

MICARE MEDICAL WE OFFER EXCELLENCE FOR YOUR HOSPITAL

As a surgical lighting solution provider, MICARE Medical has more than 20 years of experience, great innovative capacity and invaluable know-how for medical technology solutions. Thank to our proximity to our customers and understanding of their needs, we guarantee you excellent products.

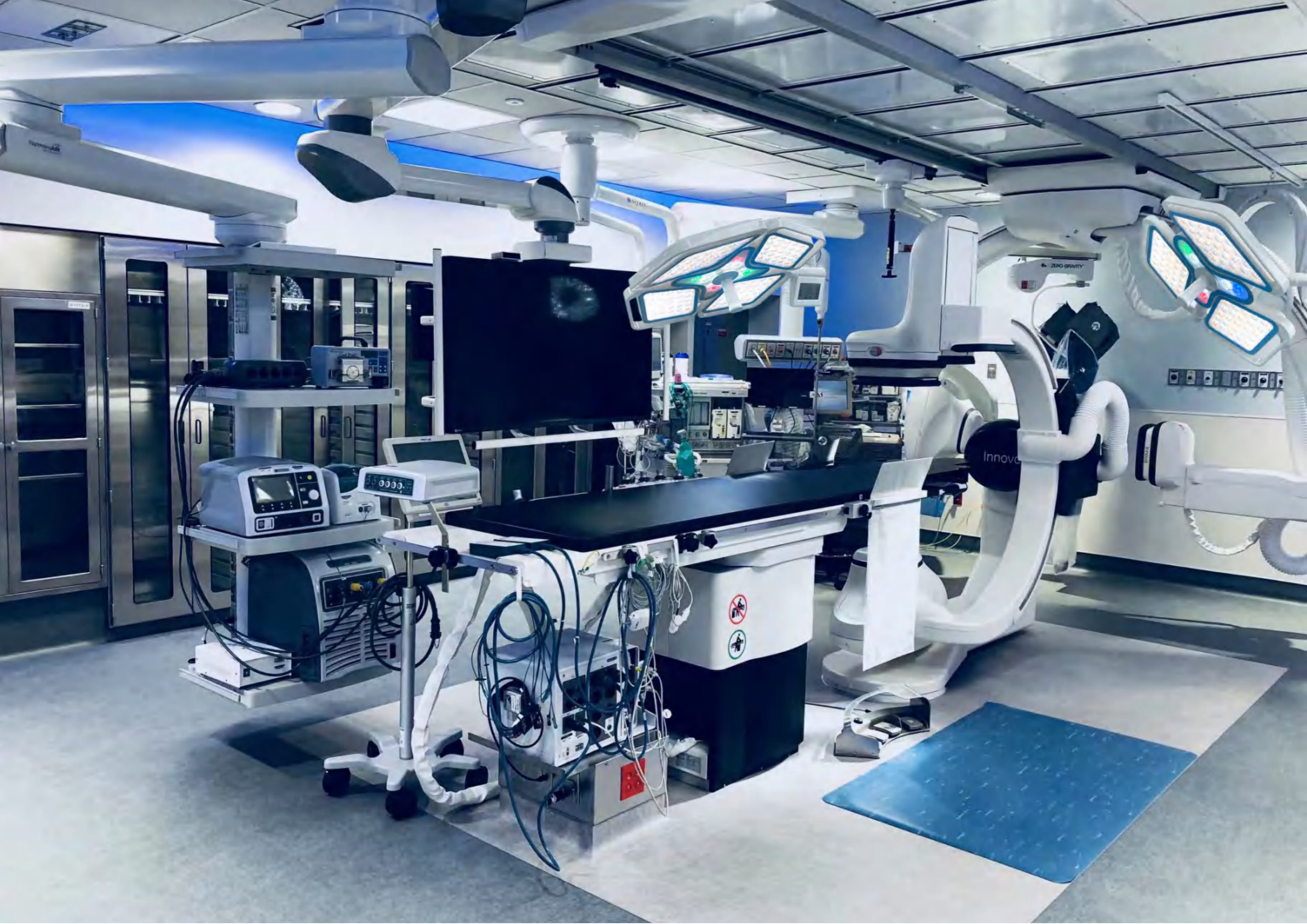
MAX INNOVATIVE & DIFFERENT

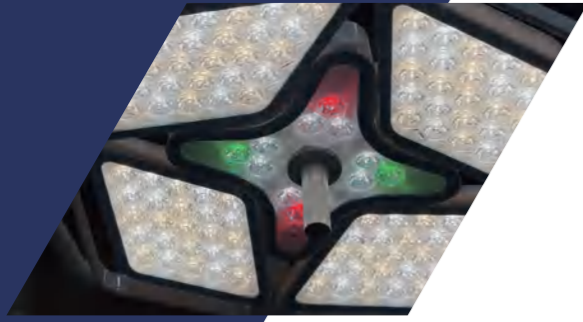


NANCHANG MICARE MEDICAL EQUIPMENT CO.,LTD.
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CE, ISO13485, ISO9001, FDA,
FREE SALE CERTIFICATE







High quality LEDs
with the lowest infrared or ultraviolet emissions, protects the patient from drying out of the tissue and provides a high quality working condition with the constant high-class lighting temperature to the operator.



Active Shadow Management
light precisely where you need it with MAX-LED Active Shadow Optional Management is a fully automatic system for ensuring that light is always available exactly where it is needed.



Perfect and even illumination
can be adjusted for any situation 112PCS powerful LEDs ensure that the surgical site always appears in the best light, literally. The conditions for a successful procedure are always ideal.

MAX-beam path for maximum variability

And that particularly applies to the surgical field and how it is illuminated. With its innovative beam path concept the MAX-LED offers you a previously unattainable light field size from 15 cm to 35 cm.



Your benefits at a glance:

- Warm white/cold white LEDs for brilliant, homogenous light
- Variable light field geometry and matrix light function
- Active Shadow Management for shadow-free illumination
- combined with excellent color rendering
- Maximum light field variability with innovative beam path concept

MAX-TREMELY FUNCTIONAL

You have options for operating MAX-LED. The control panel on the light for setting the main functions. You can use the touch-sensitive MAX-LED controller to adjust every parameter for your specific requirements during the operation. And even better: you can set your own "personal light", the precise light settings that you prefer. You can also control all the functions of the MAX-LED camera systems without difficulty. All completely intuitive with the self-explanatory, icon-based operation of the touch screen.

Flexible Manage
4.3Inches TFT LCD Touch Screen With Functional:
Light Intensity , Light Beam , Color Temperature, EndoLight Control

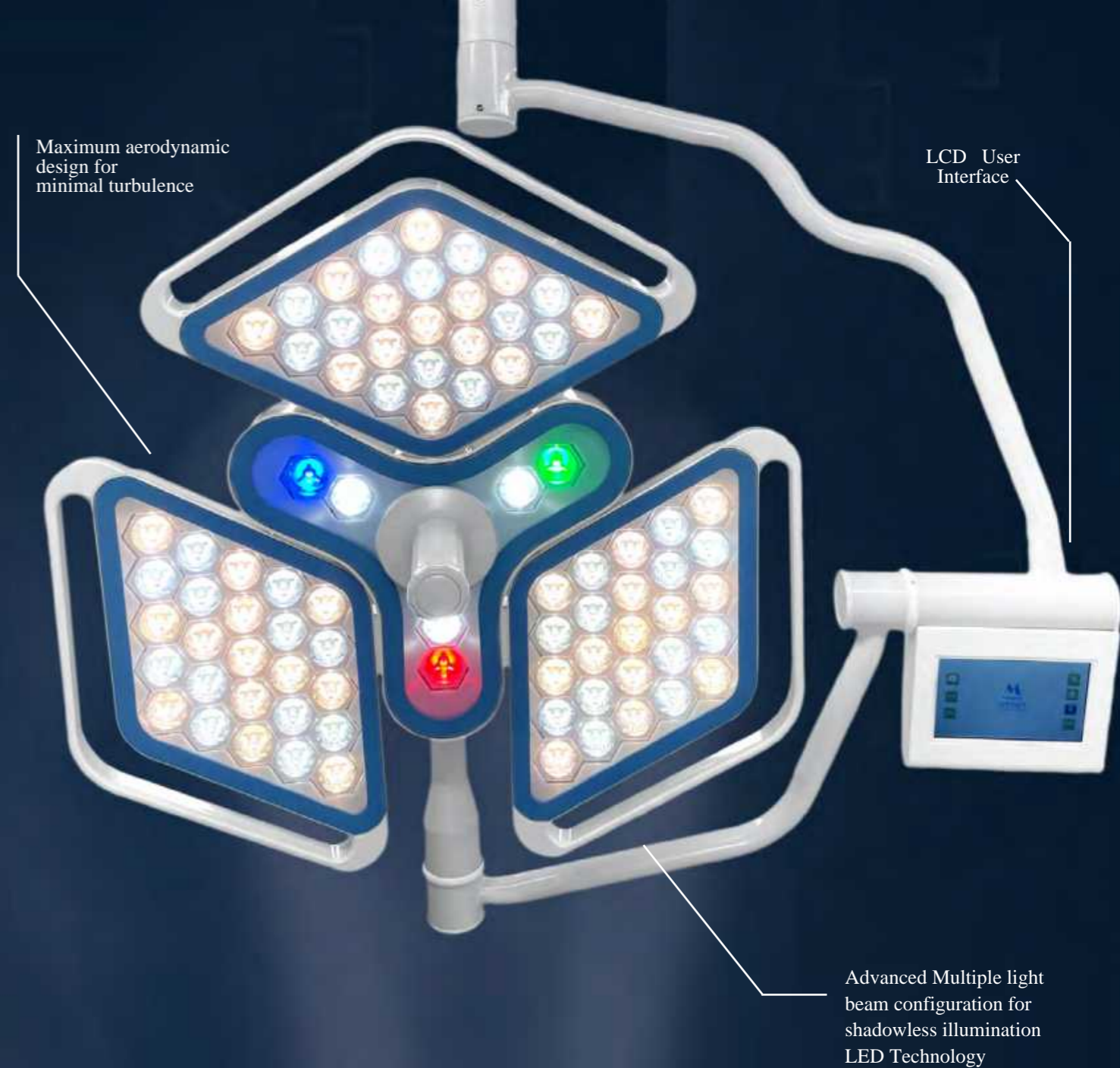
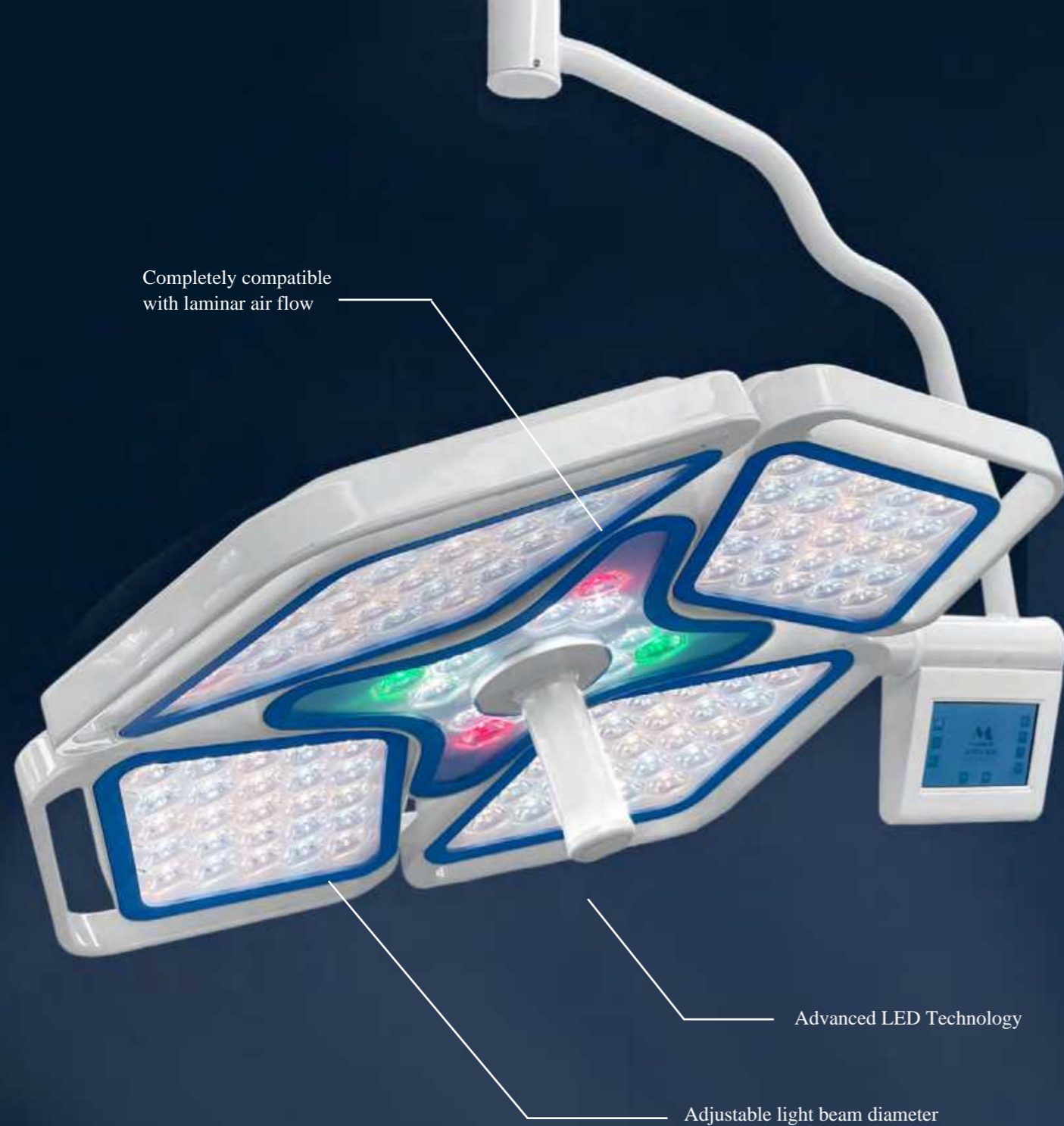


Ambient Lights Balance
Green Ambient in Endolight less stressful on the eyes during surgery
Red Ambient In Endolight provides optimum visualisation of red tissues. Red balance enhancement compensates for our natural weakness in distinguishing shades of red and is user adjustable to fine-tune the light to match our own red vision and the surgical conditions.



Language Customization
MAX LED support different languages
customization: Spanish, French, Russian, Portuguese, Arabic, German, Italian, Japanese, Korean etc.



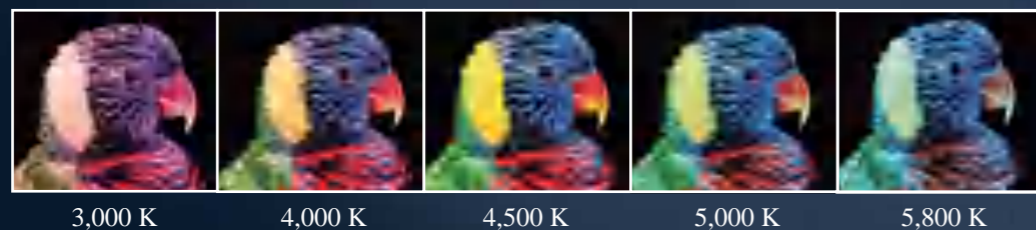


Clear Visualization For Better Results

Improved Beam Technology Quick and Comfortable Usage Special lens technology designed for surgical lighting fully compatible with LED, provides homogeneous light field; when the light field is changed, the light intensity does not change.

Multi Colours

Adjustable color control



MAX-LED provides adjustable color temperature to optimize visualization of red tissues. Color temperature is variable from 3000K – 5800K.

- Multiple Light Beam Configuration for Shadowless Illumination
- Improved Beam Technology
- No flicker effect
- Quality Light
- Super Optical Performance
- 4.3" TFT LCD Touch Screen Panel
- Memory function
- Easy to clean
- Endo Mode
- Ergonomic and practical design
- Laminar Air Flow
- Quick and comfortable usage
- Extra Protection

Maximum consistent

Adaptive color temperature combined with excellent color rendering – for a very natural view

The illuminance and the color temperature can be set precisely and retained in order to create and maintain a consistent ideal light situation and mood. The color rendering index is at the top level, as impressively confirmed by the outstanding quality of the MAX-LED system

Your benefits at a glance:

- Functional slimline design of the light housing
- Light-emitting area from genuine glass
- Easy-to-clean closed housing shape – therefore extremely hygienic
- Shape optimized for flow to prevent air turbulence
- Suitable for laminar air flow systems
- IP55: complete protection from dust deposits and moisture inside

MAX-LED

TECHNICAL SHEET

MAX-LED is the intelligent solution for any operating theatre. The design is optimised for an OR's air flow, improving air flow circulation in the operating area and reducing the potential for contamination. In addition, the Dynamic Obstacle Compensation of MAX-LED automatically adapts to the shadows in the light field. Furthermore, Intuitive Sterile Surgeon Control makes surgical operations safer and more ergonomic for surgeons. The user interface design is simplicity itself – anyone can use it.



| Model | E700/700 | E700/500 | E500/500 |
|--------------------------------------|------------------------------------|-------------------------------------|------------------------------------|
| Voltage | 95-245V, 50/60HZ | 95-245V, 50/60HZ | 95-245V, 50/60HZ |
| Light Intensity at 1m (EC) | 60,000-180,000/ 60,000 -180,000 | 60,000-180,000 / 40,000 -160,000 | 40,000-160,000/ 40,000 -160,000 |
| Light Intensity Ajustable | 0%-100% | 0%-100% | 0%-100% |
| Lamp Head Diameter(MM) | 700/700 | 700/700 | 700/700 |
| LED Bulb Quantity | 112 + 112 PCS | 112 + 82 PCS | 82 + 82 PCS |
| Color temperature(Kelvin) | 3,000 -5,800 | 3,000 -5,800 | 3,000 -5,800 |
| Color rendering index Ra | 96 | 96 | 96 |
| Color rendering index R9 | 98 | 98 | 98 |
| Spot Size Beam | 150-350 / 150-350 | 150-350 / 90-280 | 90-280 / 90-280 |
| Total Radiant Flux Density | 364W/m ² | 364W/m ² | 364W/m ² |
| Endo Ambient Lights | Green + Red | Green + Red + Blue | Green + Red + Blue |
| Endo Lights Quantity (PCS) | 12 + 12 | 12 + 6 | 6 + 6 |
| Light Intensity For Endo Lights | 15% | 12% | 10% |
| Rated Power | 220W | 190W | 160W |
| Depth of illumination (L1+L2) @ 60 % | 750MM | 700MM | 650MM |
| Depth of illumination (L1+L2) @ 20 % | 1400MM | 1300MM | 1200MM |
| Class Of Protective | IP55 | IP55 | IP55 |
| Main Material | Aluminum Alloy | Aluminum Alloy | Aluminum Alloy |
| Rotation | 540° | 540° | 540° |
| 4.3" TFT LCD Touch Screen | Optional | Optional | Optional |
| Dynamic Obstacle Compensation | Optional | Optional | Optional |
| Back Up Rechargeable Battery | Optional | Optional | Optional |
| Internal Sony Camera 10X | Optional | Optional | Optional |
| Monitor (21Inches) | Optional | Optional | Optional |
| LED Brand | OSRAM | OSRAM | OSRAM |

MAX-LED

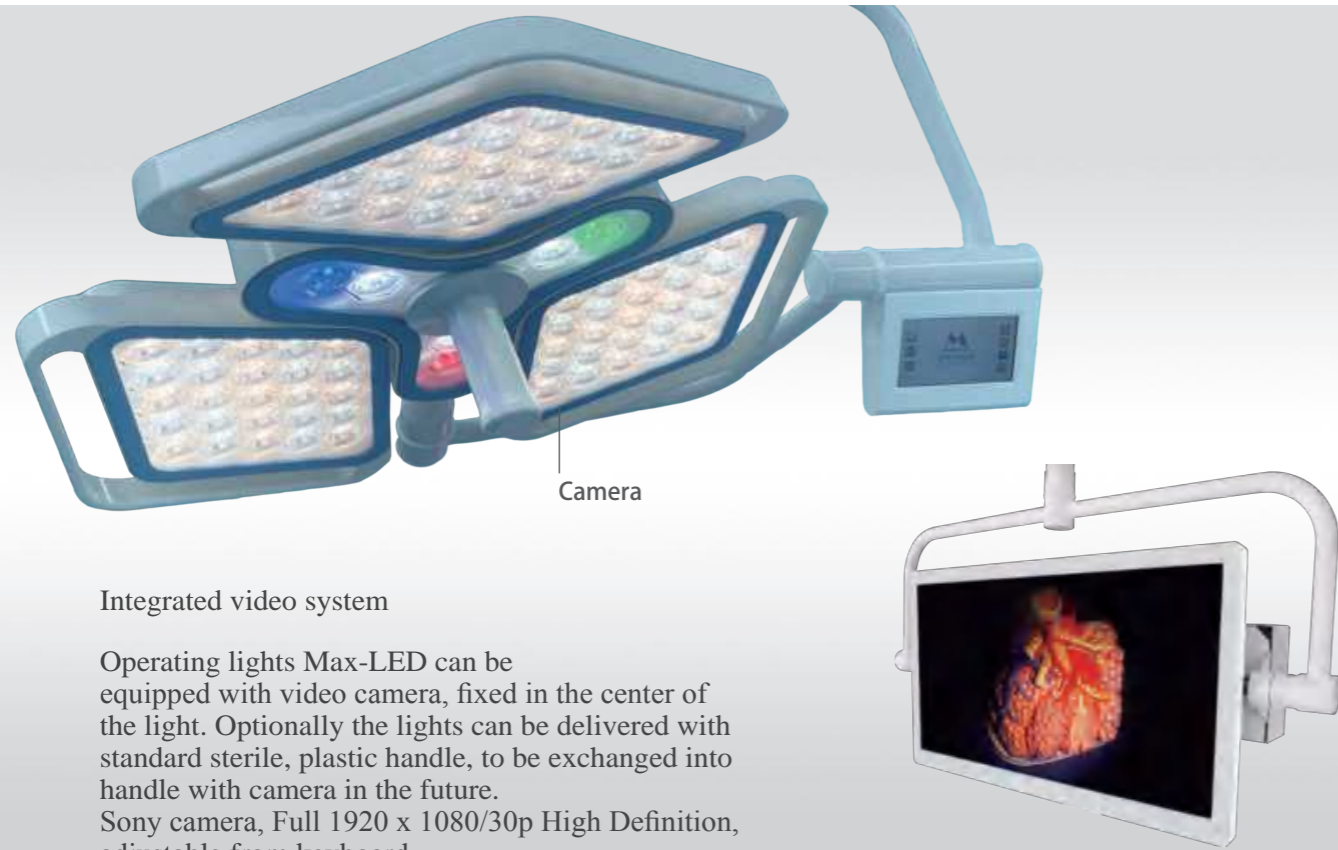
TECHNICAL SHEET

Each medical specialty requires particular and specific installations. The modular design of MAX-LED surgical lighting with multiple associated products brings a unique architectural, tailor-made solution which precisely responds to both your current and future needs.



| Model | E700 | E500 | E700L | 500L |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|
| Voltage | 95-245V, 50/60HZ | 95-245V, 50/60HZ | 95-245V, 50/60HZ | 95-245V, 50/60HZ |
| Light Intensity at 1m (EC) | 60,000-180,000 | 40,000 -160,000 | 60,000-180,000 | 40,000 -160,000 |
| Light Intensity Ajustable | 0%-100% | 0%-100% | 0%-100% | 0%-100% |
| Lamp Head Diameter(MM) | 700 | 700 | 700 | 700 |
| LED Bulb Quantity | 112 PCS | 82 PCS | 112 PCS | 82 PCS |
| Color temperature(Kelvin) | 3,000 -5,800 | 3,000 -5,800 | 3,000 -5,800 | 3,000 -5,800 |
| Color rendering index Ra | 96 | 96 | 96 | 96 |
| Color rendering index R9 | 98 | 98 | 98 | 98 |
| Spot Size Beam | 150-350 | 90-280 | 150-350 | 90-280 |
| Total Radiant Flux Density | 364W/ m ² | 364W/ m ² | 364W/ m ² | 364W/ m ² |
| Endo Ambient Lights | Green + Red | Green + Red + Blue | Green + Red | Green + Red + Blue |
| Endo Lights Quantity (PCS) | 12 | 6 | 12 | 6 |
| Light Intensity For Endo Lights | 15% | 12% | 15% | 12% |
| Rated Power | 110W | 80W | 110W | 80W |
| Depth of illumination (L1+L2) @ 60 % | 750MM | 700MM | 750MM | 700MM |
| Depth of illumination (L1+L2) @ 20 % | 1400MM | 1300MM | 1400MM | 1300MM |
| Class Of Protective | IP55 | IP55 | IP55 | IP55 |
| Main Material | Aluminum Alloy | Aluminum Alloy | Aluminum Alloy | Aluminum Alloy |
| Rotation | 540° | 540° | 540° | 540° |
| 4.3" TFT LCD Touch Screen | Optional | Optional | Optional | Optional |
| Dynamic Obstacle Compensation | Optional | Optional | Optional | Optional |
| Back Up Rechargeable Battery | Optional | Optional | Optional | Optional |
| Internal Sony Camera 10X | Optional | Optional | Optional | Optional |
| Monitor (21Inches) | Optional | Optional | Optional | Optional |
| LED Brand | OSRAM | OSRAM | OSRAM | OSRAM |

Additional Equipment and Functions



Integrated video system

Operating lights Max-LED can be equipped with video camera, fixed in the center of the light. Optionally the lights can be delivered with standard sterile, plastic handle, to be exchanged into handle with camera in the future. Sony camera, Full 1920 x 1080/30p High Definition, adjustable from keyboard.

High Image Quality

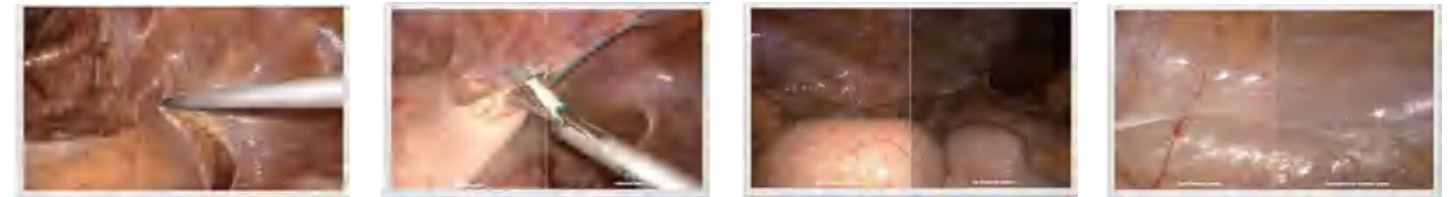
- Camera With 10X Optical Zoom With 1950*1080P HD Solution
- Finely Textured Images With Clear, Sharp Colors
- Remarkably Better Colors For Better Attention To Detail And A Brilliant Rendition

Ultra High Definition

- Exmor R Sensor - Clearer Images In Every Condition
- Twice As Sensitive As Conventional Sensors
- Higher Image Quality In Low Light Conditions

Easy Handling

- Easy Installation And Modification Or Retrofitting Of Existing OR Light Systems
- Mechanical And Electronical Image Rotation
- Flexible And Independent Operation Via Remote Control
- Optional Operation Via Wall Control Unit



| Camera Specifications | Details |
|--------------------------|---|
| Image Device | 1/2.8 type Exmor™ CMOS sensor (SONY Brand) |
| Effective Pixels | Approx. 2 million |
| Digital Zoom | 12X Optical Zoom |
| Horizontal Viewing Angle | 54.1° (wide end) to 2.9° (tele end) |
| Sync System | Internal |
| Electronic Shutter | 1/2 to 1/10,000 s |
| White Balance | Auto |
| Focus System | Auto |
| Exposure Control | AE Control: Auto, Manual, Priority (shutter priority and iris priority) |
| Video Output | Details |
| Lens Value | 10x Optical Zoom, f=4.7 mm (wide) ~ 94.0 mm (tele), f1.6 to f3.5 |
| S/N Ratio More | More than 50 dB |
| Signal System | Signal System HD: 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/50, 720p/29.97, 720p/25 SD: NTSC/PAL |

CONSISTENTLY TOP-NOTCH PRODUCT QUALITY

In recent years, we have developed to become one of the world's leading producers of hospital solutions. We operate and produce according to our philosophy "Pushing Technology to Excellence" at all times. Our work is based on three pillars: innovation, global footprint



Innovative solutions

For MICARE, innovation means adding value to the customer. MICARE products provide a great deal of flexibility, and our numerous patents are testament to their exceptional level of technical innovation; these qualities have helped MICARE become a key company in medical technology.



Diversification

MICARE has continuously been developing new and innovative products since its foundation, always in line with MICARE's philosophy as a solution provider for the hospital with focus on the OR.



Global

As an internationally operating company, we sell in more than 90 countries-worldwide.



Cooperation

Being a reliable business partner

MICARE LIGHTING

PUSHING TECHNOLOGY TO EXCELLENCE

MAX-LED Hybrid Room OR Light

— UNIQUE DESIGN FOR IDEAL LIGHTING

Demanding tasks require special solutions. With the innovative MAX-LED surgical lights we give you all the benefits of cutting-edge LED technology, in a uniquely effective way. MICARE offers trendsetting light and system solutions that can be retrofitted easily and without special preparation. This includes, for example, the wireless equipping of your surgical lights with cameras.



MICARE POWERLED

- Aluminum Lamp Housing
- High Color Rendering Index
- Uniform And Round Focus
- Life Time: $\geq 50,000$ hrs
- Safety Explosion-Proof

BRILLIANT BY DESIGN

The MICARE PowerLED Surgical Lighting System Provides Meaningful, Clinician-Inspired Advances To Keep Up With Life In Today's OR.

Through Thoughtful Innovation, This Future-Ready System Offers Superior Optical Performance, Laminar Airflow Design

Full Intergration To The OR Environment From Conventional To Theatre Rooms

MICARE PowerLED ensures the clearest and brightest light for surgeons, without distractions from glare.

Allows equipment to be positioned within reach of the surgeon, concealing wires and cables to improve safety and hygiene. Equipment can be easily added, removed and upgraded to meet future requirements.

Thanks to MICARE Power LED High-quality illumination helps to relieve strain, Comfort Light feature, improves visual performance, reduces the sensation of glare and increases the feeling of wakefulness leading to a better working environment

Micare PowerLED 700/500

Evolving Design, Revolutionary Features

Near Perfect Colour Rendition with white and yellow LEDS mix
For the best visualisation of tissue during surgery.

Widely Beam Technology From 15CM-35CM
The largest light beams of any current product with high intensity across the full beam width.

Unique Comfort
A soft illumination of light to reduce eye strain from high contrasts of light intensity.



Designed to Minimise Infections
Easy to clean, sealed light head, remote controls and anti-microbial coatings.

HDI-SDI Camera Optional, Integrated cameras are fully enclosed inside the light head, records for risk, management, and optimize understanding and learning.

Maximum illumination up to 180,000 lux
Stable and constant illumination
Enhanced visibility, diagnosis and treatment



Endoscopy Mode In Deep Illumination For Various Operation Enviromental



Astro Space Design, Working seamlessly with laminar airflow solutions



Removable Sterilizaer Handle Can Be Easily For Internal Camera



5.1 INCHES LCD Touch Panel Optional (OEM With LOGO Print Available)



| MICARE PowerLED Model | E700/700 | E700/500 | E500/500 |
|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Voltage | 95~245V, 50/60HZ | 95~245V, 50/60HZ | 95~245V, 50/60HZ |
| Illuminance at distance of 1 m(LUX) | 93,000-180,000/93,000-180,000 | 93,000-180,000/83,000-160,000 | 83,000-160,000/83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM/700MM | 700MM/500MM | 500MM/500MM |
| Quantity Of LEDS | 80PCS/80PCS | 80PCS/48PCS | 48PCS/48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K | 3800-5000K |
| Color rendering index Ra | 96 | 96 | 96 |
| Color rendering index R9(Red) | 98 | 98 | 98 |
| Light Field Size Adjustable | 150-350MM/150-350MM | 150-350MM/90-260MM | 90-260MM/90-260MM |
| Total radiant flux density | 364W/m ² | 364W/m ² | 364W/m ² |
| Endoscopy Mode | YES | YES | YES |
| Endoscopy Mode LEDS | 8PCS/8PCS | 8PCS/8PCS | 8PCS/8PCS |
| Illumination For Endo-Mode | 10% | 15% | 18% |
| LED service life | 50,000hrs | 50,000hrs | 50,000hrs |
| Main Material | Aluminum | Aluminum | Aluminum |
| Rotating Angle Of Arm | >540° | >540° | >540° |
| LED Bulb Power | 1w Each Pc | 1w Each Pc | 1w Each Pc |
| Input Power | 400w | 400w | 400w |
| Operating element | Touch Control | Touch Control | Touch Control |
| Light head protection rating | IP54+FireProof | IP54+FireProof | IP54+FireProof |
| Depth of illumination L1+12 | 1400MM | 1200MM | 1100MM |
| Lamp weight | 700+700=52KGS | 700+500=49KGS | 500+500=46KGS |
| Packing | 3 Wooden Cartons | 3 Wooden Cartons | 3 Wooden Cartons |
| LCD Touch Screen | Optional | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional | Optional |
| Shadow Compensation Function | Optional | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional | Optional |
| Wall Mounted Control) | Optional | Optional | Optional |

| MICARE PowerLED Model | E700 | E500 |
|-------------------------------------|---------------------|---------------------|
| Voltage | 95~245V, 50/60HZ | 95~245V, 50/60HZ |
| Illuminance at distance of 1 m(LUX) | 93,000-180,000 | 83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM | 500MM |
| Quantity Of LEDS | 80PCS | 48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K |
| Color rendering index Ra | 96 | 96 |
| Color rendering index R9(Red) | 98 | 98 |
| Light Field Size Adjustable | 150-350MM | 90-260MM |
| Total radiant flux density | 364W/m ² | 364W/m ² |
| Endoscopy Mode | YES | YES |
| Endoscopy Mode LEDS | 8PCS | 8PCS |
| Illumination For Endo-Mode | 10% | 18% |
| LED service life | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional |
| Shadow Compensation Function | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional |
| Wall Mounted Control) | Optional | Optional |





| MICARE PowerLED Model | E700L(Battery Optional) | E500L(Battery Optional) |
|-------------------------------------|-------------------------|-------------------------|
| Voltage | 95~245V, 50/60HZ | 95~245V, 50/60HZ |
| Illuminance at distance of 1 m(LUX) | 93,000-180,000 | 83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM | 500MM |
| Quantity Of LEDS | 80PCS | 48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K |
| Color rendering index Ra | 96 | 96 |
| Color rendering index R9(Red) | 98 | 98 |
| Light Field Size Adjustable | 150-350MM | 90-260MM |
| Total radiant flux density | 364W/m2 | 364W/m2 |
| Endoscopy Mode | YES | YES |
| Endoscopy Mode LEDS | 8PCS | 8PCS |
| Illumination For Endo-Mode | 10% | 18% |
| LED service life | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional |
| Shadow Compensation Function | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional |
| Wall Mounted Control) | Optional | Optional |



Redefine optical performance Aerospace-based design

How can you deliver more clean airflow to your patient during a surgical procedure? The Osram Power LED allows unobstructed flow of clean air through the lighthouse to dissipate accumulated heat and surgical smoke. Working seamlessly with laminar airflow solutions, it decreases air turbulence through its unique airfoil design. Aerospace-based design, We've learned from the best in the aerospace industry for a design that mitigates airflow turbulence while delivering clean air to the patient.

Lightweight aluminum construction
The suspension weights approximately
30% less than previous generations
of steel arms.

Micare Power LED E700/500 CAMERA AND VIDEO SYSTEM

THE NEW DIMENSION IN VIDEO IMAGES

CAMERA (INTERNAL & EXTERNAL)

More Details, Better Visualization

Fascinating Images-With Clear, Sharp Contrours



**E700/700
Internal Camera**

**E700/500
Internal Camera**

**E500/500
Internal Camera**

High Image Quality

- Camera With 10X 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 Conventional 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
- Flexible And Indepent Operation Via Remote Control
- Optional Operation Via Wall Control Unit



**E700
Internal Camera**



**E500
Internal Camera**



**E700
Internal Camera**



**E500
Internal Camera**

IMAGE SENSOR

SONY 1/2 8TYPE "EXMOR" CMOS, SUPPORT PROGRESSIVE MODE

IMAGE SOLUTION

1920*1080P, APPROX, 2,140,000 PIXELS

VIDEO OUTPUTS

10X 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

21INCHES HANGING WITH ARM

SOUND COLLECTION

STANDARD



**E700/700
External Camera**

**E700/500
External Camera**

**E500/500
External Camera**



**E700
External Camera**



**E500
External Camera**



Future-ready to evolve with you

What if you had a lighting system that was modular, upgradeable, and expandable so that it could meet your ongoing needs with ease? You've found it. There are ways to customize this system today and in the future.

All of us here at MICARE are committed to you



SIMPLY INGENUOUS

What if you had illumination in the OR that simply supported you throughout each surgical procedure? The MICARE PowerLED does this, delivering excellent color, contrast, clarity, and control.

A unique peninsula design provides optimal illumination at the surgical site, including deep cavity procedures. Advances in LED technology mean that the MICARE PowerLED is able to optimize illumination through fewer LEDs than in the past.

You focus on patients. We focus on you. MICARE Lighting solutions bring together people and technology so that you have exactly what you need, when you need it, for the intelligent OR of today and tomorrow. From project design to implementation to service support, your success is our highest priority.

LIGHTING
EXPERIENCE



MICARE MULTI-COLOR LED

- Clean Air Ceilings
- True Colors And Dimming
- Lighting With Endoscopic Procedures
- Limitless Service Life
- Excellent Color Properties

MICARE IN THE OR

MICARE Surgical Solutions creates state-of-the-art products to ensure the greatest possible clinical experience. Our second generation,

MICARE MULTI COLOR LED Surgical Lighting System brings the highest LED technology to the Operating Room.

The multi-color surgical light is designed for superior shadow control and optimum light intensity, along with offering diverse, color temperatures to accurately differentiate between tissues. The slim design and laminar flow openings promote airflow, allow for effortless maneuvering of the light, and is attached to a durable suspension system to eliminate drifting. The design was created with exceptional infection control features to prevent the spread of bacteria.

the OR booms to assist clinical staff to safely reposition and transfer patients, ensuring the best possible outcomes in your OR.

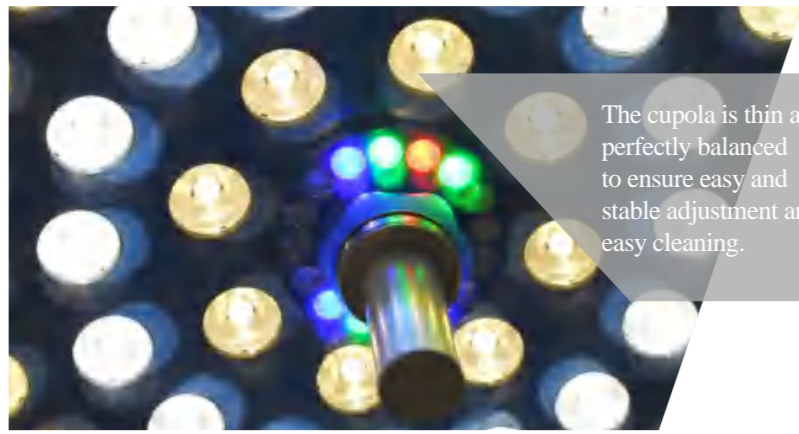
DETERMINATION AND PASSION, THE ART OF INNOVATION

700 500
MULTI COLOR LED
MICARE

A new way to illuminate the operating room

With the introduction of MICARE LED lights, the multi-color surgical lights has now been expanded.

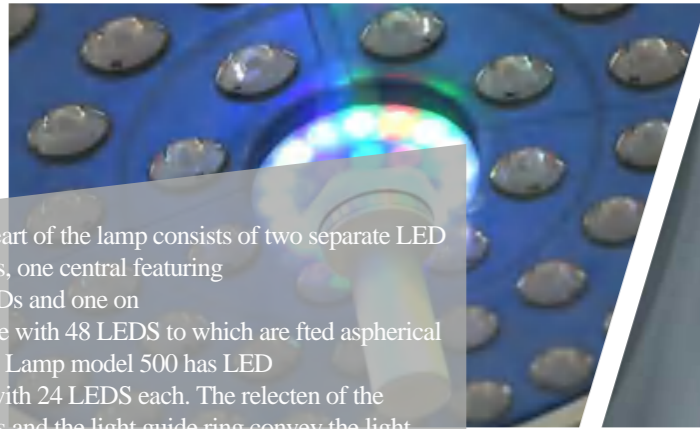
MICARE now has the most extensive selection of products for illuminating the surgical field that can meet any user's requirements and preferences. The innovative MICARE multi-color LED lights have ultra-modern, high-performance LEDs to provide outstanding illumination of the surgical field.



The cupola is thin and perfectly balanced to ensure easy and stable adjustment and easy cleaning.

MICARE MULTI-COLOR LED

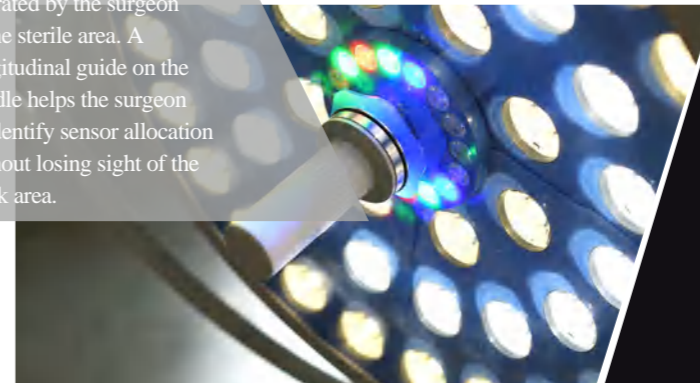
The electronics controls the power functions, light adjustment, colour temperature change, change of light diameter in two widths, endoscopy light and courtesy light.



The heart of the lamp consists of two separate LED circuits, one central featuring 16 LEDs and one on the side with 48 LEDs to which are fitted aspherical lenses. Lamp model 500 has LED cruts with 24 LEDs each. The reflecten of the mirrors and the light guide ring convey the light flow to the established point without dispersion.

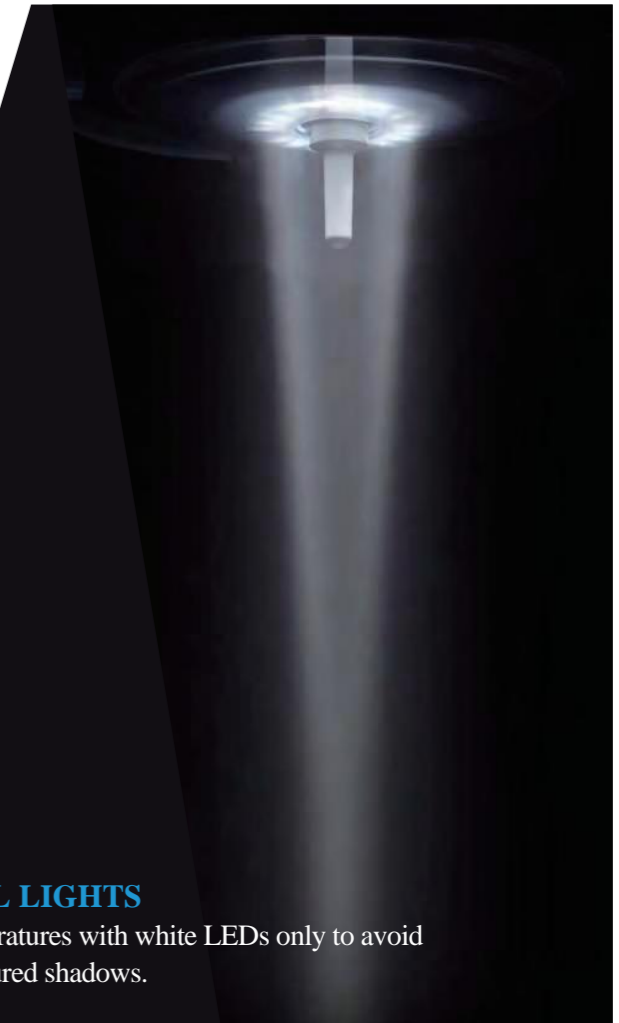


The sterilizable handle is equipped with a capacitive system for light adjustment, operated by the surgeon in the sterile area. A longitudinal guide on the handle helps the surgeon to identify sensor allocation without losing sight of the work area.



In the aluminium cupola and in the protective screen an ergonomic round grip is obtained to hold and move the lamp. The entire aluminium lamp body optimizes the LED thermal management and luminous efficacy, so as to maintain constant illuminance for the whole time the device is on without the aid of electronic processes.

COLORFUL LIGHTS
4 colour temperatures with white LEDs only to avoid annoying coloured shadows.



TECHNICAL SHEET

MICARE MULTI-COLOR LED



**MULTI-COLOR LED
E700/700**



**MULTI-COLOR LED
E500/500**



**MULTI-COLOR LED
E700/500**



**MULTI-COLOR LED
E700**



**MULTI-COLOR LED
E500**

| MULTI-COLOE 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) | 93,000-180,000/93,000-180,000 | 93,000-180,000/83,000-160,000 | 83,000-160,000/83,000-160,000 | 93,000-180,000 | 83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% | 10-100% | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM/700MM | 700MM/500MM | 500MM/500MM | 700MM | 500MM |
| Quantity Of LEDS | 64PCS/64PCS | 64PCS/40PCS | 40PCS/40PCS | 80PCS | 48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K | 3800-5000K | 3800-5000K | 3800-5000K |
| 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/90-260MM | 90-260MM/90-260MM | 150-350MM | 90-260MM |
| Total rediant flux density | 364W/m2 | 364W/m2 | 364W/m2 | 364W/m2 | 364W/m2 |
| Endoscopy Mode | YES | YES | YES | YES | YES |
| Endoscopy Mode LEDS | 16PCS/16PCS | 16PCS/16PCS | 16PCS/16PCS | 16PCS | 16PCS |
| Illumination For Endo-Mode | 20% | 35% | 30% | 20% | 25% |
| LED service life | 50,000hrs | 50,000hrs | 50,000hrs | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional | Optional | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional | Optional | Optional | Optional |
| Shadow Compensation Function | Optional | Optional | Optional | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional | Optional | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional | Optional | Optional | Optional |
| Wall Mounted Control) | Optional | Optional | Optional | Optional | Optional |



TECHNICAL SHEET

MICARE MULTI-COLOR LED



**MULTI-COLOR LED
E700L**



**MULTI-COLOR LED
E700L+BATTERY**



**MULTI-COLOR LED
E500L**



**MULTI-COLOR LED
E500L+BATTERY**

| MICARE PowerLED Model | E700 | E500 |
|-------------------------------------|------------------|------------------|
| Voltage | 95~245V, 50/60HZ | 95~245V, 50/60HZ |
| Illuminance at distance of 1 m(LUX) | 93,000-180,000 | 83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM | 500MM |
| Quantity Of LEDS | 80PCS | 48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K |
| Color rendering index Ra | 96 | 96 |
| Color rendering index R9(Red) | 98 | 98 |
| Light Field Size Adjustable | 150-350MM | 90-260MM |
| Total radiant flux density | 364W/m2 | 364W/m2 |
| Endoscopy Mode | YES | YES |
| Endoscopy Mode LEDS | 16PCS | 16PCS |
| Illumination For Endo-Mode | 20% | 25% |
| LED service life | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional |
| Shadow Compensation Function | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional |
| Wall Mounted Control) | Optional | Optional |

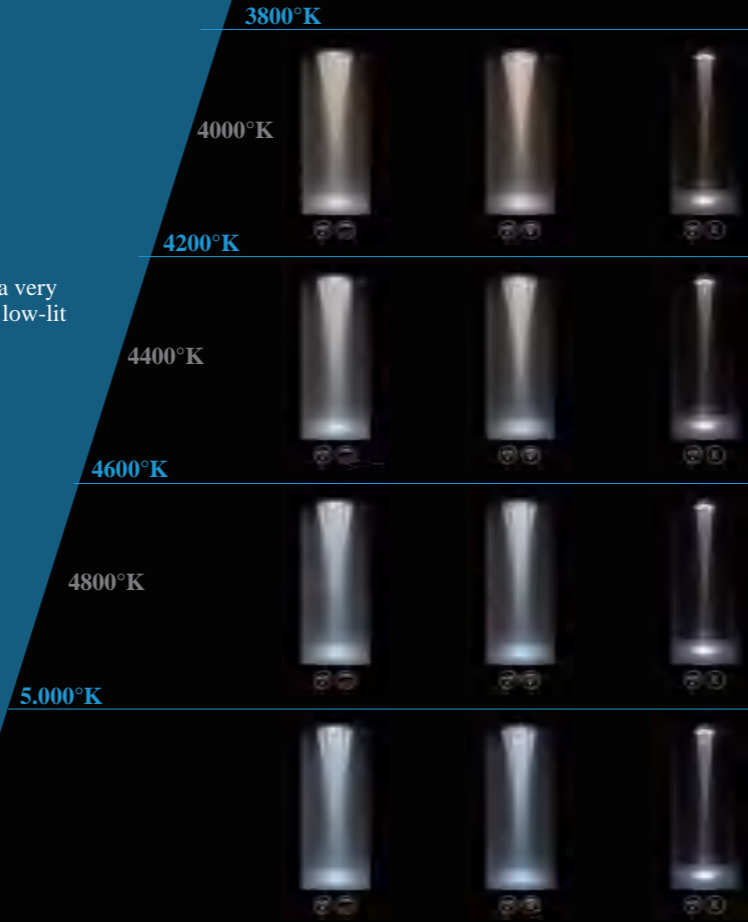


CREE MULTI-COLOR LED

With MICARE, light can be personalized in a very simple way

Particular attention has been devoted to visual impact. To avoid the feeling of blindness experienced when passing from a very well-lit area to a non-illuminated peripheral zone, an intermediate low-lit area has been created so the eye can adapt to light change.

MICARE uses white LEDs with colour temperatures - 3800K, 4000K, 4200K, 4400K, 4600K, 4800K, 5000K. It is also possible to select two diameters of the lit-up surface according to the specificity of the operation to be performed. An electronic system switches- on a group of extra LEDs which, reflected on the elliptical mirrors, creates two different light diameters. For endoscopy and concentrated operating field operations, the Endoled function is active, providing soft light, this too adjustable in intensity and tone, to light up the work area.



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



High Image Quality

- Camera With 10X 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 Conventional Sensors
- Higher Image Quality In Low Light Conditions

Easy Handling

- Easy Installation And Modification Or Retrofitting Of Existing OR Light Systems
- Mechanical And Electronical Image Rotation
- Flexible And Independent 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 | 10X 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 | 21INCHES 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

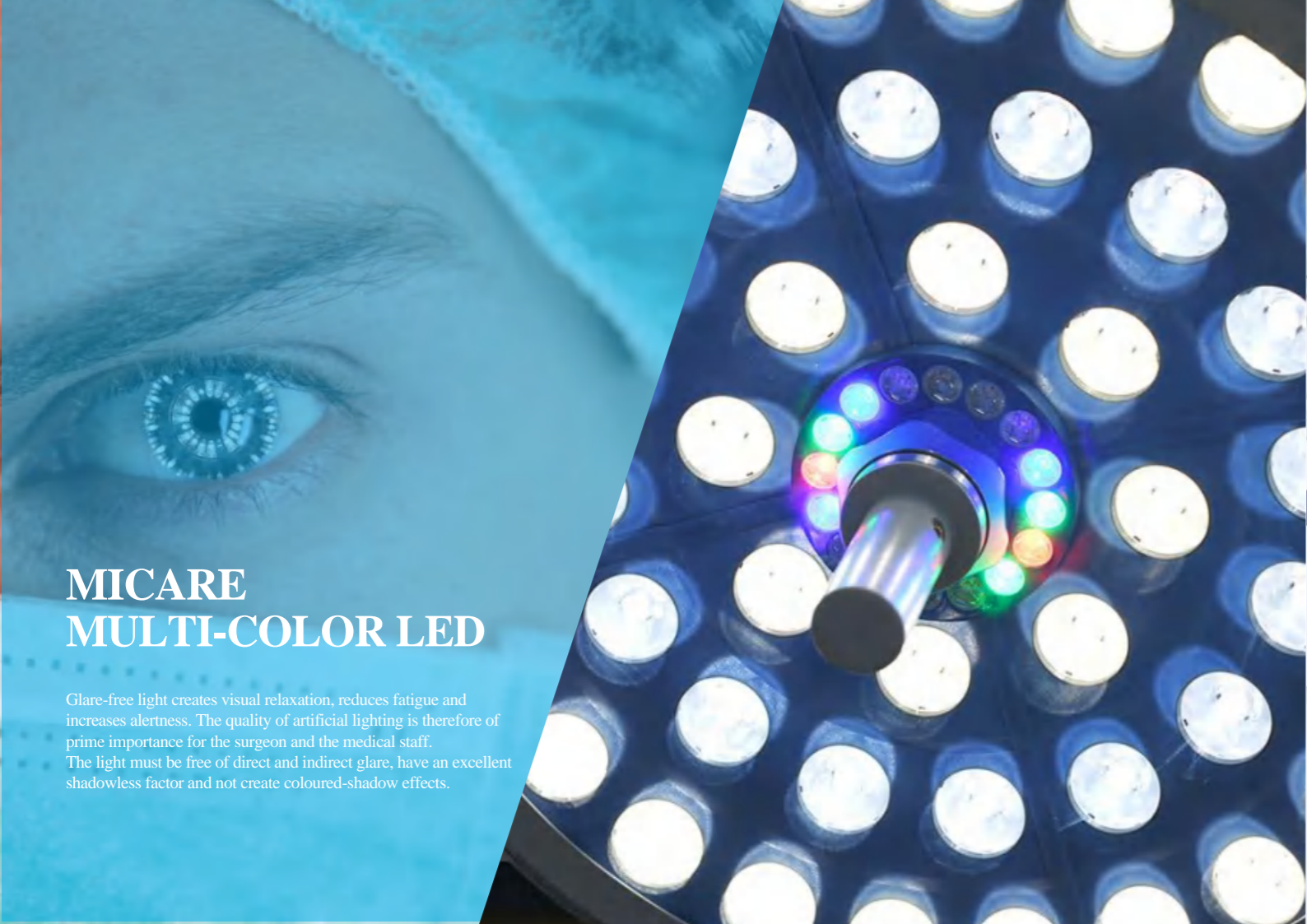


E700
External Camera



E500
External Camera





MICARE MULTI-COLOR LED

Glare-free light creates visual relaxation, reduces fatigue and increases alertness. The quality of artificial lighting is therefore of prime importance for the surgeon and the medical staff. The light must be free of direct and indirect glare, have an excellent shadowless factor and not create coloured-shadow effects.



MICARE again asserts its uniqueness, a lamp designed to enhance operating theatre lighting.

The concepts "White Light without colour shadows" and "Indirect Light", already established in the previous series, are now enhanced by technology which permits light propagation without glare.

MICARE has been a specialist in surgical lighting equipment. We offer best-in-class products, global experience in planning and project management, and individual service.

Our products and services include:

- MICARE Surgical Lights
- MICARE video and camera systems
- MICARE Examination Lamps
- MICARE OR tables and accessories
- MICARE Surgical Headlights
- MICARE LED X-ray Film Viewer
- Development, consulting, project management
- Service and Installation by the best-trained specialists

We look forward to hearing from you and helping you plan, design and install your next surgical environment.

MICARE MULTI-COLOR LED

Surgical Solutions

Surgical Lighting

FLOWER LED
Surgical Lighting System

Brighten your Expertise

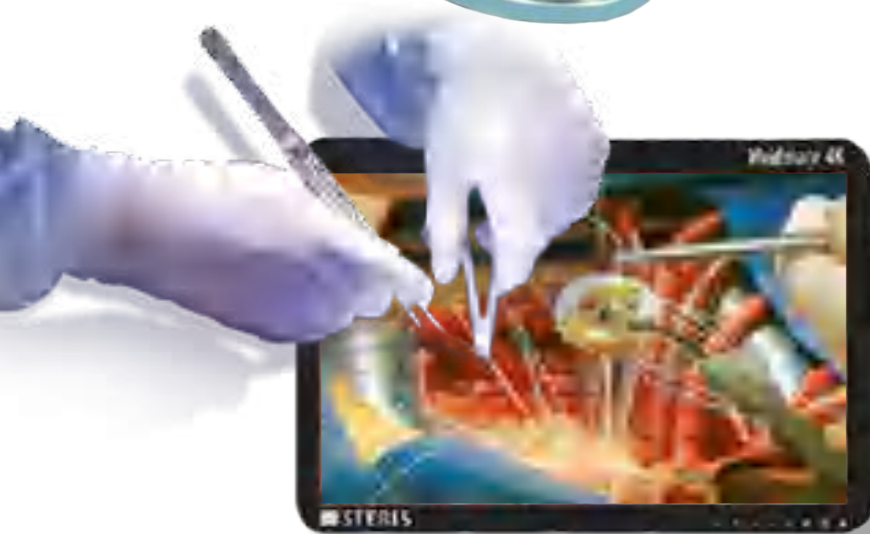


One Integrated Approach to Healthcare



Adjustable colour temperature: For Your Visual Comfort

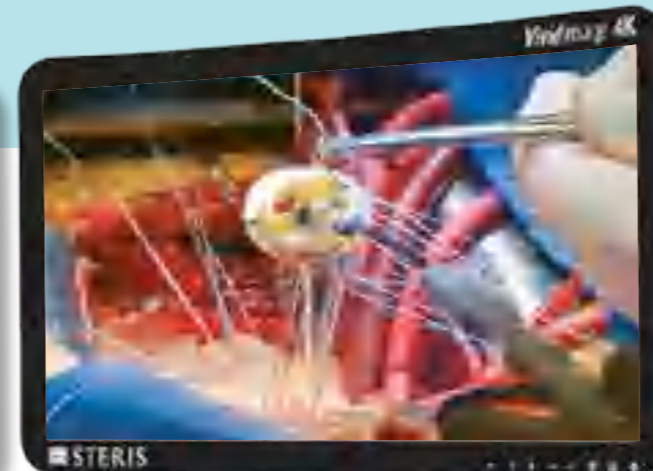
FLOWER LED surgical lighting with adjustable colour temperatures retains all the benefits of white LEDs while offering additional functions. Selecting from 4 calibrated colour temperatures, the user can choose a light adapted to their visual sensitivity and preferences - warmer colours aiming towards 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
Ra=95 / R9=91



4 000 K
Ra=95 / R9=97



4 500 K
Ra=95 / R9=97



5 000 K
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

MICARE 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) | 93,000-160,000/93,000-160,000 | 93,000-160,000/83,000-140,000 | 83,000-140,000/83,000-140,000 | 93,000-160,000 | 83,000-140,000 |
| Brightness Adjustable | 0-100% | 0-100% | 0-100% | 0-100% | 0-100% |
| Lamp Head Diameter | 700MM/700MM | 700MM/500MM | 500MM/500MM | 700MM | 500MM |
| 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/90-260MM | 90-260MM/90-260MM | 150-350MM | 90-260MM |
| Total radiant 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 | 50,000hrs | 50,000hrs | 50,000hrs | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional | Optional | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional | Optional | Optional | Optional |
| Shadow Compensation Function | Optional | Optional | Optional | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional | Optional | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional | Optional | Optional | Optional |
| Wall Mounted Control) | Optional | Optional | Optional | Optional | Optional |



TECHNICAL SHEET

MICARE 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) | 93,000-180,000 | 83,000-160,000 |
| Brightness Adjustable | 10-100% | 10-100% |
| Lamp Head Diameter | 700MM | 500MM |
| Quantity Of LEDS | 80PCS | 48PCS |
| Color Temperature Adjustable | 3800-5000K | 3800-5000K |
| Color rendering index Ra | 96 | 96 |
| Color rendering index R9(Red) | 98 | 98 |
| Light Field Size Adjustable | 150-350MM | 90-260MM |
| Total radiant flux density | 364W/m ² | 364W/m ² |
| Endoscopy Mode | YES | YES |
| Endoscopy Mode LEDS | 16PCS | 16PCS |
| Illumination For Endo-Mode | 20% | 25% |
| LED service life | 50,000hrs | 50,000hrs |
| 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 | Optional | Optional |
| Back Up Battery (4-6hrs) | Optional | Optional |
| Shadow Compensation Function | Optional | Optional |
| Internal/External Sony Camera(10X) | Optional | Optional |
| Monitor With Extra Arm(21 Inches) | Optional | Optional |
| Wall Mounted Control) | Optional | Optional |



Energy Efficiency

Operating costs for ventilation ceilings and air-conditioning systems are reduced due to low surface temperature of <math><27.5^{\circ}\text{C}</math>

Service / Maintenance

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



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

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

Hygiene

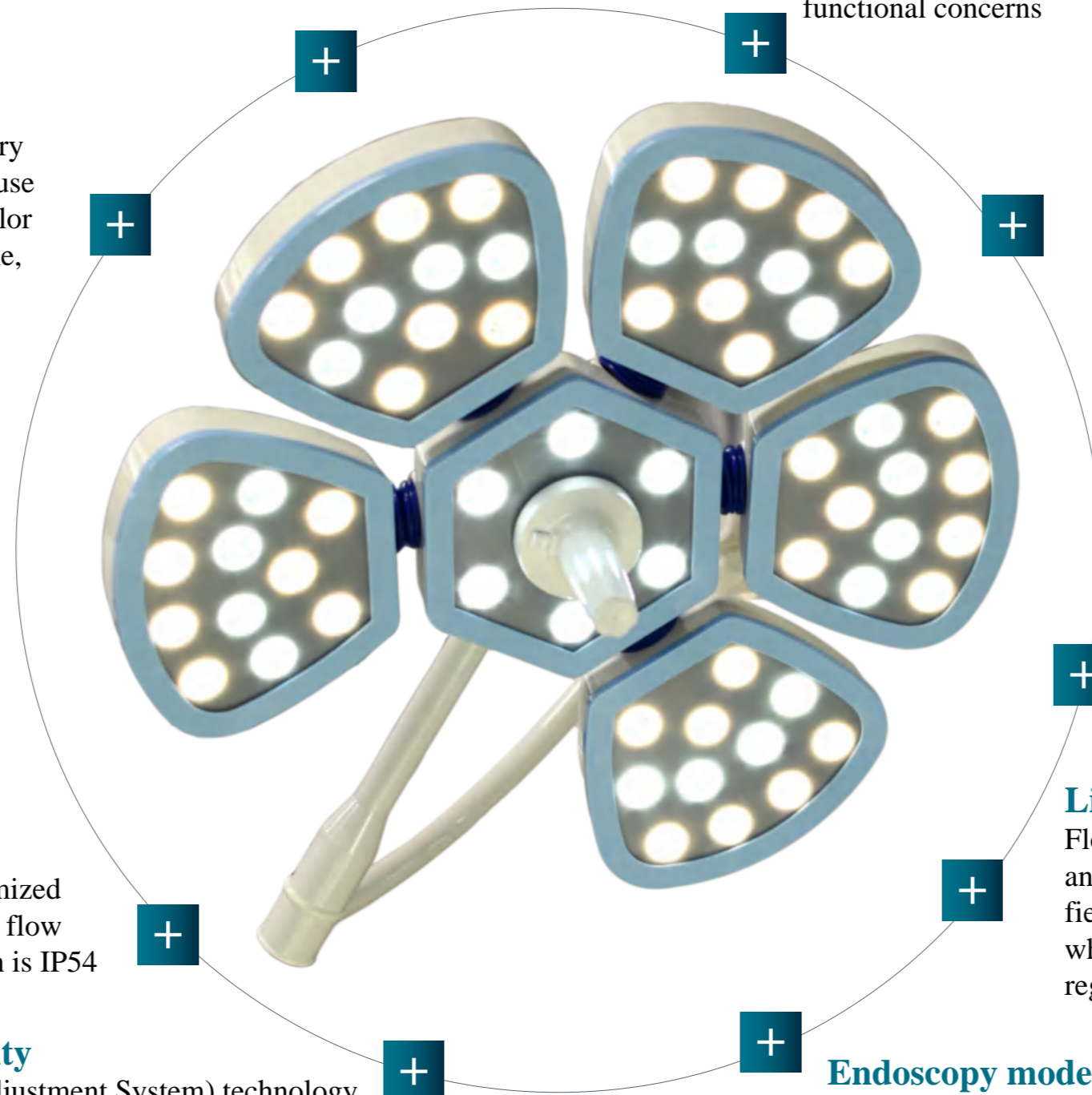
Flower LED include a flow-optimized luminaire housing for laminar air flow ceilings. The degree of protection is IP54

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, Better Visualization
Fascinating Images-With Clear, Sharp Contrours



High Image Quality

- Camera With 10X 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 Conventional 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
- Flexible 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 | 10X 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 | 21INCHES 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



**ICE COLD AND EFFICIENT
A NEW GENERATION OF
SURGICAL LIGHTS.**

FLOWER LED

**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