

### medifa H!Light

LED operating light system

we care.

medifa H!Light

- Innovative lighting technology combined with high functionality and
- User-friendly control concept

160,000 lux light intensity

- Operating theatre adapted colour rendering from 3,000 - 5,500 K
- Large, homogeneous surface illumination
- Easy adjustability
- One universal handle holder for all cameras (4K and HD) and all handles
- Sterile control at the multifunction handle
- Lightweight construction (aluminium housing)
- Optional: 360° monitor arm with stopfree signal transmission
- Ideal cleaning and disinfection conditions
- Sustainable energy efficiency with minimal warming
- Long lifespan
- Optional with HD or 4K wireless camera



# medifa H!Light - illuminating advantages





### Light field size and shadow management

Light field sizes from 18 - 32 cm for the distances of 0.8 to 1.2 metres frequently required in everyday operating theatres

More than 330 individually calculated free-form facets per lens enable a beam path concept that avoids shadow formation (passive shadow management).

With the active shadow management of medifa H!Light plus, additional sensors ensure automatic light guidance and intelligent control of the individual LEDs, thus ensuring a homogeneously illuminated situs.

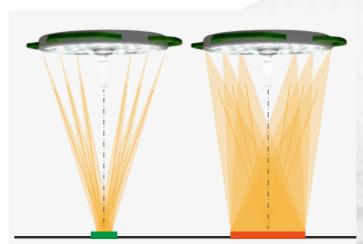


### **LED Technology**

The newest medifa LED technology for a homogeneous mixture of cold and warm white LEDs behind the lenses.

The mixed light emerges as white light and is distributed evenly over the wound area.

This prevents the creation of colour shadows by the surgeon's head or hands in the light channel of the operating light.



#### **Focus**

Electronic focus through the medifa dual lens system, consisting of 72 versatile lenses in 2 sizes.

No mechanical adjustment of the optical components necessary.



#### Universal handle holder

The universal handle holder offers unique flexibility.

All handle adapters fit into the same handle holder.

Tool-free change possible.

# medifa H!Light - illuminating advantages



### **Colour temperature**

The right colour temperature for every type of tissue and wound structure.

From 3,000 K to 5,500 K.



### **Endoscopy mode**

The inner area is illuminated in green for higher contrast on the monitor.

Extremely user-friendly for minimally invasive procedures.



## **Prepared for hybrid ORs**

With long extension arms and X-ray protection shields on the spring arm, the medifa H!Light series meets all requirements in the modern hybrid OR.



Aerodynamic shape of the closed lamp body with smooth surface, no edges, no screws or notches.

For the specific requirements of ventilation systems in the operating theatre as well as easy cleaning and disinfection.

Due to the shape of the outer handles 2 lights can be positioned directly next to each



# Models



included 
 optional



			(D)
		medifa H!Light Art-No. 100200	medifa H!Light plus Art-No. 100400
0	Colour temperature 3,000 K -5,500 K	•	•
	Control element on light head	•	•
î	Sterile control at the multifunction handle	•	•
	Passive shadow management	•	•
<b>(-</b> )	Active shadow management		•
9	Camera	•	•
2	Endoscopy mode	•	•
	Memory-function	•	•



# medifa H!Light - combinations





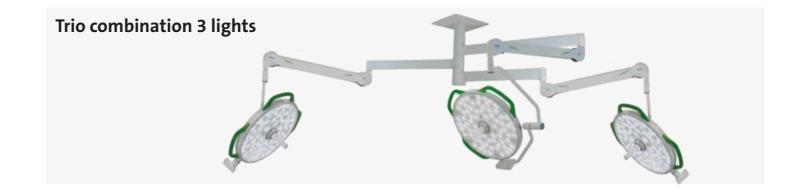












Each combination can consist of medifa H!Light, medifa H!Light plus, medifa H!Light lc or medifa H!Light plus lc for the operating light.

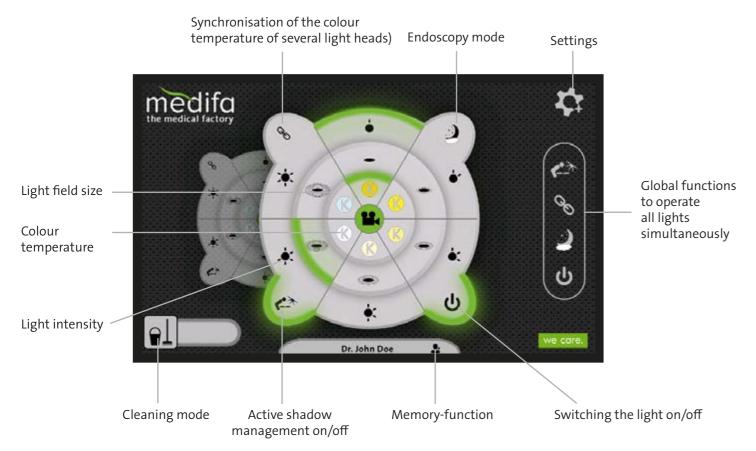
## User-friendly control concept

# medifo

### **Operating light**

#### **Touch control element**

on the lamp head and optionally as wall control units surface-mounted (Art. no. 105600), flush-mounted (Art. no. 105650) or panel-mounted (Art. no. 105660).



### Option: Sterile control at the multifunction handle

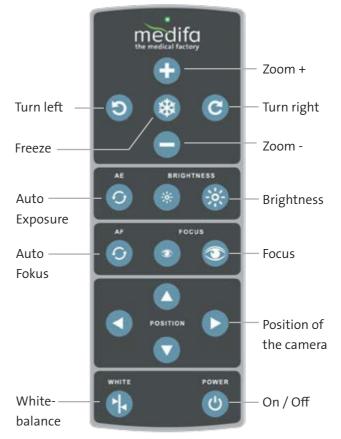
Intensity, light field size and colour temperature can be controlled on the sterile handle.

The functions are selected by pressing the selection button at the bottom of the handle.

The selected function is adjusted by turning the sterilisable handle.

#### Wireless-camera

#### Remote control





# medifa H!Light for your OR





# Everything from one source for your Operating theatre:

- 1. Operating lights
- 2. Modular room system RooSy
- 3. Mobile operating tables and accessories
- 4. Medical furniture and customized solutions

## Technical data



40,000 lx - 160,000 lx
25 - 100%
3,000 - 5,500
96
95
98
18 - 32 cm
0.67
70 - 150 cm
60 cm
<0.5°
72
> 60,000h
65
120
< 600 W/m2
160 VA

All values are conform to IEC 60601-2-41 and are subject to a general industrial tolerance of  $\pm$  10%.

\*In accordance with the IEC 60601-2-41 standard, the maximum illuminance must not exceed 160,000 lx. The industrial tolerance is therefore only -10%.

Technical data wireless-camera	wireless HD (Artno. 103200)	<b>wireless 4K</b> (Artno. 103200)
Resolution pixel	ca. 2,140,000 Pixel	8,510,000 Pixel
Resolution	1,920 x 1,080	3,840 x 2,160
Zoom	30x optical, 12x digital	20x optical, 12x digital
Image rotation	limitless, motorised	limitless, motorised
Video outputs	HDMI 1.4, DVI	HDMI 1.4, DVI
Aspect ratio	16:9	16:9
Dimensions (Ø, length)	68 mm x 179 mm	68 mm x 179 mm
Weight camera	1 kg	1 kg
Security of data transmission	exclusively between	exclusively between
	coupled transmitter + receiver	coupled transmitter + receiver
	AES 128 bit encryption	AES 128 bit encryption



Use our wireless camera systems in the operating theatre for detailed, precise representation and highest image quality

Our cameras offer you finely structured images, optimum detail and brilliant reproduction with clear, sharp contours and perfect colour reproduction from every position.

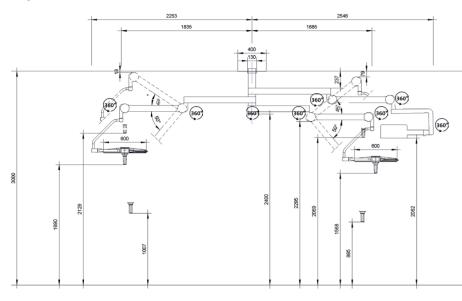
A wired solution is also available on request.

# Configuration examples

## Variants and accessories



#### Triple combination with monitor holder



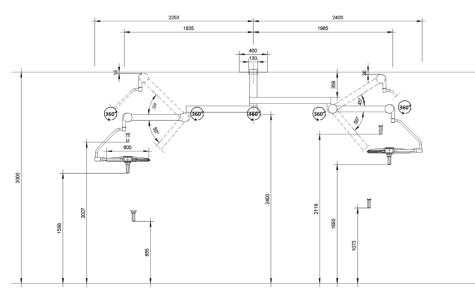
#### **Combination of**

- Art.-no. 105075 Flat cover 400x400
- Art.-no. 105060 Ceiling tube 105 mm
- Art.-no. 105300 Central axis trio
- Art.-no. 100200 medifa H!Light
- Art.-no. 100400 medifa H!Light plus
- Art.-no. 105700 2x medifa handle adapter standard or
   Art.-no. 105750 medifa handle adapter sterile control
- Art.-no. 102400-1 medifa H!Light monitor 4K up to 32′′

  Art.-no. 102200-1 medifa H!Light

**Art.-no. 102200-1** medifa H!Light monitor stop

#### **Double combination**



#### **Combination of**

- Art.-no. 105075 Flat cover 400x400
- Art.-no. 105060 Ceiling tube 105 mm
- Art.-no. 105200 Central axis duo
- Art.-no. 100200 medifa H!Light
- Art.-no. 100400 medifa H!Light plus
- Art.-no. 105700 2x medifa handle adapter standard or

**Art.-no. 105750** medifa handle adapter sterile control



#### medifa H!Light

Art.-no. 100200

#### Art.-no. 100400 with active shadow management

- $\cdot$  Power supply 100  $^{\sim}$  240 V AC oder 24 V DC
- · Spring arm standard height
- · Light head with double yoke and camera prep. wireless



#### medifa H!Light Ic (low ceiling height))

Art.-no. 100200L

#### Art.-no. 100400L with active shadow management

- $\cdot$  Power supply 100  $^{\sim}$  240 V AC oder 24 V DC
- Spring arm low ceiling height
- Light head with single yoke and camera prep. wireless



#### medifa H!Light monitor holder

Art.-no. 102400-1 with 4K transmission through slip rings Art.-no. 102200-1 with STOP for cable pulling on site

- Spring arm 12,5 21,5 kg
- Monitor holder single up to 32"
- Interface VESA 75x75, 100x100, 100x200, 100x400



#### Ceiling fixation set Light

#### Art.-no. 105050

- For intermediate ceiling
- Max. distance intermediate/bare ceiling 1,200 mm for installation with flat cover
- ${\scriptstyle \bullet}$  Consisting of: 1x Ceiling anchor plate M16, 6x Distance unit M16



#### Ceiling tube 105 mm Art.-no. 105060

- · Ceiling tube diameter: 105 mm
- Standard length: 300 mm or 500 mm
- Other length on request
- Fixation hole pattern 6x M16 270 mm

## Variants and accessories





### Cover 590

#### Art.-no. 105095

- Solo cover round
- D = 590 mm H = 125 mm
- Two part with 6 pcs. Mounting screws
- one part holding ring



#### Flat cover 400x400 Art.-no. 105075

- Flat cover Solo
- 400 x 400 mm H = 2 mm
- Two part holding ring



#### Installationkit Laminar Air Flow Art.-no. 105080

Two units, two part holding ring



#### Central axis single Art.-no. 105100

- Central axis and extension arm
- Extension arm length standard: 1,075 mm



#### Central axis duo Art.-no. 105200

- Central axis and extension arm
- Extension arm length standard: 925 mm / 1,075 mm



#### Central axis duo hybrid

#### Art.-no. 105210

- Central axis and extension arm
- Extension arm length standard: 1,375mm / 1,525 mm



### Central axis trio

- Art.-no. 105300
- Central axis and extension arm
- Extension arm length standard: 775 mm / 925 mm / 1,075 mm



#### medifa H!Light X-Ray shield 76x60 Art.-no. 102800-1

- Spring arm
- X-Ray protection shield Pb =0,5 mm
- Dimensions 76 x 60 cm
- Body cut out



#### medifa H!Light X-Ray shield 78x90 Art.-no. 102900-1

- Spring arm
- X-Ray protection shield Pb =0,5 mm
- Dimensions 78 x 90 cm
- Body cut out and additional slats



#### X-Ray shield disposable covers

• 1 box (50 pieces disposable covers)

## Accessories

## medifa





#### medifa handle adapter

Art.-no. 105700 standard without control function Art.-no. 105750 with control function

- Weight dummy for light head
- For sterilisable handles



#### medifa handle standard (set of 5)

Art.-no. 104100

- Sterilisable handle made from PPSU
- medifa handle camera (set of 5)

Art.-no. 104200

• Sterilisable handle camera made from PPSU



#### Additional adapter disposable

Art.-no. 104300

 Adapter for upgrade handle adapter or monitor holder for disposable handles



#### medifa H!Light wireless HD Art.-no. 103200

- · Camera module HD and receiver module HD
- DVI-D connector
- · 30x optical zoom, 12x digital zoom
- IR remote control



#### medifa H!Light wireless 4K Art.-no. 103400

- · Camera module 4K and receiver module 4K
- DVI-D connector
- 20x optical zoom, 12x digital zoom
- IR remote control

#### The medifa healthcare group unites competence concerning operating rooms under one roof.

medifa is an owner-run and internationally active complete solution provider in the medical technology.

The product and service portfolio covers all operating room requirements from modular wall, door, ceiling and cabinet systems (RooSy® Room Systems) for the turnkey operating room, as well as mobile operating tables, operating table accessories and operating lights, right up to examination chairs and medical

furniture. In addition, one of the largest German OEM suppliers in the medical technology sector also belongs to medifa.

medifa GmbH & Co. KG (Finnentrop), medifa hygienic rooms GmbH (Ötigheim) and medifa metall und medizintechnik GmbH in Rastatt are all part of this group of companies. The medifa healthcare group employs approximately 350 employees at three locations within Germany. The planning, engineering and production

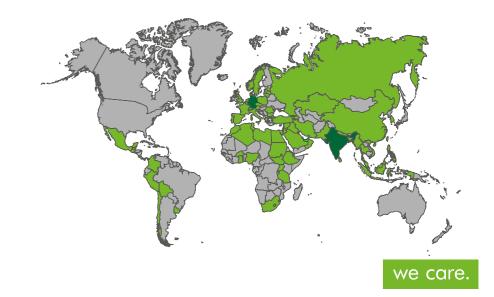
take place exclusively in Germany, and with over 90% added value in the group of companies, the group guarantees fast reaction times.

The slogan "we care" means for us that we consistently orientate ourselves according to the requirements of our customers. Customers all over the world can rely on top-class consultation, processing and quality from a single source, made in Germany according to certified national and international quality standards.

#### **Products**

- Modular operating room systems: walls, doors, ceilings and cabinets (RooSy)
- Mobile operating tables and accessories
- Operating lights
- Examination and treatment chairs
- Medical furniture and trolleys
- Customized medical solutions

#### medifa worldwide















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Subject to modifications due to technical development. This document is intended to provide information to an international audience outside of the US.



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we care.