



medifa H!Light

LED operating light system



we care.

medifa H!Light

- Innovative lighting technology combined with high functionality and 160,000 lux light intensity
- User-friendly control concept
- Operating theatre adapted colour temperature from 3,000 - 5,500 K
- Large, homogeneous surface illumination
- One universal handle holder for all cameras (4K and HD) and all handles
- Sterile control at the multifunction handle
- Lightweight construction (aluminium housing)
- VSG safety glass window
- Ideal cleaning and disinfection conditions
- Sustainable energy efficiency with minimal temperature increase
- Long lifespan
- Optional: 360° monitor arm with stopless signal transmission
- Optional: HD or 4K wireless camera



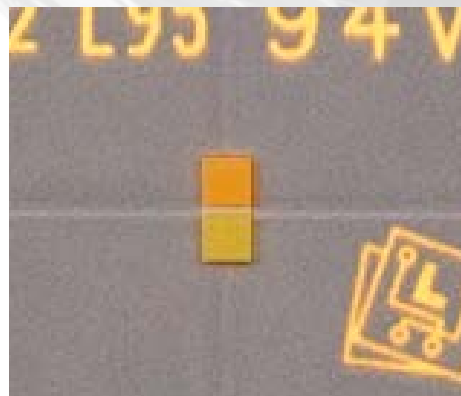
K

medifa H!Light - illuminating advantages



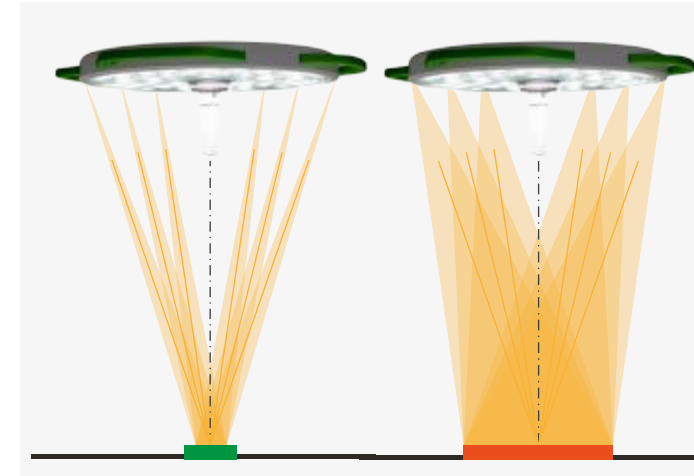
Light field size and shadow management

- 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.
- Thanks to the dual-lens system and the homogeneous mix of cool/warm white LEDs behind the lenses, the shading values remain constant even at extreme colour temperatures such as 3,000K or 5,500K.



Universal handle holder

- The universal handle holder offers unique flexibility.
- All handle adapters and available cameras fit into the same handle holder.
- Tool-free change possible.

medifa H!Light - illuminating advantages



5,500 K



3,000 K

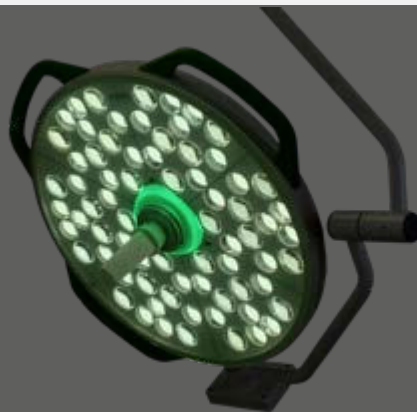
Colour temperature

- The right colour temperature for every type of tissue and wound structure.
- From 3,000 K to 5,500 K.



Airflow optimised shape

- Aerodynamic shape of the closed light 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 other.



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.

Models

	 medifa H!Light Art-no. 100200	 medifa H!Light plus Art-no. 100400
 Colour temperature 3,000 K -5,500 K	●	●
 Control element on light head	●	●
 Sterile control at the multifunction handle	◆	◆
 Passive shadow management	●	●
 Active shadow management		●
 Prepared for attachment of cameras	●	●
 Camera	◆	◆
 Endoscopy mode	●	●
 Memory-function	●	●
	● included ◆ optional	



medifa H!Light - combinations

Single light

Art.-no. 106100



Mobile light

Art.-no. 106120



Duo combination light and monitor

Art.-no. 106200



Single monitor

Art.-no. 106100



Trio combination 2 lights and monitor

Art.-no. 106300



Duo combination lights

Art.-no. 106200



Trio combination 3 lights

Art.-no. 106300



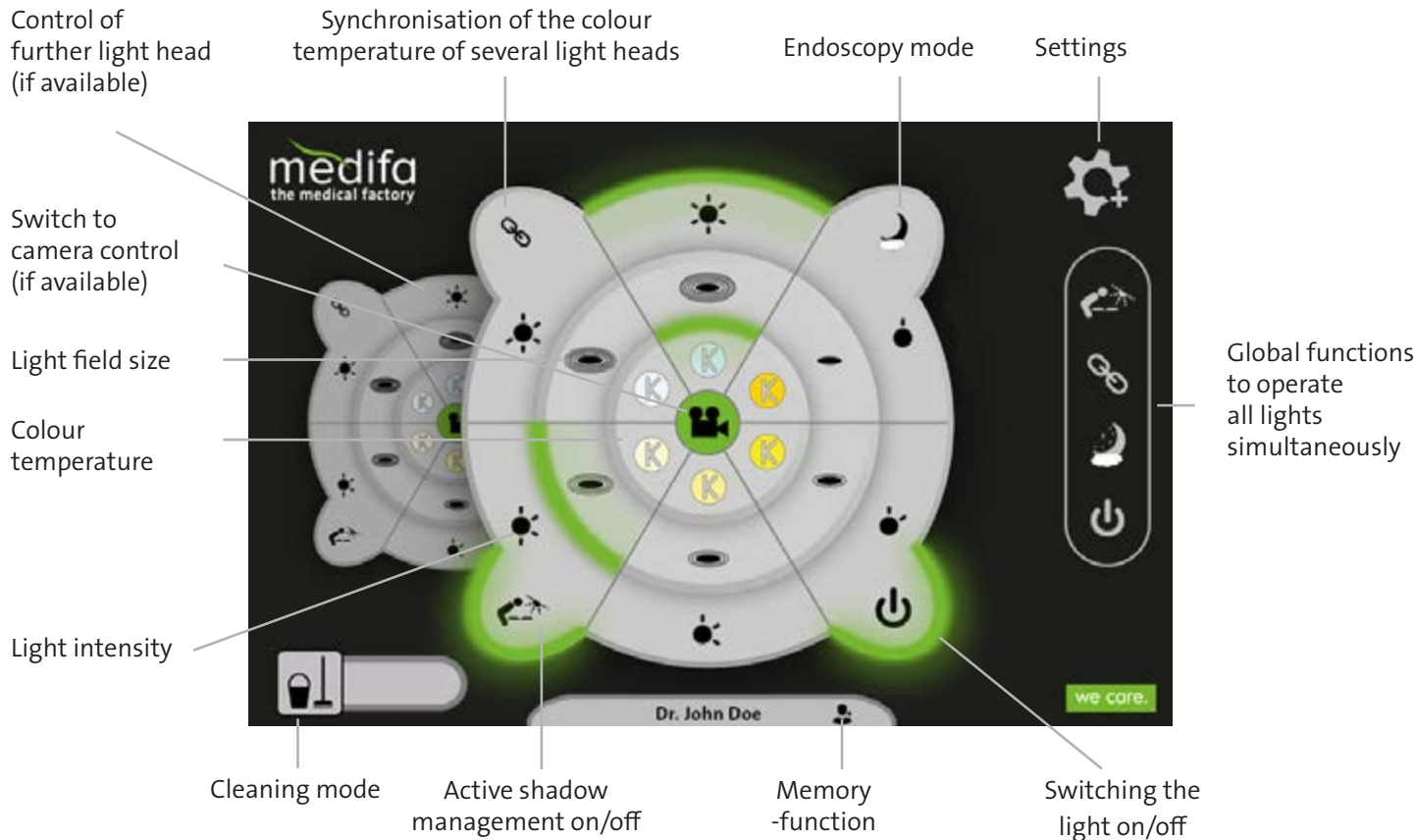
Each combination can consist of medifa H!Light, medifa H!Light plus, medifa H!Light lc or medifa H!Light plus lc for the operating light.

User-friendly control concept

Operating light

Touch control element

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

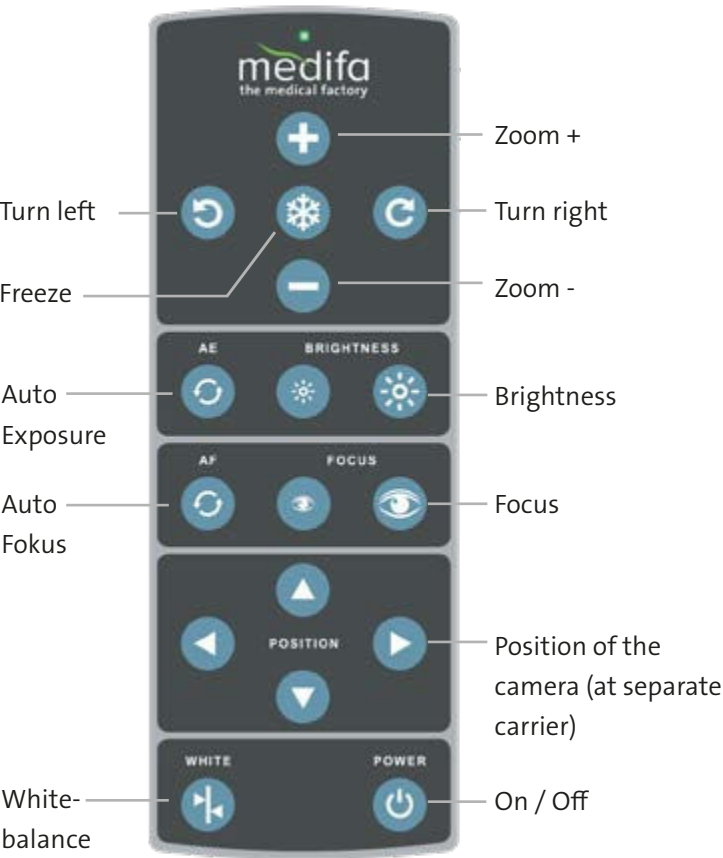


Option: Sterile control at the multifunction handle

Intensity, light field size, colour temperature and endoscopy mode 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 operating light	
Light intensity in 1 m distance (in lx)	40,000 - 160,000
Adjustability of the light intensity (in %)	25 - 100
Colour temperature (Kelvin)	3,000 - 5,500
Colour rendering index R _a	97
Colour rendering index R ₉ (blood)	97
Colour rendering index R ₁₃ (skin)	99
Focusable light field size (Diameter d ₁₀ in cm)	18 - 32
d ₅₀ /d ₁₀ ratio	0.5 - 0.6
Working distance (in cm)	70 - 150
Diameter of light head (in cm)	60
Temperature increase in the head area	<0.5°
Number of lenses	72
Life-span of the LEDs (in hours)	> 60,000
Depth of light field L1+L2 at 60% Ec(cm)	65
Depth of light field L1+L2 at 20% Ec(cm)	120
Radiation energy	< 600 W/m2
Total power consumption (per light head)	160 VA

All values are conform to IEC 60601-2-41 and are subject to a general industrial tolerance of ± 5%.
*In accordance with the IEC 60601-2-41 standard, the maximum illuminance must not exceed 160,000 lx. The industrial tolerance is therefore only -5%.

Technical data wireless-camera	wireless HD (Art.-no. 103200)	wireless 4K (Art.-no. 103200)
Resolution (in pixel)	approx. 2,140,000	8,510,000
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 (in kg)	1	1
Security of data transmission	exclusively between coupled transmitter + receiver AES 128 bit encryption	exclusively between coupled transmitter + receiver AES 128 bit encryption



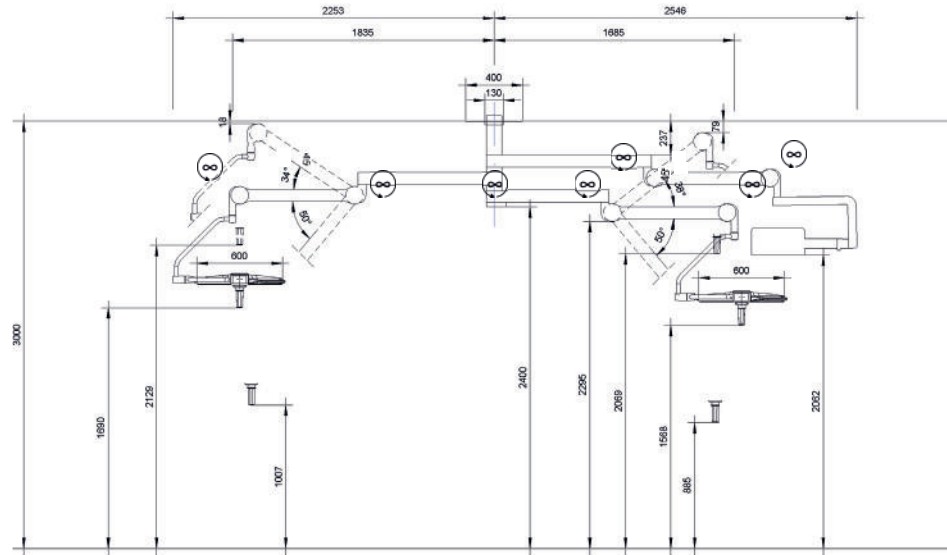
Use our wireless camera systems in the operating theatre for detailed, precise representation and highest image quality

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

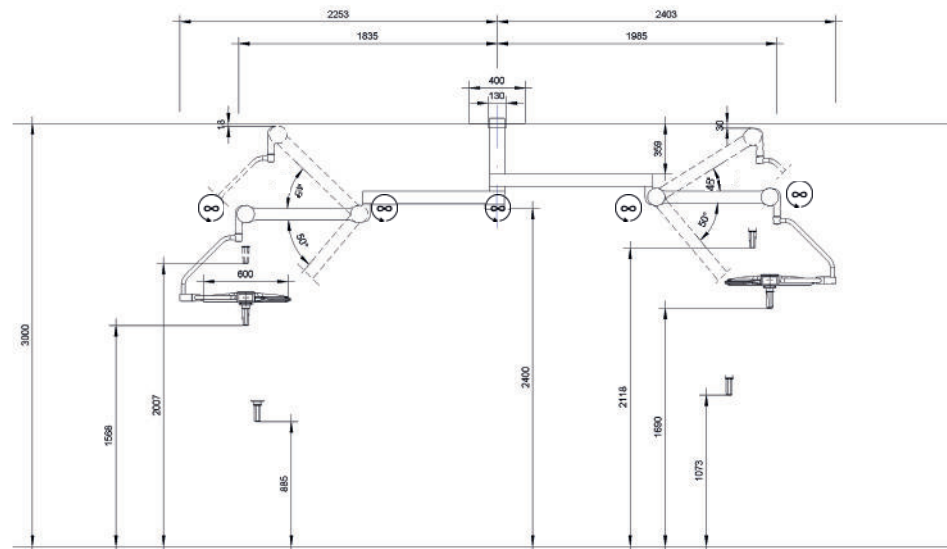
Triple combination with monitor holder



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 holder stopless or
- **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

Models and accessories



medifa H!Light

Art.-no. 100200

Art.-no. 100400 with active shadow management

- Power supply 100 ~ 240 V AC oder 24 V DC
- Spring arm standard height
- Light head with double yoke and camera prep. wireless



medifa H!Light lc (low ceiling height))

Art.-no. 100200L

Art.-no. 100400L with active shadow management

- Power supply 100 ~ 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
- Consisting of: 1x Ceiling anchor plate M16, 6x Distance unit M16



Ceiling tube 105 mm

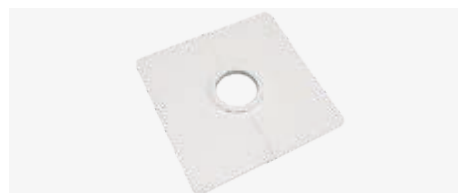
- Art.-no. 105060
- Ceiling tube diameter: 105 mm
- Standard length: 300 mm or 500 mm
- Other length on request
- Fixation hole pattern 6x M16 270 mm



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

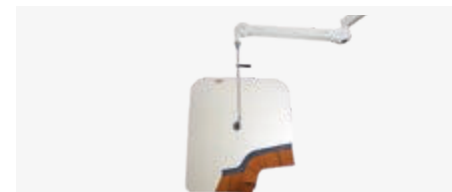
- Central axis and extension arm
- Extension arm length standard: 775 mm / 925 mm / 1,075 mm



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)



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 operating tables with accessories, operating lights right up to special construction solutions 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,

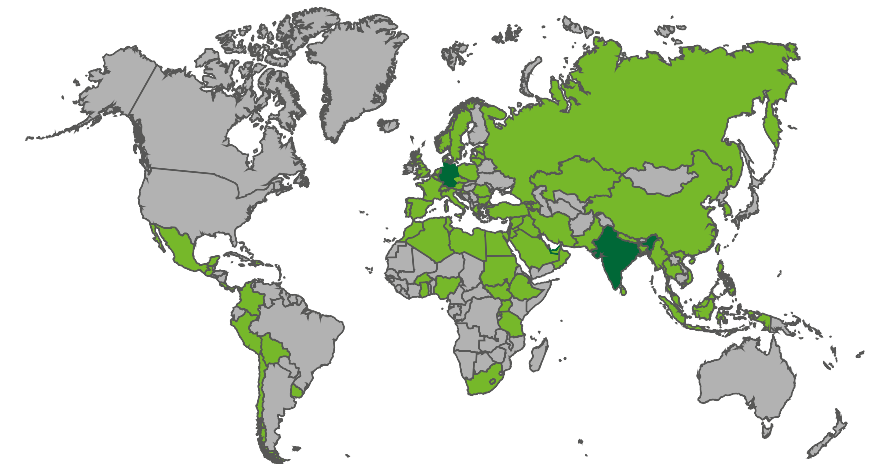
and with over 80% added value in the group of companies, the group guarantees fast reaction times.

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 (RooSy)
- Operating lights (H!Light)
- Mobile carbon tables for minimally invasive applications
- Operating tables and accessories
- Examination and treatment chairs
- Medical furniture and trolleys
- Customized medical solutions

medifa worldwide



we care.



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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.

www.medifa.com



medifa GmbH & Co. KG

Industriestraße 5
57413 Finnentrop
Germany
fon +49 2721 71 77 -0
fax +49 2721 71 77 -255
info@medifa.com

we care.