Surgical Solutions

Surgical Lighting

FLOWER LED
Surgical Lighting System

Brighten your Expertise

One Integrated Approach to Healthcare

Adjustable colour temperature:
For Your Visual Comfort

FLOWER LED surgical lighting with adjustable colour temperatures retains all the benefits of white LEDs while offering additional functions.
Selecting from 4 calibrated colour temperatures, the user can choose a light adapted to their visual sensitivity and preferences - warmer colours aiming towards orange, or cooler tones, aiming towards warm white.
Depending on the type of surgery, the surgical team can easily adapt the color

3 500 K	4 000 K	4 500 K	5 500 K
Ra=95 / R9=91	Ra=95 / R9=97	Ra=95 / R9=97	Ra=95 / R9=97

Homogeneous and constant quality of light across the different colour temperatures and over time.

How Does that Work?
Optimal Duo of White&Yellow LEDs

Contrary to the light generated by a combination of coloured LEDs (green, red, blue...) which have a tendency to decline over time and need regular recalibration to conserve its properties, FLOWER LED surgical lights with adjustable colour temperature option is obtained by combining white LEDs and yellow LEDS with different colour temperatures.

PRACTICAL ASPECTS
CUSTOMER-ORIENTED

Flexible system
The light, camera and monitor arm with considerable swiveling and tilting range for all commercially available screens can be attached to an individual ceiling suspension and are lightweight and safe to position. 4 arms can be used per ceiling support unit.

*Performance + 10% according to IEC60601-2-41 / **Performance 0/-10% according to IEC60601-2-41 /
***Performance + 6% according to IEC60601-2-41

TECHNICAL SHEET
FLOWER LED

FLOWER LED
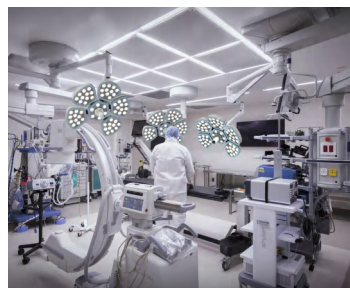**E700/700**

FLOWER LED
E500/500

FLOWER LED
E700/500

FLOWER LED
E700

FLOWER LED
E500

FLOWER LED Model	E700/700	E700/500	E500/500	E700	E500
Voltage	95~245V，50/60HZ	95~245V，50/60HZ	95~245V，50/60HZ	95~245V，50/60HZ	95~245V，50/60HZ
Illuminance at distance of 1 m(LUX)	60,000-160,000/60,000-160,000	60,000-160,000/40,000-140,000	60,000-160,000/40,000-140,000	60,000-160,000	40,000-140,000
Brightness Adjustable	0-100%	0-100%	0-100%	0-100%	0-100%
Lamp Head Diameter	650MM/650MM	650MM/650MM	650MM/650MM	650MM	650MM
Quantity Of LEDS	61PCS/61PCS	61PCS/39PCS	39PCS/39PCS	61PCS	39PCS
Color Temperature Adjustable	3800-5500K	3800-5500K	3800-5500K	3800-5500K	3800-5500K
Color rendering index Ra	96	96	96	96	96
Color rendering index R9(Red)	98	98	98	98	98
Light Field Size Adjustable	150-350MM/150-350MM	150-350MM/120-280MM	120-280MM/120-280MM	150-350MM	120-280MM
Total rediant flux density	364W/m2	364W/m2	364W/m2	364W/m2	364W/m2
Endoscopy Mode	YES	YES	YES	YES	YES
Endoscopy Mode LEDS	6PCS/6PCS	6PCS/6PCS	6PCS/6PCS	6PCS	6PCS
Illumination For Endo-Mode	10%	12%	15%	10%	15%
LED service life	80,000hrs	80,000hrs	80,000hrs	80,000hrs	80,000hrs
Main Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Rotating Angle Of Arm	>540°	>540°	>540°	>540°	>540°
LED Bulb Power	1w Each Pc	1w Each Pc	1w Each Pc	1w Each Pc	1w Each Pc
Input Power	400w	400w	400w	400w	400w
Operating element	Touch Control	Touch Control	Touch Control	Touch Control	Touch Control
Light head protection rating	IP54+FireProof	IP54+FireProof	IP54+FireProof	IP54+FireProof	IP54+FireProof
Depth of illumination L1+12	1400MM	1200MM	1100MM	1400MM	1100MM
Lamp weight	700+700=52KGS	700+500=49KGS	500+500=46KGS	700+700=52KGS	500+500=46KGS
Packing	3 Wooden Cartons	3 Wooden Cartons	3 Wooden Cartons	3 Wooden Cartons	3 Wooden Cartons
LCD Touch Screen 4.3Inches	Optional	Optional	Optional	Optional	Optional
Back Up Battery (4-6hrs)	Optional	Optional	Optional	Optional	Optional
LED Bulb Size	20MM	20MM	20MM	20MM	20MM
Internal/External Sony Camera(20X)	Optional	Optional	Optional	Optional	Optional
Monitor With Extra Arm(22 Inches)	Optional	Optional	Optional	Optional	Optional
LCD Touch Screen 5Inches	Optional	Optional	Optional	Optional	Optional

TECHNICAL SHEET
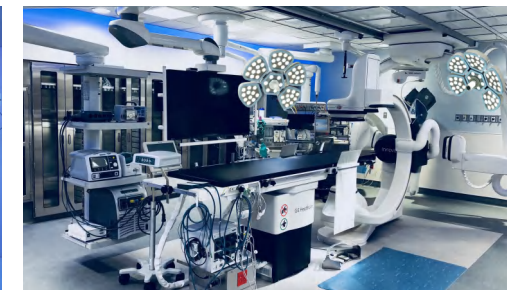
FLOWER LED

FLOWER LED
E700L

FLOWER LED
E700L+BATTERY

FLOWER LED
E500L

FLOWER LED
E500L+BATTERY

FLOWER LED Model	E700	E500
Voltage	95~245V，50/60HZ	95~245V，50/60HZ
Illuminance at distance of 1 m(LUX)	60,000-160,000	40,000-140,000
Brightness Adjustable	10-100%	10-100%
Lamp Head Diameter	650MM	650MM
Quantity Of LEDS	61PCS	39PCS
Color Temperature Adjustable	3800-5500K	3800-5500K
Color rendering index Ra	96	96
Color rendering index R9(Red)	98	98
Light Field Size Adjustable	150-350MM	90-260MM
Total rediant flux density	364W/m2	364W/m2
Endoscopy Mode	YES	YES
Endoscopy Mode LEDS	6PCS	6PCS
Illumination For Endo-Mode	10%	15%
LED service life	80,000hrs	80,000hrs
Main Material	Aluminum	Aluminum
Rotating Angle Of Arm	>540°	>540°
LED Bulb Power	1w Each Pc	1w Each Pc
Input Power	400w	400w
Operating element	Touch Control	Touch Control
Light head protection rating	IP54+FireProof	IP54+FireProof
Depth of illumination L1+12	1400MM	1100MM
Lamp weight	700+700=52KGS	500+500=46KGS
Packing	3 Wooden Cartons	3 Wooden Cartons
LCD Touch Screen 4.3inches	Optional	Optional
Back Up Battery (4-6hrs)	Optional	Optional
LED Bulb Size	20MM	20MM
Internal/External Sony Camera(20X)	Optional	Optional
Monitor With Extra Arm(22 Inches)	Optional	Optional
LCD Touch Screen 5Inches	Optional	Optional

Energy Efficiency
Operating costs for ventilation ceilings and air-conditioning systems are reduced due to low surface temperature of <2°C

Service / Maintenance
Service and maintenance are aided by the D-A-S (Data Analysis System), for determining operating hours and other functional concerns

3,800 Kelvin   4,500 Kelvin   5,500 Kelvin

Technology
Lens combination was developed with primary and secondary optics for light bundling. We use high-performance LEDs with a maximum color rendering index. Color temperature is variable, and the illumination intensity is dimmable

Optimized View
Endoscopy mode provides improved contrast for surgeons using imaging procedures. Monitor reflection is reduced during endoscopic procedures while offering adequate background lighting to support the orientation of the entire surgical team

Color Temperature Selection
Color temperature selection can be set individually for Flower LED. There are three levels from 3,800 K to 5,500 K, yielding high-contrast light for different types of tissue

Hygiene
Flower LED include a flow-optimized luminaire housing for laminar air flow ceilings. The degree of protection is IP54

Light
Flower LED Illumination in both area and depth is optimal and shadow-free, with the ideal ratio of luminaire to light field diameter. Provides a natural color-rendering index with white light (Ra of 96 at all light levels, R9 of 98 in the red region). It can be regulated to 160,000 lx
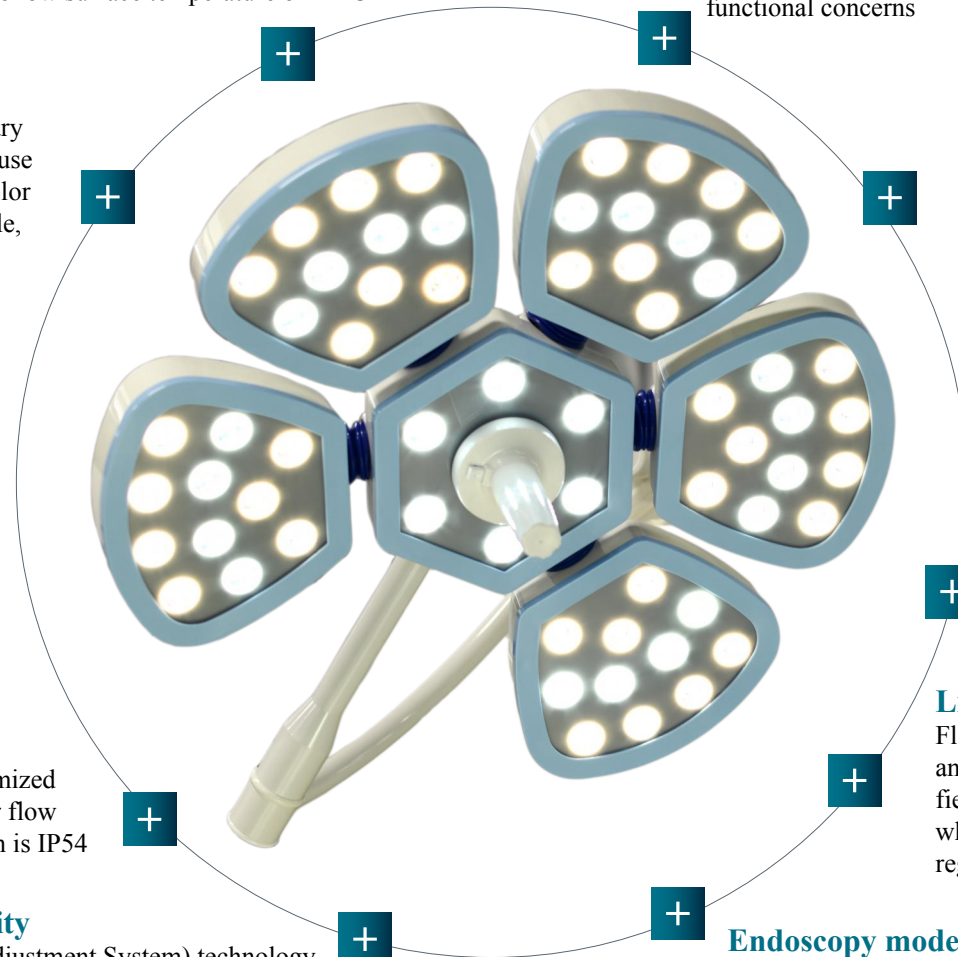
Sustainability
LAS (Light Adjustment System) technology creates 100% lighting power, even after many years of use

Endoscopy mode
Switch to White LEDS for optimum endoscopic intervention conditions

CAMERA (INTERNAL & EXTERNAL)
More Details, Bettery Visualization
Fascinating Images-With Clear, Sharp Contrours

High Image Quality
- Camera With 20X Optical Zoom With 1950*1080P HD Soluton
- Finely Textured Images With Clear, Sharp Cplors
- Remarkably Better Colors For Better Attention To Detail And A Brilliant Rendition

Ultra High Definition
- Exmor R Sensor - Clearer Images In Every Condition
- Twice As Sensitive As Coneventional Sensors
- Higher Image Quality In Low Light Conditions

Easy Handling
- Easy Installation And Modification Or Retrofitting Of
- Existing OR Light Sustems
- Mechanical And Electronical Image Rotation
- Fl;exible And Indepent Operation Via Remote Control
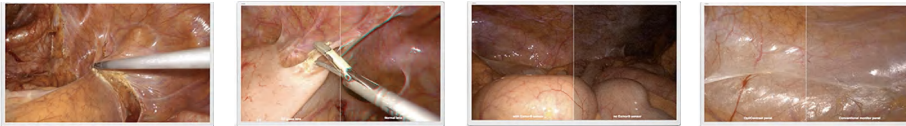- Optional Operation Via Wall Control Unit

IMAGE SENSOR	SONY 1/2 8TYPE "EXMOR" CMOS, SUPPORT PROGRESSIVE MODE
IMAGE SOLUTION	1920*1080P, APPROX, 2,140,000 PIXELS
VIDEO OUTPUTS	20X OPTICAL ZOOM, 12X DIGITAL ZOOM
ASPECT VIDEO	SDI
FOCUS OPERATING	16:9
WHITE BALANCE	MANUAL & AUTO
REMOTE CONTROL	AUTO, ATW, INDOOR, OUTDOOR, ONE, PUSH WB, MANUAL WB
WIRELESS REMOTE CONTROL	STANDARD ACCESSORIES
HARD DISK FOR STORE	1T
POWER	6.8W
VOLTAGE	DC12-30W, 1.5A
INSTALLATION	INTERNAL & EXTERNAL OPTIONAL
MONITOR	22INCHES HANGING WITH ARM
SOUND COLLECTION	STANDARD

E700/700 Internal Camera	E700/500 Internal Camera	E500/500 Internal Camera

E700 Internal Camera	E500 Internal Camera

E700 Internal Camera	E500 Internal Camera

E700/700 External Camera	E700/500 External Camera	E500/500 External Camera

E700 External Camera	E500 External Camera

FLOWER LED
SMART INNOVATION

FLOWER LED

ICE COLD AND EFFICIENT A NEW GENERATION OF SURGICAL LIGHTS.

PERFORMANCE
INNOVATIVE TECHNOLOGY

FLOWER LED is a new generation of surgical lights. The latest LED technology with user-relevant features can be configured to suit individual requirements and offers the perfect lighting solution.

ICE COLD AND EFFICIENT A NEW GENERATION OF SURGICAL LIGHTS.

In the operating room, shadow-free lighting that does not change the surrounding climatic conditions and minimally affects air flow is essential. The wide variety of performed procedures calls for extreme flexibility, and equipment must be adaptable to individual requirements at all times. Time for the new Flower LED technology