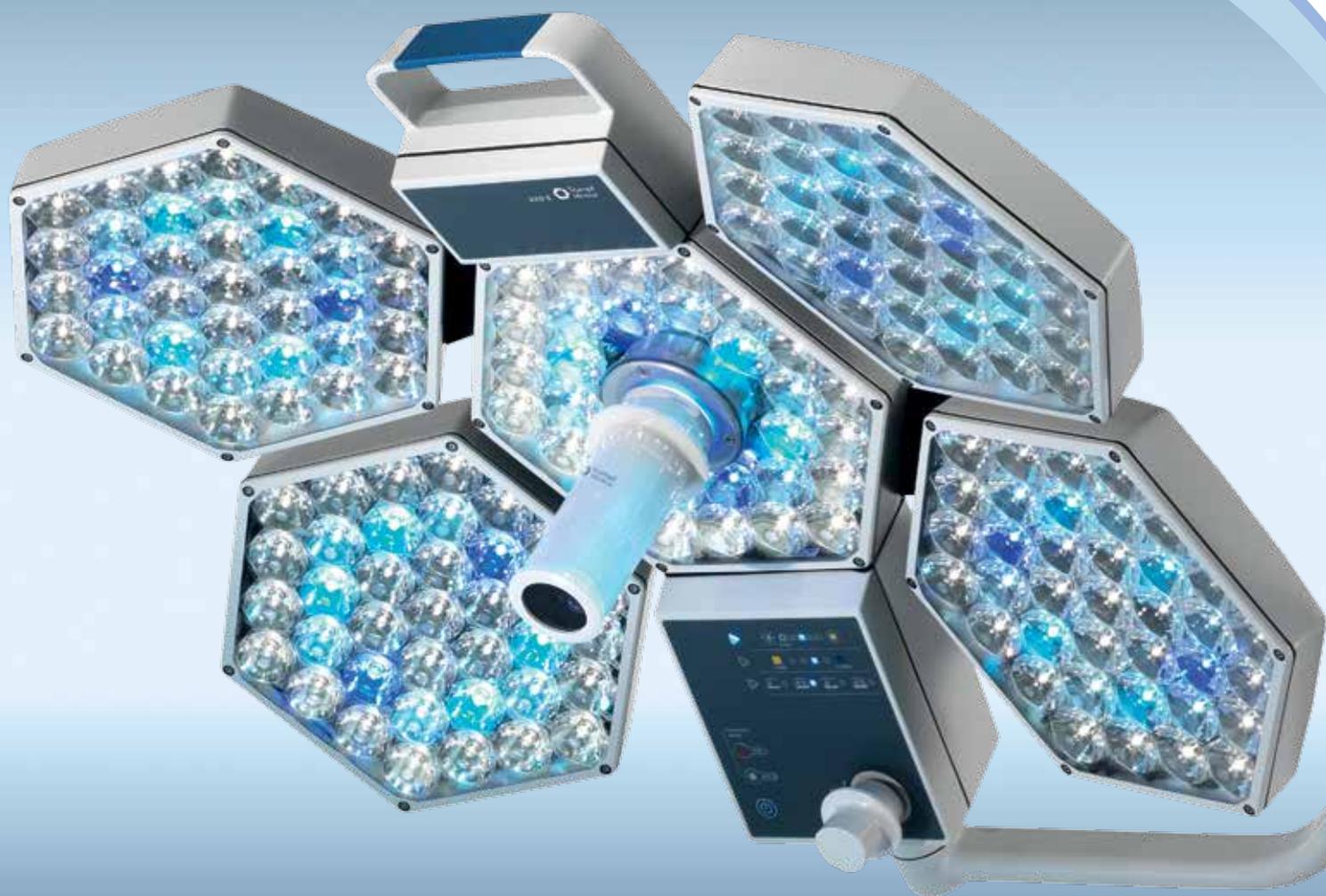


# iLED™ 5 and iLED™ 3 Surgical Lights

Milestones of light



Enhancing outcomes for  
patients and their caregivers:

**Hill-Rom**

# High performance knows no boundaries

## iLED™ Surgical Light: meeting next-generation demands

Pioneering research has made the iLED™ Surgical Light the leader in its class. With its exceptional lighting specifications, extreme adaptability and energy-efficient technology, the iLED™ Surgical Light is firmly established in the premium lighting segment. Our goal? Uncompromising performance. The iLED™ Surgical Light features impressive high-performance technology for even greater ease of use and efficiency in the hospital.





## A truly diverse solution

- **Brilliant**  
Everything in view: optimum illumination of the wound area with the unique multi-lens matrix with a light intensity up to 160,000 lx
- **User comfort**  
Impeccable support: automatic focusing (ALC Plus) and intuitive control of light intensity with the Sterile Light Control (SLC)
- **Adaptable**  
Always to the point: four color settings provide optimal contrast and resolution for any surgical procedure
- **Precise**  
Light in the shadows: uniform, homogeneous lighting for surface and deep cavity procedures with innovative shadow management control
- **Security**  
Sustainability that pays for itself: long LED light expectancy delivers reliability and protects your investment
- **Efficient**  
Environmentally proactive: low power consumption and durable LEDs minimize the impact on the environment
- **Connected**  
More than just a light: integrated camera and video systems for digital transmission in high-resolution HD format

# Perfection in every aspect

## iLED™ Surgical Light – leading-edge lighting technology

With their exceptional performance and energy efficiency, light-emitting diodes (LEDs) are becoming more common for illumination in demanding environments. Compared to conventional lamps, LEDs offer a wide range of technological, economic, and environmental benefits, such as flexibility with a range of settings and functions, low heat generation, minimal power consumption and a long service life. The iLED™ Surgical Light supplies these advantages in one package. The result: unparalleled performance.



### **The multi-lens matrix: powerful and homogeneous light at the surface and in depth**

During an operation, the entire surgical site must be clearly visible under homogeneous illumination. Trumpf Medical's recipe for success is the unique multi-lens matrix that uniformly distributes the emitted light.

Inspired by nature: like the convex, faceted eyes of an insect, the matrix consists of three or five strategically placed segments, each consisting of a number of individual convergent lenses. In this arrangement, every lens produces its own light pattern. The result: an exceptionally homogeneous, shadow-free light on the surface and in deep cavities, with a light intensity of up to 160,000 lx.

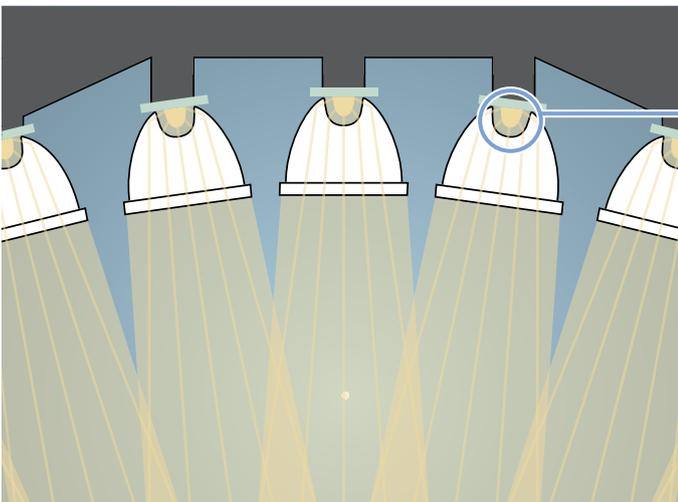
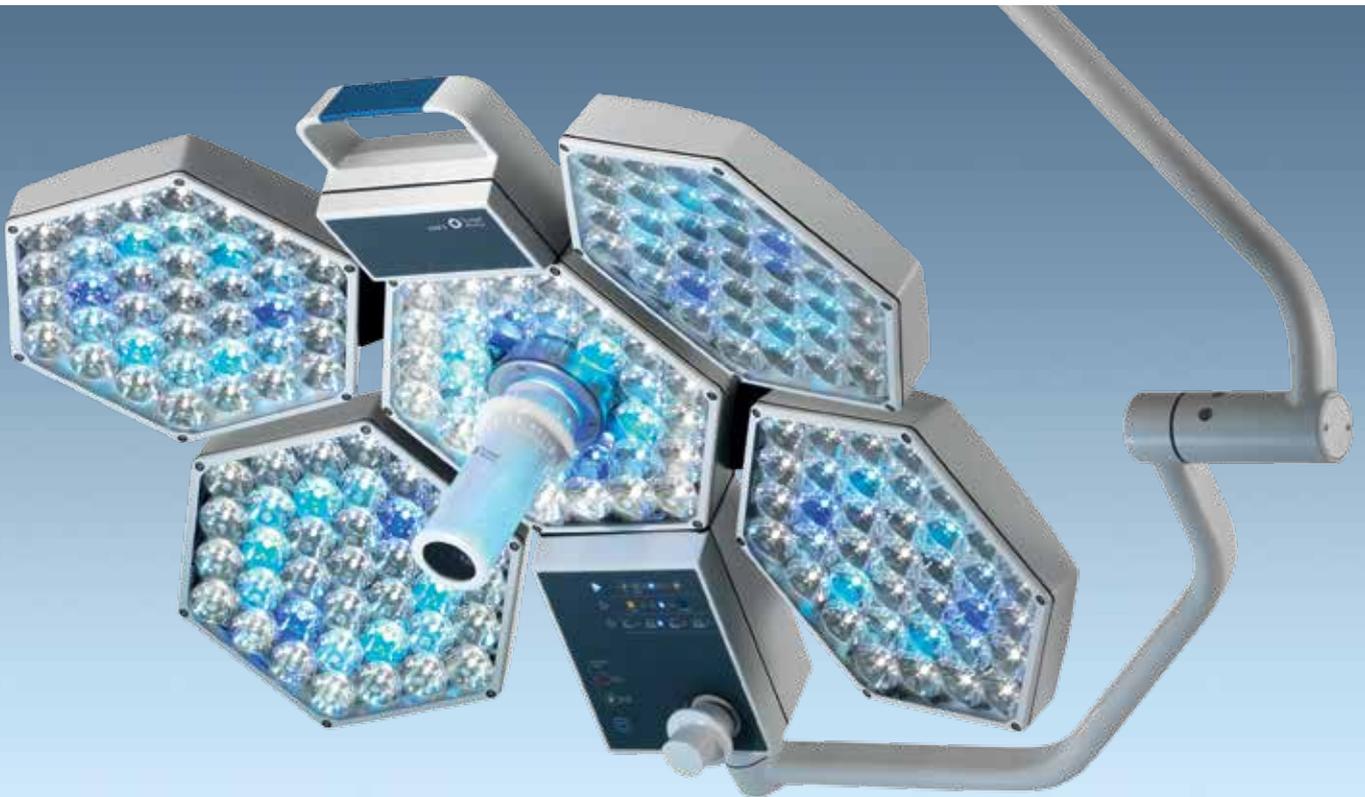


## Green technology

LED lights are an extremely environmentally friendly alternative to conventional light sources. They contain no heavy metals, consume very little energy, and have a very long life. The reduced heat generation means a lower heat load and more efficient ventilated ceilings.

## Long-lasting light sources

With a service life of 40,000 hours, each LED lasts many times longer than conventional lighting sources. The expense of storing and replacing lamps is dramatically reduced. Each LED can be individually replaced – combining ergonomics, cost efficiency, and optimal performance.



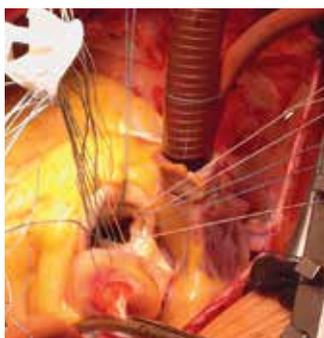
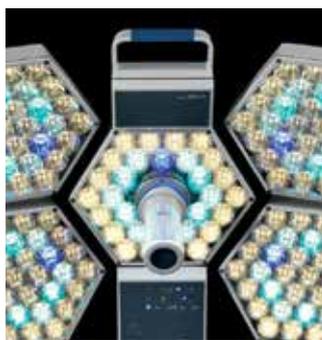
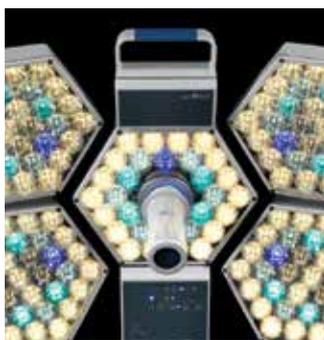
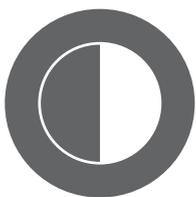
## Best implementation

The basis of the intelligent multi-lens matrix is embedding of individual LEDs within convergent lenses. The LEDs are completely surrounded within the light body meaning the light from each individual LED is fully and optimally used.

# The new standard for perfect sight

## Individuality through adjustable color temperature

The variable adjustment of the iLED™ Surgical Light enables the lighting to be adapted to the surgeon's individual preferences and special requirements in different OR situations, thereby optimizing the work of the surgeon, particularly in extreme situations.

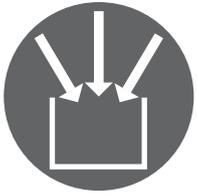


### Superior results: improved contrast, less fatigue, and greater ease of use

Whether blood flow to the operating area is strong or weak, a Color Rendering Index (CRI) of up to Ra 98 enables surgeons to optimize contrast by changing the color temperature. A higher color temperature can reduce eye fatigue and improve concentration, for example during night operations.

Contrast enhancement with adjustment of the color temperature from 3,500 to 5,000 K

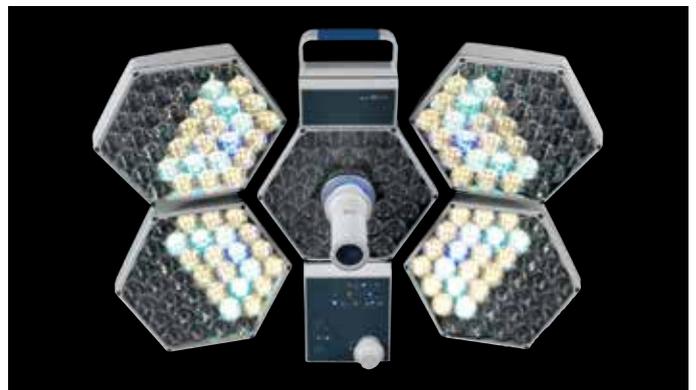
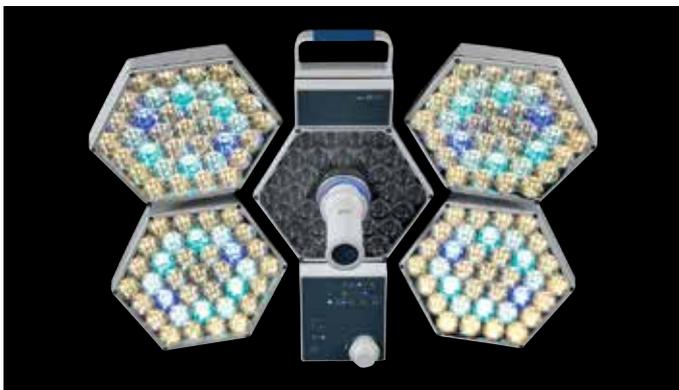
# Meeting every challenge



## Shadow-free light for safe working in extreme situations

Using special technology, Trumpf Medical has perfected the far-reaching potential of the multi-lens matrix. Depending on the situation, the light intensity of specific zones of the iLED™ 5 Surgical Light can be regulated manually, to provide optimum backlighting of obstacles.

The result is up to 25% more light at depth. In extreme situations the surgeon benefits from high lighting intensity in the wound area.



Shadow-free illumination of the wound area with backlighting of obstacles



25% more light in extreme situations; for example, in narrow, deep wounds

# Ease of use

## Ergonomics has a new standard: iLED™ Surgical Light

With people at the center of attention, the demands on the product extend far beyond the specifications. This is why the iLED™ Surgical Light is more than simply a light in the surgical field. With its ergonomic properties, the surgical light supports operating room staff through all phases of the procedure, making it an essential part of the team. The secret of success: the sterile operating design and the intelligent ALC plus technology for automatic focus.

## Adaptive Light Control Plus



### Intelligent technology for more efficient processes

Adaptive Light Control Plus (ALC Plus) is the term for targeted electronic focusing of the light segments to ensure optimum illumination of the wound site at variable distances. If the light fixture is moved during the operation, the integrated motion detector automatically measures the distance to the surgical site and adjusts the position of the light segments accordingly. The beam angle of the lens groups remains optimized for different distances and provides optimum lighting at all times. Your advantage: the surgeon can concentrate fully on the surgery.



Automatic (re)focusing if the light body is moved, due to ALC Plus

## Simple



### Dimming with Sterile Light Control

The Sterile Light Control (SLC) function for controlling the light intensity is an additional innovation with the iLED™ Surgical Light. Capacitive sensors in the sterile handle of the light head make adjustment during an operation quick and easy. This ensures more efficient work processes in surgery without requiring additional unsterile assistants.

## Synchronization for greater ease of use



### Automatic adoption of color temperature

The innovative operating concept of the iLED™ Surgical Light makes it as easy as possible to make central settings. Synchronous adjustment of the color temperature for all light heads is possible from each light head.



# Always in shape



iLED™ 5 Surgical Light sterile control panel for greater convenience during operations



iLED™ 3 Surgical Light control panel

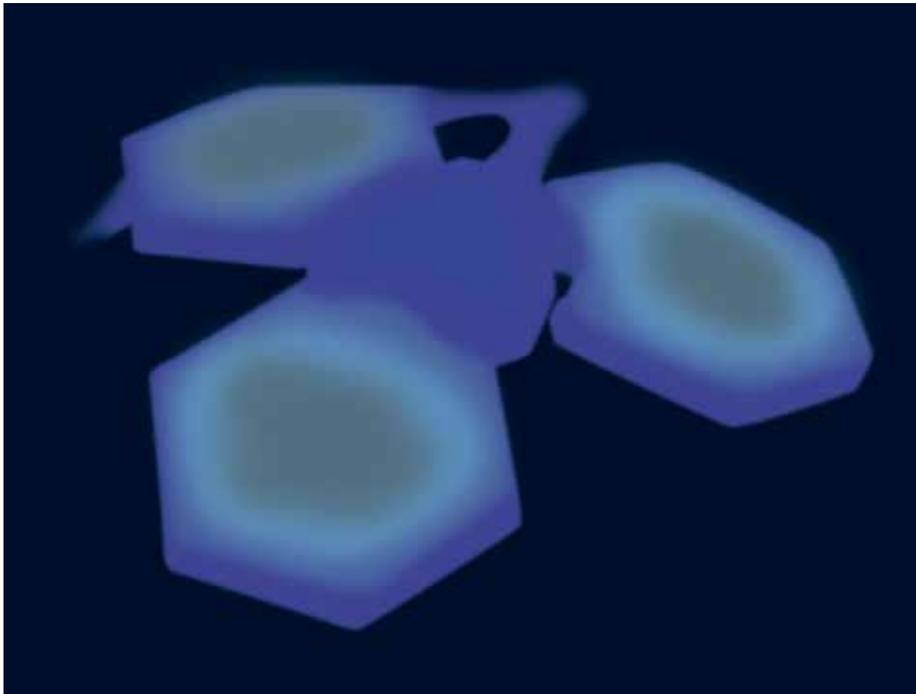
## Sterile in use

**STERILE**

### The intuitive control of the iLED™ 5 and iLED™ 3 Surgical Lights

Another ergonomic advantage of the iLED™ Surgical Light: the sterile control design gives the surgical team intuitive, quick and convenient control of all important functions – at the light head or at the wall:

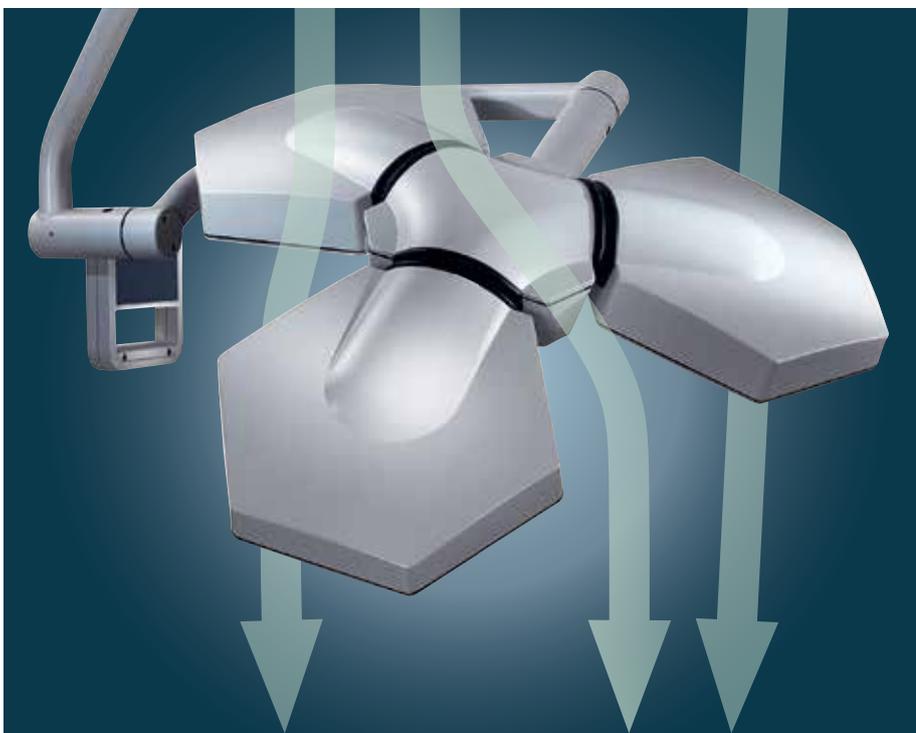
- On/off switch
- Dimming with integrated endo mode
- Synchronization of multiple light heads
- Adjustment of color temperature
- Shadow management – iLED™ 5 Surgical Light
- Camera functions



Heat development on the surface of the light head

## Cool head with intelligent thermal management

Creating the perfect conditions for operating – iLED™ Surgical Light with its sophisticated thermal management. Efficient, even heat dissipation prevents localized overheating. At the same time, thermal reduction increases the life and efficiency of the LEDs, and the economy of the surgical light.



Open design for high degree of compatibility with clean air ceilings

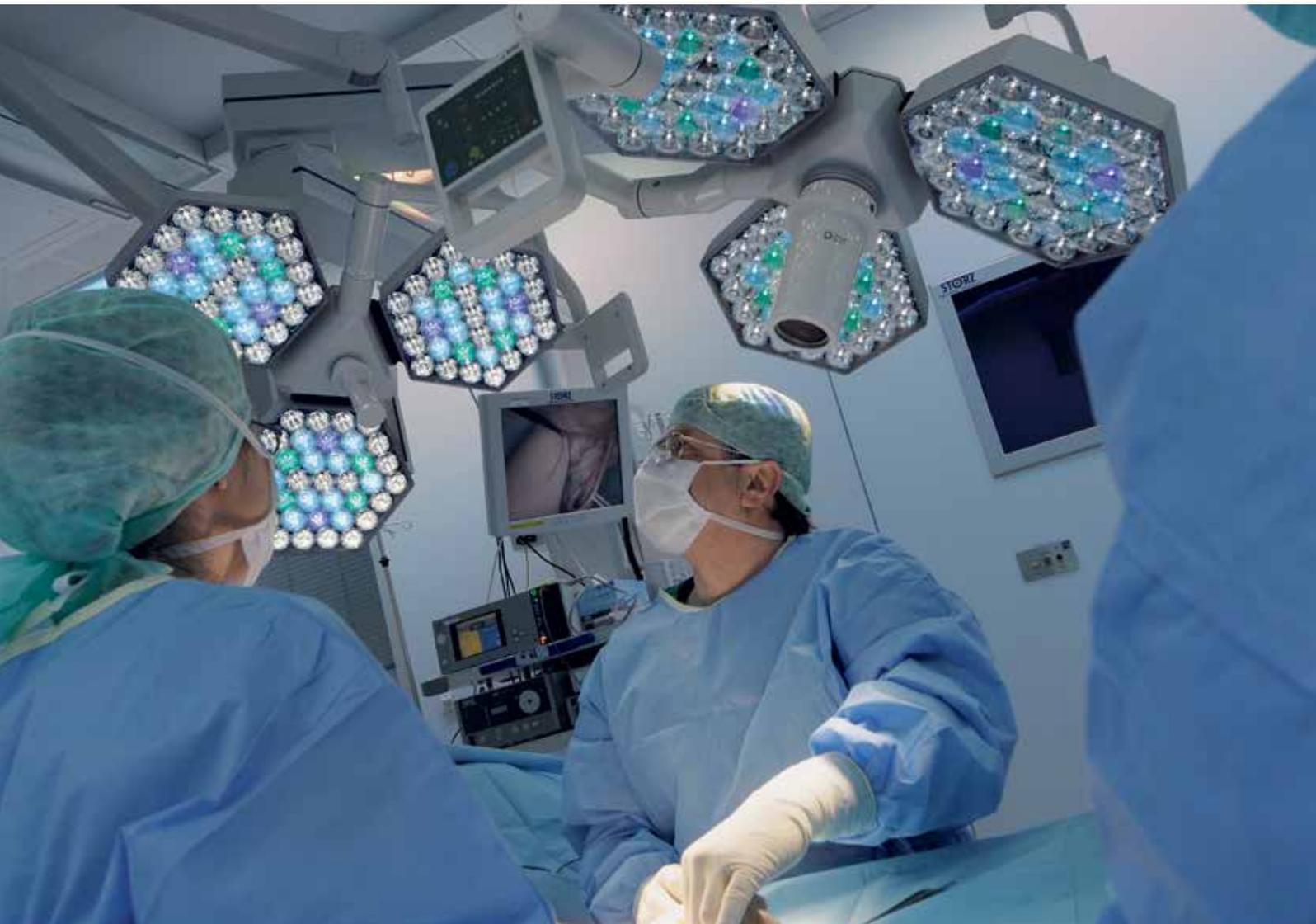
## Flow-optimized head for improved hygiene

Hygiene: one of the most important factors in the operating room. The open design of the LED guarantees maximum possible freedom from pathogens. The cool light head minimizes air flow and turbulence and is ideal for clean air ceilings (laminar air flow).

# One step ahead

## Sophisticated communication needs a platform

For Trumpf Medical, "Premium" means setting new standards. For this reason, the iLED™ range of surgical lights allows integration of high-quality, innovative camera solutions – with full-HD digital imaging quality and communication over LAN networks.



Cameras can be installed in the light head or on a separate support and removed and replaced as required. This forms an ideal platform for research, teaching, and documentation.

# Versatile design

## Ideal assistant: surgical lights by Trumpf Medical

Specialized requirements demand flexible interplay of individual solutions. Trumpf Medical offers a wide range of LED lights to add to the functions of your iLED™ Surgical Light, and to open up new applications for you.



### Masters in their class: iLED™ 5 and iLED™ 3 Surgical Lights

Premium surgical light with performance parameters for the most extreme requirements



### Masters of ergonomics: TruLight™ 5000 and TruLight™ 3000 Surgical Lights

Extremely light and maneuverable surgical light for immediate use with maximum economy



Further information on wired TruVidia™ Camera solutions is available in our [product brochure](#)

# Secure investment

Always there for you: Trumpf Medical™ Service



## Secure decision

We offer tailored consultation services before purchase to make sure that your investment is successful. Our 3D planning software allows us to help you with the individual design of your OR and ICU environments.

## Professional support

The comprehensive Trumpf Medical™ service portfolio guarantees maximum availability and range of functions. We service your products, install new options as required, and train your staff in workshops and training courses.

## Did you know?

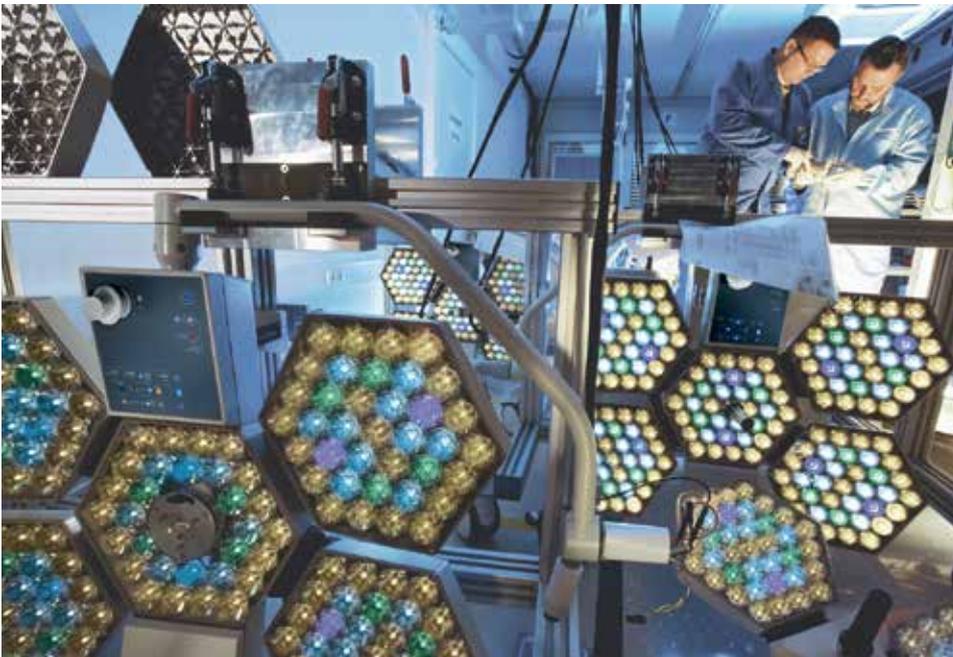
Trumpf Medical offers innovative financing concepts customized to your specific requirements, enabling you to procure first-class Trumpf Medical products and solutions at attractive lease rates. Just ask us!



To learn more about Trumpf Medical Services, go to [www.trumpfmedical.com/en/services](http://www.trumpfmedical.com/en/services)

## The highest standards right from the start

From development through production, Trumpf Medical fulfills the latest quality standards according to EN ISO 13845. To meet rigorous lighting quality requirements, all surgical LED lights are assembled in a clean room environment. Trumpf Medical also tests all lights during its finished product inspection to ensure specifications are met and that you receive highly efficient LED surgical lights to meet your most demanding challenges.



| Technical data   | iLED™ 5                          | iLED™ 3   |
|--|----------------------------------|---|
| Illumination level $E_c$ at 1 m (lx)                   | 160,000                          | 160,000   |
| Pattern size (d10) at 1 m (cm)   (inch)                | 20–30   7.9"–11.8"               | 20–30   7.9"–11.8"                                  |
| Color temperature (K)                                  | 3,500   4,000   4,500   5,000    | 3,500   4,000   4,500   5,000                       |
| Color Rendering Index (Ra)                             | max. 98                          | max. 98   |
| Dimming range (%)                                      | 5–100                            | 5–100   |
| Remaining illumination without tube with one mask (%)  | 98                               | 72  |
| Remaining illumination with tube and one mask (%)      | 83                               | 62  |
| Remaining illumination without tube with two masks (%) | 64                               | 51  |
| Temperature increase in the surgeon's head area (°C)   | < 1                              | < 1   |
| Controlling options for lighting functions             | Entirely sterile and non-sterile | Focusing and dimming sterile, otherwise non-sterile |
| Average service life of the LEDs (h)                   | > 40,000                         | > 40,000  |

Hill-Rom is a leading global medical technology company with more than 10,000 employees in over 100 countries. 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.** Hill-Rom people, programs, and product brands work towards one mission: **Every day, around the world, we enhance outcomes for our patients and their caregivers.**

Trumpf Medical, part of Hill-Rom, is distinguished by high-quality German engineering standards and 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 benchmark and innovation as the foundation of our success, Trumpf 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. Hill-Rom recommends you carefully read the detailed instructions for safe and proper use included in the documentation accompanying the medical devices. The personnel of healthcare establishments are responsible for the proper use and maintenance of these medical devices.

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