economical. We offer innovative light and system solutions that can be retrofitted easily and without special preparation.

Used in Dental implant surgery, Medical unit, Surgery, Operation theatre.

Also known as Surgical LED Light, LED operation theatre light, LED OT light.

#### **BOPL-401 LED OR SHADOWLESS LAMP**



Imported LED cold light source is adopted, with the ultrathin optical lens

Digital means are adopted for stepless regulation of LED brightness

Light field size can be adjusted by the handle

Removable handle sheath can be disinfected

Service life of LED shadowless lamp is long (50,000h)

Color temperature can be adjusted in three steps

Imported switch power supply is adopted to control the voltage, making the work voltage permanently stable

No welding titanium alloy arm, Imported spring arm make sure the lamp head adjusted easily and freely

Model	BOPL-401	
Illumination	40000-120000 Lux (at 1m distance)	
Color temperature	(3500-4500) ±500K	
Light field diameter	10-28 cm at 1m Light field diameter D10-180±40 mm	
D50	110±35 mm	
Depth of L1+L2 illumination	150 cm	
Color rendering Index	100≥Ra≥85	
Number of LED bulbs	32/32	
Average bulb life (hours)	50000	
Heat to light ratio	<6 (mW/m²lx)	
Working distance	70-140 cm	
Ceiling height for installation	270-320 cm	
Max power consumption	80W/80W	
Power Supply	100-240V 50/60 Hz	

#### **BOPL-402 LED OR SHADOWLESS LAMP**



Imported LED cold light source is adopted, with the ultrathin optical lens

Digital means are adopted for stepless regulation of LED brightness

Light field size can be adjusted by the handle

The removable handle sheath can be disinfected

The service life of LED shadowless lamp is long (50,000h)

The imported switch power supply is adopted to control the voltage, making the work voltage permanently stable

The no welding titanium alloy arm, Imported spring arm make sure the lamp head adjusted easily and freely

## **SPECIFICATIONS**

Model	BOPL-402
Illumination	40000-120000 Lux (at 1m distance)
Color temperature	4500K±500K
Light field diameter	10-28 cm at 1m
D10	180+40 mm
Diameter of spot D50	110+35 mm
Color rendering Index	100>Ra>85
Working distance	70-140 cm
Heat to light ratio	<6 mW/m²lx
Average bulb life (hours)	50000 hours
Number of LED bulbs	32
Max power consumption	80 VA

## **BOPL-403 LED OR SHADOWLESS LAMP**



The no welding titanium alloy main arm is adopted, so that the appearance is aesthetic and the rotation is more flexible and convenient

The removable handle sheath can be disinfected at the high temperature of 135°C.

The de-polished panel made of imported material makes the light rays softer

The imported switch power supply is adopted to control the voltage, making the work voltage permanently stable

The special radiation filter reducing the heat to the minimum level

The multi-flake retro reflector made of imported aluminium sheet has the features of no coating film and never fading

Imported lamp receptacle, Tungsten halogen bulbs of international brand are adopted with the average service more than 1500 hours

Light adjustment circuit adopts CPU control, enabling increase or decrease of illumination and boasting brightness memory

One lamp holder with two bulbs enables automatic operation of the standby bulb in 1/2 second when the main bulb malfunctions, and it has indicators for the damage of main or standby bulb

## **SPECIFICATIONS**

Model	BOPL-403
Illumination	40000-120000 Lux (at 1m distance)
Color temperature	4500K±500K
Light field diameter	10-28 cm at 1m
D10	180+40 mm
Diameter of spot D50	110+35 mm
Color rendering Index	100>Ra>85
Working distance	70-140 cm
Heat to light ratio	<6 mW/m²lx
Average bulb life (hours)	50000 hours
Number of LED bulbs	32
Max power consumption	80 VA

## **BOPL-404 LED OR SHADOWLESS LAMP**



Stepless adjusting light source ONDAL arm, OSRAM bulb

Model	BOPL-404
Illumination	40000~160000 LUX/40000~160000 LUX Illumination at 1m on Endo mode- 10000 LUX
Color temperature	6700>TC>3000K
Color rendering Index	100≥Ra≥85 Red color rendering Index R9-≥97
Light field diameter	D10 180+40/180+40 mm
Depth of L1+L2 illumination	150 cm
Heat to light ratio	<6mW/m²Ix
D50	110+35/110+35
Number of LED bulbs	84/84
Average bulb life (hours)	50000 hours
Ceiling height for installation	270-320 cm
Input power	150W/150W VA
Power Supply	100-240V

## **400 LED OPERATION LIGHT**



Streamlined, ultra-thin, enclosed head with reduced air resistance to minimise contamination

Digital controlled light intensity without grades of brightness and automatic memory for added flexibility

Optionally built in power supply systems avoiding complicated installation of wall mounted control boxes

Auxiliary light source included for laparoscopic operations

Rigid suspension arm with easy mobility and stable positioning

No infrared or ultraviolet radiation

Backlight compensation function

Endoscopy light source

Stepless adjusting light source

Model	B0PL-405	B0PL-409
Illumination	60000~120000 Lux	160,000 Lux / 140,000 Lux
Diameter of spot	10-28 cm	-
Depth of light beam	≥700 mm	-
Color rendering Index	100≥Ra≥85	≥97 / ≥97
Color temperature	4500±500 K	3600K-5500K (±500K) variable
Spot diameter (D50-D10)	-	130-350 / 130-350 mm
Average bulb life (hours)	-	100,000 h / 100,000 h Power of bulb 1 W x N 128 / 1 W x N 64 Light focus system-Manual/ Manual
Power Supply	-	220 V 50 Hz/ 220 V 50 Hz
Input power	-	160 W / 80 W
Ceiling height for installation	-	2.8 m / 2.8 m







BOPL-409

#### **BOPL-406 SINGLE ARM LED OPERATING LAMP**



Imported LED cold light source is adopted, with the ultrathin optical lens

Digital means are adopted for stepless regulation of LED brightness

Light field size can be adjusted by the handle

The removable handle sheath can be disinfected

The service life of LED shadowless lamp is long (50,000h)

Color temperature can be adjusted in three steps

The imported switch power supply is adopted to control the voltage, making the work voltage permanently stable

There is no welding titanium alloy arm, Imported spring arm make sure the lamp head adjusted easily and freely

#### **SPECIFICATIONS**

odel BOPL-406	
Illumination	≥60000
Color rendering Index	100≥Ra≥85
Color temperature	4500±500 K
Left / Right	160°
Front / Back	190°
Spring arm adjusted	≥600 mm
Input power	20 VA

### **BOPL-407 LED OR LAMP**



The no welding titanium alloy main arm is adopted, so that the appearance is aesthetic and the rotation is more flexible and convenient.

The removable handle sheath can be disinfected at the high temperature of 135°C.

The depolished panel made of imported material makes the light rays softer

The imported switch power supply is adopted to control the voltage, making the work voltage permanently stable

The special radiation filter reducing the heat to the minimum level

The multi-flake retroreflector made of imported aluminum sheet has the features of no coating film and never fading

Imported lamp receptacle, Tungsten halogen bulbs of international brand are adopted with the average service more than 1500 hours  $\frac{1}{2}$ 

Light adjustment circuit adopts CPU control, enabling increase or decrease of illumination and boasting brightness memory

One lamp holder with two bulbs enables automatic operation of the standby bulb in 1/2 second when the main bulb malfunctions, and it has indicators for the damage of main or standby bulb

Model	BOPL-407
Illumination	160000 / 160000 Lux Illumination at 1m on Endo model- 15000 LUX
Adjusting range of illuminance	10-100%

Light field diameter	D10 180±40 / 180±40 mm
D50	110±35 / 110±35
Depth of L1+L2 illumination	150 mm
Color rendering Index	100≥Ra≥85 Red color index R9: R9≥97 R13 ≥99 R15 ≥98
Color temperature	6700K≥Tc≥3500k
Number of LED bulbs	84/84
Average bulb life (hours)	50000 h
Heat to light ratio	<6mW/m²lx
Power Supply	110-240 V
Input power	150 W / 150 W
Ceiling height for installation	2.7-3.2 m

## **BOPL-408** DOUBLE ARM LED OPERATING LAMP



Streamlined, ultra-thin, enclosed head with reduced air resistance to minimise contamination

Digital controlled light intensity without grades of brightness and automatic memory for added flexibility

Optionally built in power supply systems avoiding complicated installation of wall mounted control boxes

Auxiliary light source included for laparoscopic operations

Rigid suspension arm with easy mobility and stable positioning

360° arm rotation

No infrared or ultraviolet radiation

Backlight compensation function

Endoscopy light source

ONDAL arm, OSRAM bulb

Model	BOPL-408
Illumination	140,000 Lux
Adjusting range of illuminance	10-100%
Spot diameter (D50-D10)	130-350 mm
Color rendering Index	≥97
Color temperature	3600K-5500K (±500K) variable
Average bulb life (hours)	100,000 h Power of bulb- 1 W x N 64 Light focus system- Manual
Power Supply	220 V 50 Hz
Input power	80 W
Ceiling height for installation	2.8 m

## **BOPL-601 LED OR SHADOWLESS LAMP**



The nano-layer heat sink creates an ideal heat dissipation effect

Intelligent touch control screen

Removable handle cover for easy cleaning and disinfection

Titanium alloy boom, no welding, to ensure that each angle is 90° without drift

The spring arm is an imported spring, which can move up and down, which is light and flexible

The color temperature is adjustable, the human R9 function and the green light mode are controllable

With minimally invasive lighting function

Illumination and shadow automatic compensation mode

Electric adjustment of the spot diameter of the lighting equipment

#### **SPECIFICATIONS**

Model	BOPL-601
Illumination	40000~160000 LUX/40000~160000 LUX Illumination at 1m on Endo mode- 10000 LUX
Color temperature	5000>TC>3000K
Color rendering Index	100≥Ra≥85 Red color rendering Index R9-≥97 Green colour rendering index R11->97
Light field diameter	D10 180+40/180+40 mm electrically adjust
Depth of L1+L2 illumination	150 cm
Heat to light ratio	<6mW/m²lx
D50	110+35/110+35 electrically adjust
Number of LED bulbs	84/84
Average bulb life (hours)	50000 hours
Ceiling height for installation	270-320 cm
Input power	150W/150W VA
Power Supply	110-240V

### **BOPL-602 LED OR SHADOWLESS LAMP**



Use imported LED cold light source, ultra-thin optical lens

Digitally adjust the brightness of the LED

Removable handle cover for easy cleaning and disinfection

Titanium alloy boom, no welding, to ensure that each angle is 90° without drift

The spring arm is an imported spring, which can move up and down, which is light and flexible

The color temperature is adjustable

With minimally invasive lighting function

### **SPECIFICATIONS**

Model	B0PL-602
Illumination	40000~160000/40000~160000 LUX Illumination at 1m on endo mode- 10000 lux
Color temperature	6700>TC>3000K Endo model- 10000 lux
Color rendering Index	100≥Ra≥85
Ceiling height for installation	270-320 cm
Working distance	70-140 cm
Light field diameter	D10 180±40/180±40 mm
Depth of L1+L2 illumination	150 cm
Heat to light ratio	<6mW/m²lx
D50	110±35/110±35 mm
Number of LED bulbs	45/45
Average bulb life (hours)	50000 hours
Max power consumption	90W/90W
Power Supply	100-240V,50/60HZ

## 600 LED OR SHADOWLESS LAMP



Adopt imported LED cold light source, white the ultra-thin optical lens
Adopt digital means for stepless regulation of LED brightness
Adjust the diameter of light spot and color temperature With Endoscopy model
Removable handle sheath, easy to clean and disinfect

Removable handle sheath, easy to clean and disinfect Nano coating of heat sink has created an excellent heat dissipation effect.

Imported balance arm, which is flexible up and down

Model	B0PL-603	B0PL-604	
Illumination	40000~160000 LUX (at 1m distar	40000~160000 LUX (at 1m distance)	
Color temperature	6700>TC>3000K Endo model- 10000 lux	4500K±500K	
Color rendering Index	100≥Ra≥85	100≥Ra≥85	
Working distance	70-140 cm	70-140 cm	
Diameter of spot D50	110+35 mm	110+35 mm	
Light field diameter	10-28 cm (at 1m distance)	10-28 cm (at 1m distance)	
Heat to light ratio	<6mW/m²lx	<6mW/m²lx	
D10	180±40 mm	180±40 mm	
Number of LED bulbs	45	45	
Average bulb life (hours)	50000 hours	50000 hours	
Max power consumption	90 VA	90 VA	







### Biolab Scientific Ltd.