

**MULTI-COLOR PLUS LED OPERATING LIGHT**  
 FLEXIBLE IN COLOR OPTIONAL



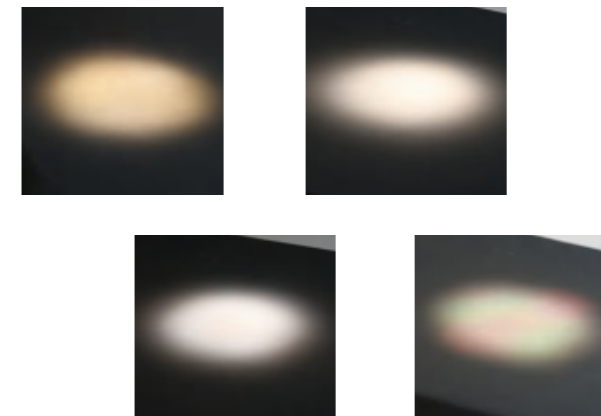
**High Quality Illumination For Optimal Visibility**

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 time -time for the new MICARE LED technology

**MICARE: Your work under the best light**

A surgical light should bring perfect light to all surgical applications – consistently, brilliantly, and shadow-free. At the same time, it must be both simple and intuitive to operate as well as easy to clean despite the highest standards of hygiene. combined with highest operational

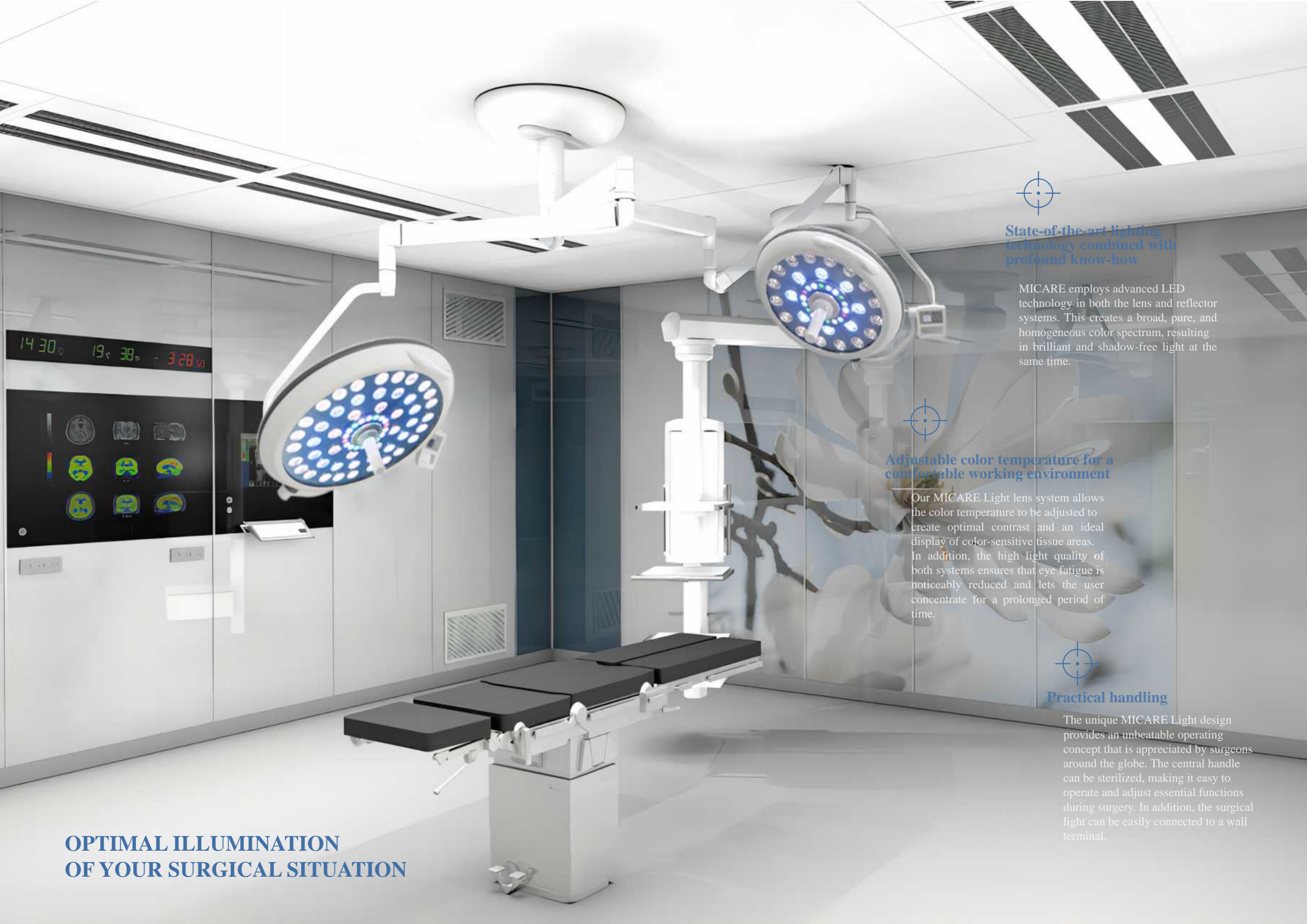
Capabilities Micare Light is a state-of-the-art lighting system that creates optimal lighting conditions in every operating theater and treatment room. The visionary design and sophisticated lighting technology allow the user to focus fully on the essentials: the patient and the outcome of treatment. In addition, micare Light is available in different sizes – culminating in individual design according to your wishes.



**ADJUSTABLE COLOR TEMPERATURE**

From warm yellow to cold white (3,500 - 5,700 Kelvin) freely for choose to reduce fatigue or glare during longer procedures and increase individual perception for each surgical situation.





**State-of-the-art lighting technology combined with profound know-how**

MICARE employs advanced LED technology in both the lens and reflector systems. This creates a broad, pure, and homogeneous color spectrum, resulting in brilliant and shadow-free light at the same time.



**Adjustable color temperature for a comfortable working environment**

Our MICARE Light lens system allows the color temperature to be adjusted to create optimal contrast and an ideal display of color-sensitive tissue areas. In addition, the high light quality of both systems ensures that eye fatigue is noticeably reduced and lets the user concentrate for a prolonged period of time.



**Practical handling**

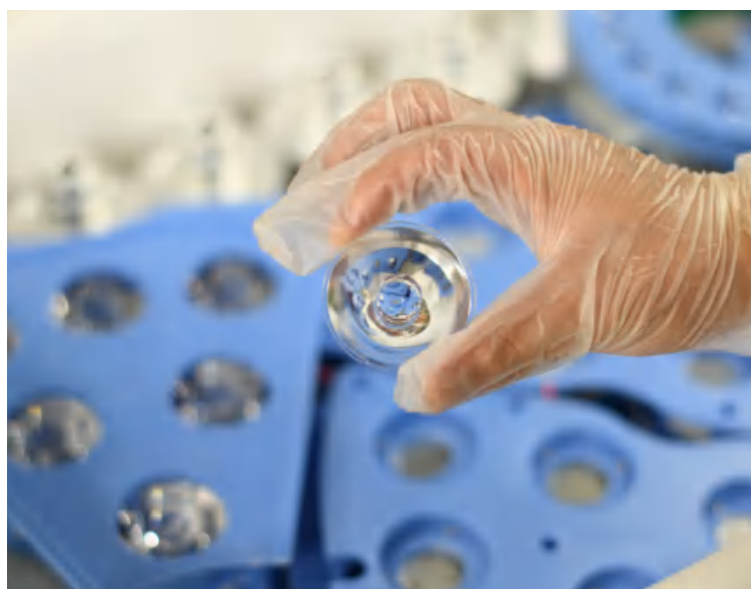
The unique MICARE Light design provides an unbeatable operating concept that is appreciated by surgeons around the globe. The central handle can be sterilized, making it easy to operate and adjust essential functions during surgery. In addition, the surgical light can be easily connected to a wall terminal.

**OPTIMAL ILLUMINATION  
OF YOUR SURGICAL SITUATION**



**New manufacturing concept:  
First in world seamless surface**

Unique manufacturing technology Through CNC milling offers the first full-aluminum monocoque light head in the market with perfect properties for an hygienic working environment. Ideal laminar flow properties and aerodynamic design provide best cooling conditions for the LED's. The clean design offers one of the most elegant light heads in the market. Improved LED's provide best in class color temperature of 3.500K - 5,700K offering a cool, bright and efficient illumination of the surgical field



**Multi-color lens technology**

The micare led multi-color OR-lights allow a variable adjustment of color temperature during surgery depending on surgical application and tissue color sensitivity and thereby ensure an optimum contrast and ideal presentation of all tissue areas

**Optimal illumination  
of your surgical situation**

**Efficient technology**

Low heat generation and extremely high light output - due to the special lens / LED combination

**High intensity**

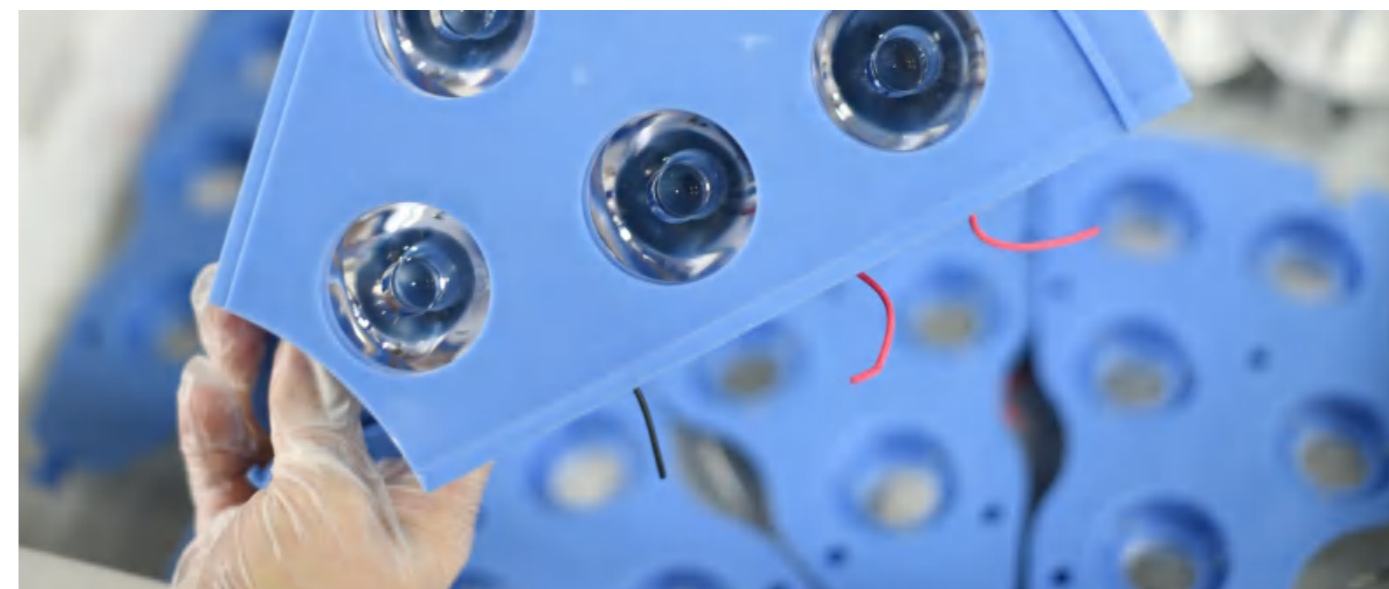
Innovative energy management and adaptation of the light field diameter to the size of the wound field ensure optimal viewing conditions in the surgical field

**Smooth housing contours**

including aerodynamic flow Characteristics

**Micare surgical lights**

are one of the most slimline on the market. Our flow-optimized design supports laminar air flow systems, thus enabling low-turbulence flow in the operating theater.

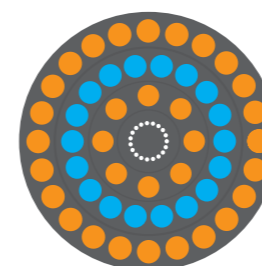


**Efficient and long-lasting products**

Evonos understands these circumstances and therefore places extreme importance on an economical lighting system that meets your requirements. You benefit from short installation times, a long service life, and a well thought out operating concept.

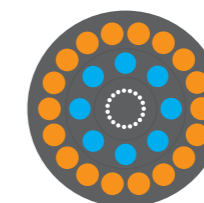
**high-tech lenses provide brilliant homogeneous light**

In addition to the mechanical stability of the housing, the cover is made of tempered, scratch-resistant glass and can be cleaned without any limitations, thus also contributing to the longevity of the lights.



**Multi-color plus E700**

66 lenses with 37MM , 8 modules with 5 warm and 4 cold lenses each



**Multi-color led E500**

42 lenses with 37MM , 8 modules with 5 warm and 4 cold lenses each

**Control panel of Multi-color led plus 700 / 500**

You control the main functions directly via the control panel attached to the gimbal. Here you can set the illuminance, the size of the light field and the color temperature. Further more, you can also activate the AMBIENTS Light for endoscopic operations





STANDARD FOR TOUCH PANEL

OPTIONAL FOR 4.3INCHES LCD TOUCH SCREEN



Illumination Intensity Adjustment  
(Max. 200,000Lux For 700, 180,000Lux For 500)



Light Field Size Adjustment  
(Max. 15-28CM For 700, 16-25CM For 500)



Color Temperature  
3,500K / 3,800K / 4,300K / 4,800K / 5,300K / 5,700K



Color Rendering Index  
RA: 96 / R9: 98



6 Different Modes  
Deep Surgery / General Surgery / Examine Mode / Surface Surgery / Endoscopy Mode / Day Light



10INCHES TABLET PC WALL CONTROL

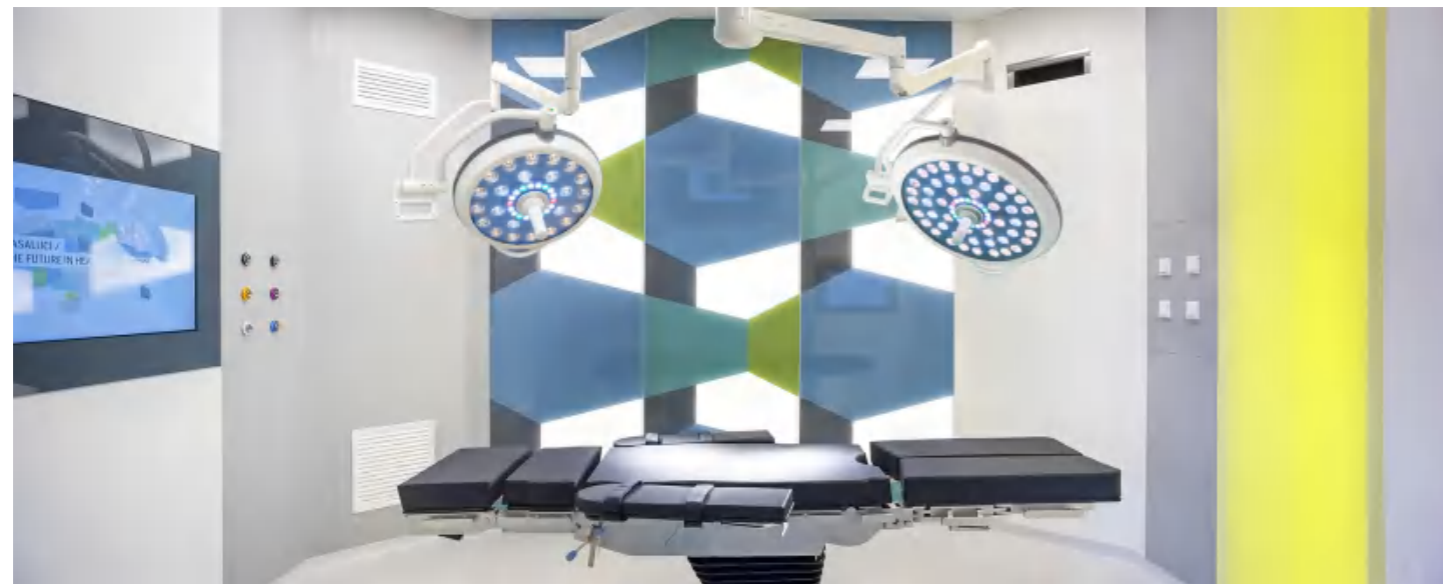
SYNC CONTROL LED OPERATING LIGHT FUNCTIONS



Back-up Battery Optional (24V12.2AH)  
Over Voltage Detection  
Under Voltage Detection  
Discharging Over Current Detection  
Short Circuit Detection  
Battery Power Digital Display  
Life cycle : 800 cycle (charge/discharge)  
Working Time : 8-10 Hours, Charging Time: 4Hrs



## Equipment and accompanying systems



**Not just meeting quality standards, but exceeding them**

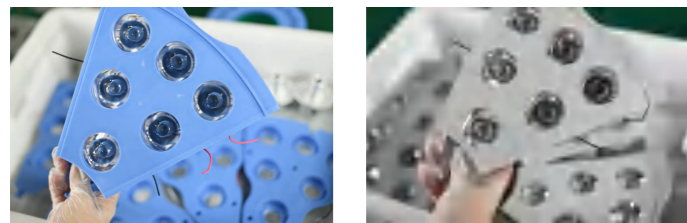
At a glance: the evoLight product portfolio. We are the only manufacturer worldwide to offer our surgical lights with lens or reflector technology.

In addition to the large variety of sizes, evonos can realize solutions for individual customer requirements. A wide range of accompanying systems rounds off our portfolio. Discover the (almost) unlimited options for yourself on the following pages

Smooth housing contours including aerodynamic flow characteristics

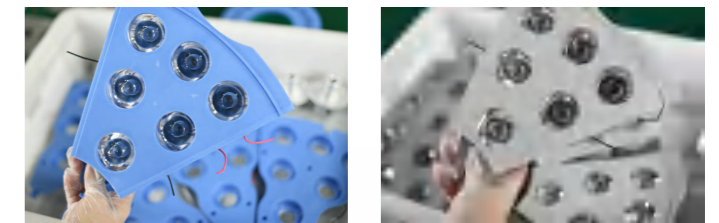
With a housing height of only 55 mm, evonos surgical lights are one of the most slimline on the market. Our flow-optimized design supports laminar air flow systems, thus enabling low-turbulence flow in the operating theater.

# TECHNICAL DATA SHEET



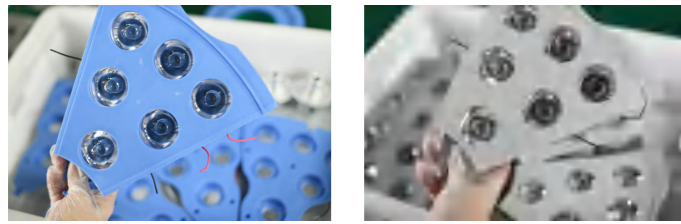
Model No	E700/700	LED-70D	LED-70D
Voltage	95V - 245V, 50/60HZ	95V - 245V, 50/60HZ	95V - 245V, 50/60HZ
Illuminance at distance of 1 m(LUX)	60,000 - 180,000Lux	60,000 - 180,000Lux	60,000 - 180,000Lux
Control Of Light Intensity	10 - 100%	10 - 100%	10 - 100%
Lamp Head Diameter	700MM	700MM	700MM
Quantity Of LEDS	66PCS	66PCS	66PCS
Color Temperature Adjustable	3,500 - 5,700K	3,500 - 5,700K	3,500 - 5,700K
Color rendering index RA	96	96	96
Color rendering index R9	98	98	98
Focusable light field size	18-35CM	18-35CM	18-35CM
Light field diameter d10	22CM / 22CM	22CM / 22CM	22CM / 22CM
Light field diameter d50:	25CM / 25CM	25CM / 25CM	25CM / 25CM
Total radiant flux density	500W/m2	500W/m2	500W/m2
Endoscopy Mode	Red + Green Balance	Red + Green Balance	Red + Green Balance
Endoscopy Mode LEDS	18PCS	18PCS	18PCS
Illumination For Endo-Mode	450LUX	450LUX	450LUX
LED service life	80,000hrs	80,000hrs	80,000hrs
Main Material	Aluminum, IP54	Aluminum, IP54	Aluminum, IP54
Operating element	Touch Panel (Standard)	Touch Panel (Standard)	Touch Panel (Standard)
Light head protection rating	IP54+FireProof	IP54+FireProof	IP54+FireProof
Depth of illumination L1+L2 at 20%	1600MM	1600MM	1600MM
Depth of illumination L1+L2 at 60%	800MM	800MM	800MM
Temperature increase in head area:	1 C	1 C	1 C
Height adjustment	UP +45°, Down -50° 1100MM 360°	UP +45°, Down -50° 1100MM 360°	UP +45°, Down -50° 1100MM 360°
LED Lens Diameter	3HRS	3HRS	3HRS
Automatic compensation	OPTIONAL	OPTIONAL	OPTIONAL
Synchronization Control	OPTIONAL	OPTIONAL	OPTIONAL
Remote / Wall Control	OPTIONAL	OPTIONAL	OPTIONAL
Back Up Battery (4-6hrs)	OPTIONAL	OPTIONAL	OPTIONAL
Internal/External Sony Camera (30X)	OPTIONAL	OPTIONAL	OPTIONAL
Monitor With Extra Arm	24 / 27 / 32 INCHES	24 / 27 / 32 INCHES	24 / 27 / 32 INCHES

# TECHNICAL DATA SHEET



Model No	LED-70D	LED-70D
Voltage	95V - 245V, 50/60HZ	95V - 245V, 50/60HZ
Illuminance at distance of 1 m(LUX)	60,000 - 180,000Lux	60,000 - 180,000Lux
Control Of Light Intensity	10 - 100%	10 - 100%
Lamp Head Diameter	700MM	700MM
Quantity Of LEDS	66PCS	66PCS
Color Temperature Adjustable	3,500 - 5,700K	3,500 - 5,700K
Color rendering index RA	96	96
Color rendering index R9	98	98
Focusable light field size	18-35CM	18-35CM
Light field diameter d10	22CM / 22CM	22CM / 22CM
Light field diameter d50:	25CM / 25CM	25CM / 25CM
Total radiant flux density	500W/m2	500W/m2
Endoscopy Mode	Red + Green Balance	Red + Green Balance
Endoscopy Mode LEDS	18PCS	18PCS
Illumination For Endo-Mode	450LUX	450LUX
LED service life	80,000hrs	80,000hrs
Main Material	Aluminum, IP54	Aluminum, IP54
Operating element	Touch Panel (Standard)	Touch Panel (Standard)
Light head protection rating	IP54+FireProof	IP54+FireProof
Depth of illumination L1+L2 at 20%	1600MM	1600MM
Depth of illumination L1+L2 at 60%	800MM	800MM
Temperature increase in head area:	1 C	1 C
Height adjustment	UP +45°, Down -50° 1100MM 360°	UP +45°, Down -50° 1100MM 360°
LED Lens Diameter	3HRS	3HRS
Automatic compensation	OPTIONAL	OPTIONAL
Synchronization Control	OPTIONAL	OPTIONAL
Remote / Wall Control	OPTIONAL	OPTIONAL
Back Up Battery (4-6hrs)	OPTIONAL	OPTIONAL
Internal/External Sony Camera (20X)	OPTIONAL	OPTIONAL
Monitor With Extra Arm	24 / 27 / 32 INCHES	24 / 27 / 32 INCHES

# Advanced documentation is modern medicine



Model No	LED-70D	LED-70D
Voltage	95V - 245V, 50/60HZ	95V - 245V, 50/60HZ
Illuminance at distance of 1 m(LUX)	60,000 - 180,000Lux	60,000 - 180,000Lux
Control Of Light Intensity	10 - 100%	10 - 100%
Lamp Head Diameter	700MM	700MM
Quantity Of LEDS	66PCS	66PCS
Color Temperature Adjustable	3,500 - 5,700K	3,500 - 5,700K
Color rendering index RA	96	96
Color rendering index R9	98	98
Focusable light field size	18-35CM	18-35CM
Light field diameter d10	22CM / 22CM	22CM / 22CM
Light field diameter d50:	25CM / 25CM	25CM / 25CM
Total radiant flux density	500W/m2	500W/m2
Endoscopy Mode	Red + Green Balance	Red + Green Balance
Endoscopy Mode LEDS	18PCS	18PCS
Illumination For Endo-Mode	450LUX	450LUX
LED service life	80,000hrs	80,000hrs
Main Material	Aluminum, IP54	Aluminum, IP54
Operating element	Touch Panel (Standard)	Touch Panel (Standard)
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Depth of illumination L1+L2 at 20%	1600MM	1600MM
Depth of illumination L1+L2 at 60%	800MM	800MM
Temperature increase in head area:	1 C	1 C
Height adjustment	UP +45°, Down -50° 1100MM 360°	UP +45°, Down -50° 1100MM 360°
LED Lens Diameter	3HRS	3HRS
Automatic compensation	OPTIONAL	OPTIONAL
Synchronization Control	OPTIONAL	OPTIONAL
Remote / Wall Control	OPTIONAL	OPTIONAL
Back Up Battery (4-6hrs)	OPTIONAL	OPTIONAL
Internal/External Sony Camera (20X)	OPTIONAL	OPTIONAL
Monitor With Extra Arm	24 / 27 / 32 INCHES	24 / 27 / 32 INCHES

## DOCUMENTATION AND DEMONSTRATION

Video documentation has a number of important applications. Whether it's education and training, live operations, for research, or for forensic purposes, more and more hospitals are choosing this useful option. Dräger offers you a selection of integrated or external video camera systems in either standard or high-definition resolution.

## LIGHTING YOUR WORLD

MICARE can help you plan and equip your OR, ER, and ICU and can provide valuable expertise when it comes to innovative new workplace concepts such as integrated and hybrid ORs. Our line of wall- and ceiling-mounted swivel arm solutions – lights and supply units – and control options was designed to let you position and direct light easily and accurately. Our team of experts can advise you on the right combination of models that best suits your particular needs, helping you to get the most out of any care area.

## Video components

**Display:**  
Medical-quality display, up to 22", 27" for video images and data.



MEDICAL MONITOR 22", 27"

**Integrated SD or HD camera Polaris:**  
Provides a direct view of the operating field with optimal exposure. Replaces the central handle and includes a picture rotation as well as an adjustment for the illumination radius.



SONY 20X/30X CAMERA

**External SD camera, MedView:**  
Flexible, sterile positioning of the camera, independent from the light source. Suitable for providing a good overview of the situation on and around the table.



10INCHES WALL / REMOTE CONTROL



There for you, whenever you need us

No matter how much some things change over time, one thing will remain the same: our service commitment to you. In more than 190 countries around the globe, Dräger is there for you with service, assistance, and advice whenever you need it.

**EXCELLENT SHADOW CONTROL**

120EA(LED 160) & 88EA(LED 120) LED provide excellent shadowless effect

**MANUAL FOCUSING**

Users can easily control the light at any position

**STREAMLINED DESIGN**

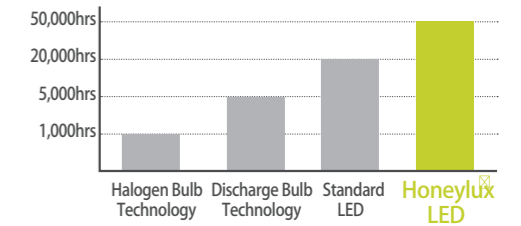
Suitable for laminar flow ceiling

**STERILIZABLE HANDLE**

Autoclave available

**360° ROTATING ARM**

**LONG SERVICE LIFE**



**FULL HD CAMERA CONTROL**

Camera offers multimedia and interactive communication (option)

**MODULAR LAMP**

Low maintenance requirement due to modular lamp inside



**ENDO-MODE**

Suitable for endo-surgery by one click



**DESIGN**  
 Sleek design  
 Small light head  
 Easy positioning



**THERMAL MANAGEMENT**  
 Temperature at the rear surface  
 of the light head <35°C



**COLOUR CODING**  
 The light system and the wall panel  
 are colour-coded for easier identification



**CAMERA**  
 High-quality HD camera integrated  
 into the light head  
 120x zoom, wireless transmission  
 of video signal



**HANDLE**  
 Sterilisable handle



**INTERFACE**  
 Intuitive control panel  
 Wall panel  
 Handles on the light head



**LIGHT INTENSITY**  
 Dräger Polaris® 100: 40,000 to 120,000 lx  
 Dräger Polaris® 200: 40,000 to 160,000 lx  
 Endolight, 300 lx  
 Average service life of LEDs: 50,000 h



**COLOUR TEMPERATURE**  
 4,400, 5,000 or 5,600 K available



**LIGHT FIELD DIAMETER**  
 The light field can be adjusted incrementally  
 to give perfect illumination



**DESIGN**  
 Sleek design  
 Small light head  
 Easy positioning





Technical data TFT monitors

Product	Features	Signals/Interfaces Outputs	Signals/Interfaces Inputs
Radiance 22" (w/o fiber-optic input)	Resolution 1920 x 1080, response time 5-12 ms  Types of voltage 24 VDC  High-quality endoscopy display with HD-SDI interface  PIP (picture-in-picture) mode and other features	1x DVI-D loop (DVI socket) 1x S-video loop (mini DIN) 1x HD-SDI loop (BNC)	1x DVI-I (DVI socket) 1x DVI-D (DVI socket) 1x VGA (D-sub, 15-pole) 1x S-video (mini DIN) 1x S-video (2x BNC) 1x composite color video signal (BNC) 1x YPbPr (3x BNC) 1x RGBS (3x BNC) 2x HD-SDI (BNC) 1x RS232 (D-sub, 9-pole)

### Compatible with the Latest Generation of Cameras

The MICARE MULTI-COLOR LED PLUS Surgical Light can be directly connected to the innovative and delay-free SONY Internal Camera System via the handle unit interface, providing brilliant recordings in full HD. Individual images for documentation purposes are possible using the snapshot function. Benefits of wireless technology: ability to install and/or upgrade this system at no additional cost or the need for complex video cabling. In addition, it can be controlled from the mobile tablet or wallmounted operating panel.

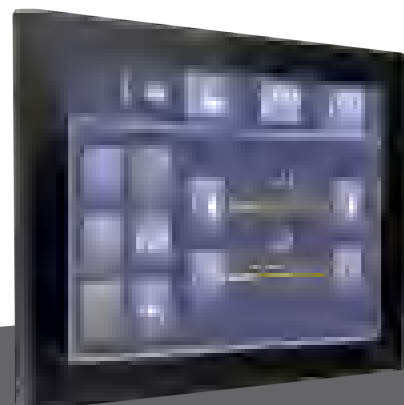


The SONY 20X/30X Internal Camera provides excellent image quality and encrypted transfer provides maximum data security

### TruConnect OR Integration System: Intelligently Linked

The MICARE Surgical Light is compatible with the innovative OR Integration System by MICARE Medical. The management and training system enables you to operate different MICARE Medical OR devices. This comprises lights, tables and cameras – even under sterile conditions. With MICARE OR Integration System Wall Control, you do not need any other remote control devices.

Instead, intuitive, mobile control of the integrated components is possible via the user interface on the tablet, including graphical feedback. The flexible app concept enables the MICARE OR Integration System to be individually extended with the addition of devices and functionalities and combined with other MICARE Medical solutions.



MICARE is a leading global medical lighting technology company. We partner with health care providers by focusing on patient care solutions that improve clinical and economic outcomes in five core areas: Advancing Mobility, Wound Care and Prevention, Clinical Workflow, Surgical Safety and Efficiency, and Respiratory Health. MICARE people, programs, and product brands work towards one mission: Every day, around the world, we enhance outcomes for our patients and their caregivers.

MICARE Medical offers innovative products to improve efficiency and safety in the OR, ICU, and in other clinical environments throughout the care sector. With our customers' requirements as our innovation as the foundation of our success, MICARE Medical delivers total solutions to fit your clinical care needs.

This document is destined solely for use by healthcare professionals. Medical devices shown in this brochure are intended for use with patients in departments of healthcare establishments.



These products are regulated health care products which, where required by applicable regulations, bear a CE mark. MICARE recommends you carefully read the detailed instructions for safe and proper use included in the documentation accompanying the medical devices.

