

LED OR-LIGHTS
LED EXAMINATION LIGHTS
PENDANT SYSTEMS



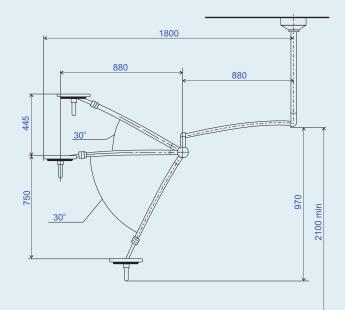
EXAMINATION LIGHT EMALED® 200 D



The ceiling mounted examination light EMALED 200 D enables a perfect illumination during medical interventions. The vertically adjustable and horizontal rotatable spring arm allows to adjust the light head in desired position.

Illumination (at 1 m)	50.000 lx	
Lighting intensity	30 - 100 %	
Diameter of lightning field D10	1/0 mm	
Operating distance	70 – 140 cm	
Colour temperature	4.500 K	
Colour rendering index	95 Ra	
Life expectancy of LEDs	50.000 hrs	
Diameter of light head	240 mm	
Number of LEDs	7	
Main voltage	230 V	
Frequency	50 – 60 Hz	
Power consumption	10 VA	
Weight of lighting element	1,0 kg	
Weight of complete system	12 kg	



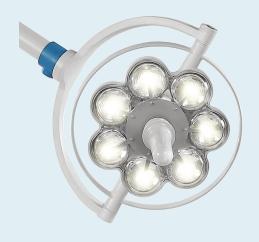


- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)



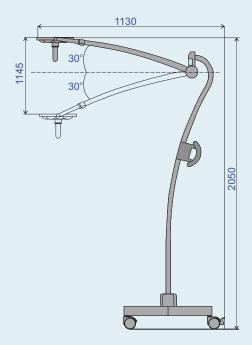


EXAMINATION LIGHT EMALED® 200 F



TECHNICAL DETAILS

Illumination (at 1 m)	50.000 lx	
Lighting intensity	30 - 100 %	
Diameter of lightning field D10	140 mm	
Operating distance	70 – 140 cm	
Colour temperature	4.500 K	
Colour rendering index	95 Ra	
Life expectancy of LEDs	50.000 hrs	
Diameter of light head	240 mm	
Number of LEDs	7	
Main voltage	230 V	
Frequency	50 – 60 Hz	
Power consumption	10 VA	
Weight of lighting element	1,0 kg	
Weight of complete system	20 kg	



The examination light EMALED 200 F is the mobile version of the 200 series. Its mobility allows to use this light in several rooms.



- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)





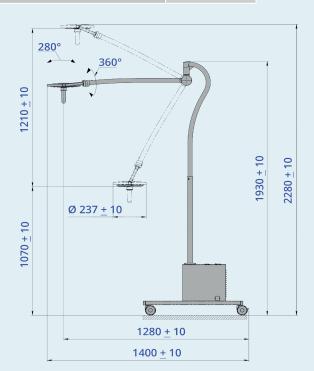


EXAMINATION LIGHT EMALED® 200 M



The mobile examination light EMALED 200 M with a battery back-up can be used without power connection up to 24 hours. The high illumination and excellent lightning quality makes this mobile surgical light a good allrounder in multiple fields.

Illumination (at 1 m) 50.000 lx			
Lighting intensity	30 - 100 %		
Diameter of lightning field D10	140 mm		
Operating distance	70 – 140 cm		
Colour temperature	4.500 K		
Colour rendering index	95 Ra		
Life expectancy of LEDs	ncy of LEDs 50.000 hrs		
Diameter of light head	240 mm		
Number of LEDs	7		
Main voltage	230 V		
Frequency	50 - 60 Hz		
Power consumption 10 VA			
Weight of lighting element	1,0 kg		
Weight of complete system 37 kg			





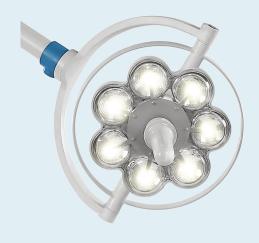
- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)





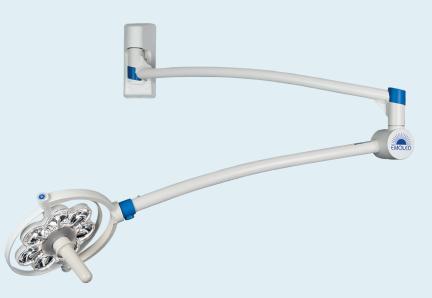


EXAMINATION LIGHT EMALED® 200 W

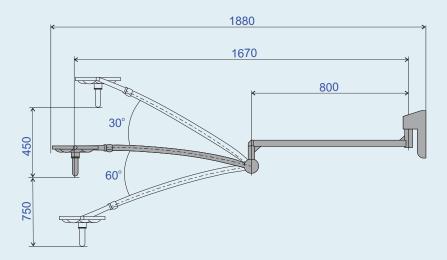


The examination light EMALED 200 W is the wall mounted version of the 200 series. It features high mobility and good positioning of the light head during medical interventions and can be used for various purposes.

Illumination (at 1 m)	50.000 lx	
Lighting intensity	30 - 100 %	
Diameter of lightning field D10	1/I() mm	
Operating distance	70 – 140 cm	
Colour temperature	4.500 K	
Colour rendering index	95 Ra	
Life expectancy of LEDs	EDs 50.000 hrs	
Diameter of light head	240 mm	
Number of LEDs	7	
Main voltage	230 V	
Frequency	50 – 60 Hz	
Power consumption 10 VA		
Weight of lighting element 1,0 kg		
Weight of complete system	tem 10 kg	



- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)









SURGICAL LIGHT EMALED® 300 D

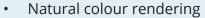


The surgical light EMALED 300 D grants a high light quality and optimal illumination for diagnostical examinations and surgical interventions. The 4-step focusing via the control panel with LCD display enables to adapt the light field as needed.

TECHNICAL DETAILS

	EMALED 300 D		
Illumination (at 1 m)	100.000 lx		
Lighting intensity	10 - 100 %		
Focusable diameter of lightning field D10	150 - 300 mm		
Operating distance	70 – 140 cm		
Colour temperature	4.500 K		
Colour rendering index	96 Ra		
Life expectancy of LEDs	50.000 hrs		
Diameter of light head	440 mm		
Number of LEDs	42		
Main voltage	230 V		
Frequency	50 – 60 Hz		
Power consumption	24 VA		
Height adjustment	1.500 mm		
Weight of lighting element	4,0 kg		
Weight of complete system	ca. 30 kg		

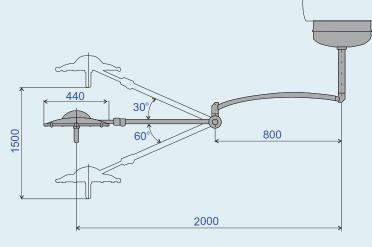




- · Shadow-free illumination
- Barely noticeable heating of the light head

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- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- High flexibility: 360° rotation horizontal
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system







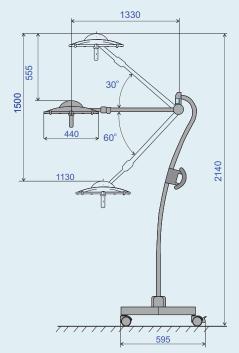


SURGICAL LIGHT EMALED® 300 F



TECHNICAL DETAILS

	EMALED 300 F		
Illumination (at 1 m)	100.000 lx		
Lighting intensity	10 - 100 %		
focusable diameter of lightning field D10	150 - 300 mm		
Operating distance	70 – 140 cm		
Colour temperature	4.500 K		
Colour rendering index	96 Ra		
Life expectancy of LEDs	Ds 50.000 hrs		
Diameter of light head	440 mm		
Number of LEDs	42		
Main voltage	in voltage 230 V		
Frequency	50 – 60 Hz		
Power consumption	24 VA		
weight of lighting element	4,0 kg		
weight of complete system	30 kg		



This mobile surgical light EMALED 300 F has a great flexibility and can be used in multiple examination and operating rooms. The high illumination and wide focusable light field makes it possible to perform examinations as well as small surgical interventions.



- Natural colour rendering
- Shadow-free illumination
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- · Optionally: cardanic system



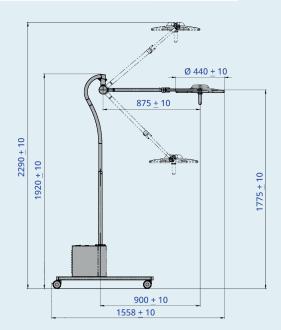


SURGICAL LIGHT EMALED® 300 M



The mobile surgical light EMALED 300 M with a battery backup can be used without power connection up to 5 hours. The high illumination and excellent lightning quality makes this mobile surgical light a good allrounder in multiple fields.

	EMALED 300 M		
Illumination (at 1 m)	100.000 lx		
Lighting intensity	10 - 100 %		
Focusable diameter of lightning field D10	150 - 300 mm		
Operating distance	70 – 140 cm		
Colour temperature	4.500 K		
Colour rendering index	96 Ra		
Life expectancy of LED's	LED's 50.000 hrs		
Diameter of light head	440 mm		
Number of LEDs	42		
Main voltage	230 V		
Frequency 50 – 60 H			
Power consumption	24 VA		
Weight of lighting element	4,0 kg		
Weight of complete system	n 45 kg		





- Natural colour rendering
- · Shadow-free illumination
- Barely noticeable heating of the ligth head
- Integrated battery back-up for 5 hour network independent use
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system







SURGICAL LIGHT EMALED® 300 W

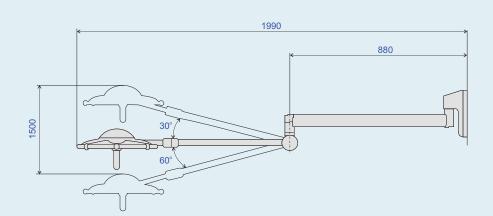


The multifunctional wall mounted surgical light EMALED 300 W grants a great flexibility, smooth movement and is a great help in examination rooms as well as in operating rooms.



	EMALED 300 W		
Illumination (at 1 m)	100.000 lx		
Lighting intensity	10 - 100 %		
Focusable diameter of lightning field D10	150 - 300 mm		
Operating distance	70 – 140 cm		
Colour temperature	4.500 K		
Colour rendering index	96 Ra		
Life expectancy of LED's	50.000 hrs		
Diameter of light head	440 mm		
Number of LEDs	42		
Main voltage	230 V		
Frequency	50 – 60 Hz		
Power consumption 24 VA			
Weight of lighting element 4,0 kg			
Weight of complete system 12 kg			

- Natural colour rendering
- Shadow-free illumination
- · Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- · Optionally: cardanic system









OLED® SURGICAL LIGHT EMALED® 500 mobile or EMALED® 560 mobile

This mobile surgical light EMALED 500 mobile or EMALED 560 mobile has a great flexibility and can be used in multiple examination and operating rooms. With the biggest light head of EMALED series it's possible to perform surgical interventions wherever it's needed.

TECHNICAL DETAILS

	EMALED 500 mobile	EMALED 560 mobile	
Illumination (at 1 m)	120.000 lx	160.000 lx	
Lighting intensity	10 - 100 %	10 - 100 %	
focusable diameter of lightning field D10	185 - 350 mm	185 - 350 mm	
Operating distance	70 – 140 cm	70 - 140 cm	
Colour temperature	4.500 K	4.500 K	
Colour rendering index	96 Ra	96 Ra	
Life expectancy of LEDs	50.000 hrs	50.000 hrs	
Diameter of light head	650 mm	650 mm	
Number of LEDs	70	70	
Main voltage	100 - 240 V	100 - 240 V	
Frequency	50 – 60 Hz	50 - 60 Hz	
Power consumption	60 VA	60 VA	
weight of lighting element	9,5 kg	9,5 kg	
weight of complete system	47 kg	47 kg	



- Natural colour rendering
- Shadow-free illumination
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- including cardanic system

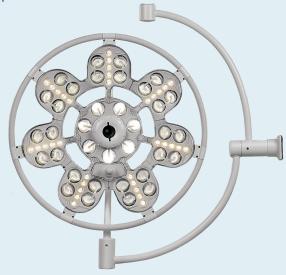
- Remote control (also for double dome lights)
- Laser pointer
- Full HD camera
- Variable colour temperature: 3500 5000 K (5-steps)







SURGICAL LIGHT EMALED® 500



This light head EMALED 500 with a light head diameter of 650 mm and its flat and unique design, is compatible with laminar flow ceilings. This surgical light grants best light quality, a large light field and is therefore suitable also for big surgical interventions.



TECHNICAL DETAILS

Illumination (at 1 m)	120.000 lx	
Lighting intensity	10 - 100 %	
Focusable diameter of lightning field D10	185 - 350 mm	
Operating distance	70 – 140 cm	
Colour temperature	4.500 K	
Colour rendering index	96 Ra	
Life expectancy of LED's	50.000 hrs	
Diameter of light head	650 mm	
Number of LEDs	70	
Main voltage	100 – 240 V / 24 V	
Frequency	50 – 60 Hz	
Power consumption	60 VA	
Weight of lighting element	9,5 kg	
Weight of complete system	80 kg	

2100 min 2500 min 2100 min 210

- · Natural colour rendering grants a great light quality
- Shadow-free illumination
- · Barely noticeable heating of the light head
- · No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

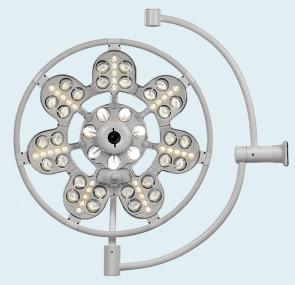
- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500 5000 K (5-steps)







SURGICAL LIGHT EMALED® 560



This light head EMALED 560 is optically identical with the EMALED 500 light head, but grants the highest possible illumination (160.000lx) and can therefore satisfy even the highest requirements.



TECHNICAL DETAILS

Illumination (at 1 m) 160.000 lx		
Lighting intensity	10 - 100 %	
Focusable diameter of lightning field D10	185 - 350 mm	
Operating distance	70 – 140 cm	
Colour temperature	4.500 K	
Colour rendering index	96 Ra	
Life expectancy of LED's	50.000 hrs	
Diameter of light head	650 mm	
Number of LEDs	70	
Main voltage	100 - 240 V / 24 V	
Frequency	50 – 60 Hz	
Power consumption	60 VA	
Weight of lighting element	9,5 kg	
Weight of complete system	80 kg	

2100 min 2500 min 250

- · Natural colour rendering grants a great light quality
- Shadow-free illumination
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500 5000 K (5-steps)



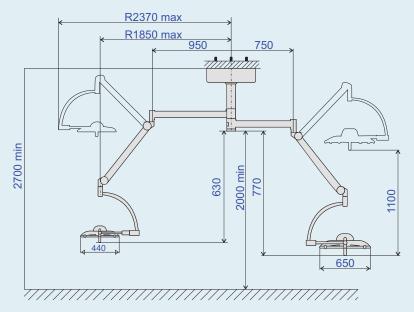


SURGICAL LIGHT EMALED® 560/300 or 500/300

Two moveable and vertically adjustable spring arms make it possible to site the light heads in every desired position. The cardanic system (at both light heads) grants an even higher flexibility.

TECHNICAL DETAILS

	EMALED 560	EMALED 500	EMALED 300
Illumination (at 1 m)	160.000 lx	120.000 lx	100.000 lx
Lighting intensity	10 – 100 %	10 – 100 %	10 – 100 %
Focusable diameter of lightning field D10	185 - 350 mm	185 - 350 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K	4.500 K
Colour rendering index	96 Ra	96 Ra	96 Ra
Life expectancy of LED's	50.000 hrs	50.000 hrs	50.000 hrs
Diameter of light head	650 mm	650 mm	440 mm
Number of LEDs	70	70	42
Main voltage	100 – 240 V	100 – 240 V	
Frequency	47 - 63 Hz	47 - 63 Hz	47 – 63 Hz
Power consumption	60 VA	60 VA	24 VA
Weight of lighting element	9,5 kg	9,5 kg	4,0 kg
Weight of complete system	100 kg	100 kg	





- Natural colour rendering grants a great light quality
- Shadow-free illumination
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

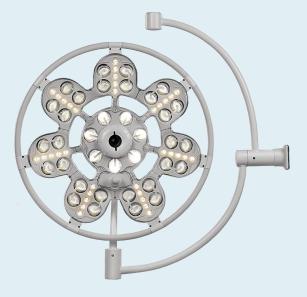
- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500 5000 K (5-steps)





SURGICAL LIGHT EMALED® 560/560 or EMALED® 500/500

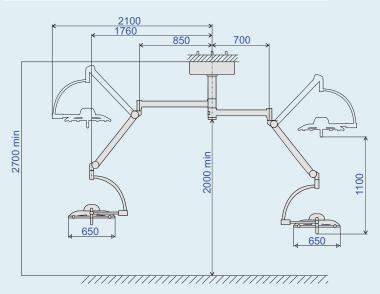
or EMALED® 560/500



This combination of light heads grants the highest possible illumination, the largest lightning field and is suitable for any kind of surgical intervention. Even long lasting interventions will be no problem, thanks to the low head release of the light heads.

TECHNICAL DETAILS

	EMALED 560	EMALED 500	
Illumination (at 1 m)	160.000 lx	120.000 lx	
Lighting intensity	10 – 100 %	10 – 100 %	
Focusable diameter of lightning field D10	185 - 350 mm	185 - 350 mm	
Operating distance	70 – 140 cm	70 – 140 cm	
Colour temperature	4.500 K	4.500 K	
Colour rendering index	96 Ra	96 Ra	
Life expectancy of LED's	50.000 hrs	50.000 hrs	
Diameter of light head	650 mm	650 mm	
Number of LEDs	70	70	
Main voltage	100 – 240 V	100 – 240 V	
Frequency	47 - 63 Hz	47 - 63 Hz	
Power consumption	60 VA	60 VA	
Weight of lighting element	9,5 kg	9,5 kg	
Weight of complete system	110 kg	110 kg	





- Natural colour rendering grants a great light quality
- Shadow-free illumination
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- · Full HD camera
- Laser pointer
- Variable colour temperature: 3500 5000 K (5-steps)

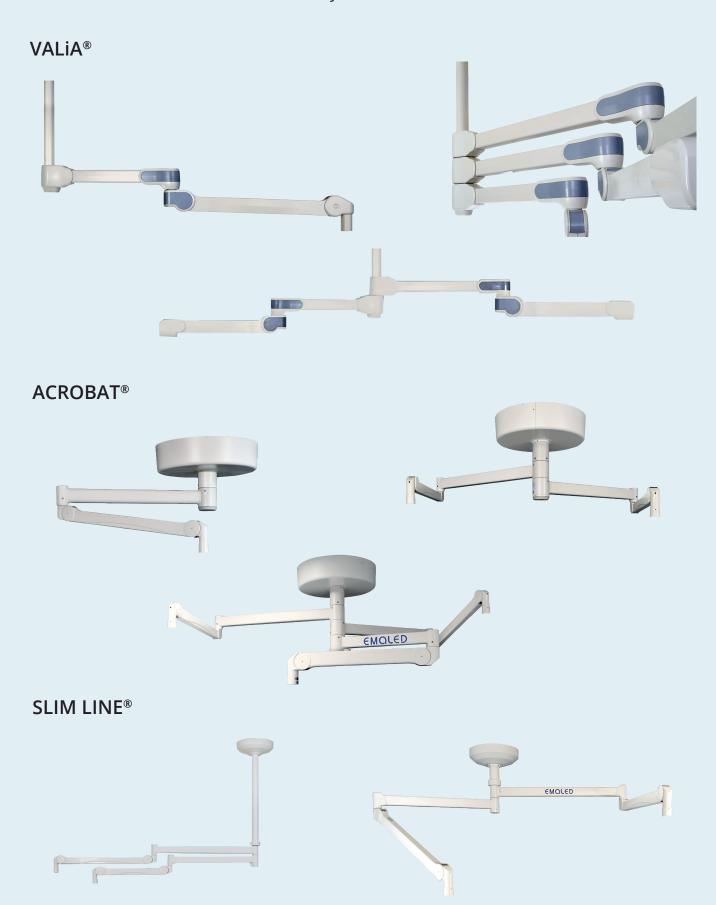






SUSPENSION SYSTEMS

We offer high quality pendant systems. We can offer flexible solutions for all of your demands.





VIDEO CAMERA AND MONITORS

For our EMALED 500 and EMALED 560 series we can additional offer video systems with medical monitors.

Full-HD camera (V)

The central positioning of the camera in the light head ensures distortion-free recordings of the procedure and ensures the best possible film quality.

Technical details

Image sensor	1/3-type CMOS (Progressive Scan)
Effective number of pixels	Approx. 4,080,000 pixels
AE (Auto exposure mode)	Auto, Manual, Priority mode (shutter/iris)
Lens	10x optical zoom f=3.3 mm (wide) to 33.0 mm (tele) F1.8 to F3.4
Zoom movement speed	1.4 sec
Focusing system	Auto, Manual, One push, AF sensitivity
Signal system (HD)	1080p/60
Digital output	HDMI



Full-HD monitors (M)

The full HD monitors (available 19 - 47 inch) are particular manufactured for the medical sector and can display the surgical interventions with best quality and color rendering.

Upon request we can also offer monitors with 4K resolution.

We're pleased to offer specific solutions for signal transmitting for your demand. E.g. we're prepared to display the surgery live on a different monitor in a seperate training room.











Control panel with LCD-display

The endoscopy light, depth illumination light and laser pointer (optionally available) can easily be controlled via the control panel with LCD-display.





Remote control

Optionally, adjustments can be carried out by a wireless control unit, which can be mounted to the wall. In addition to the lighting-parameters and focusing the unit stores settings for certain light-related circumstances in its memory.



Autoclavable handle

Two detachable and autoclavable handles come along with each light head. Additional handles are available upon request.

Our sterile handle covers are an easy and cheap alternative for the daily sterilization.







Pendant systems are used to supply operating rooms with medical gases, electricity and data connections.

We offer two possibilities for configuration of our pendant systems:

1. Standard variant

Standard variants are based on a height of the raw ceiling of up to 4000 mm and a false ceiling of approx. 3000 mm.

The built-in components of the pendants are available in the 3 standards.

- BS
- DIN
- AFNOR

Changes to the configuration are only possible in a limited range.

2. According to customer requirements

The customer-oriented planning of pendant systems enables the implementation of all customer requirements, provided they comply with national regulations.

It is possible to use payloads of up to 1000 kg and lift weights of up to 250 kg with a motor arm.

Gas outlets and sockets are available in all international standards.



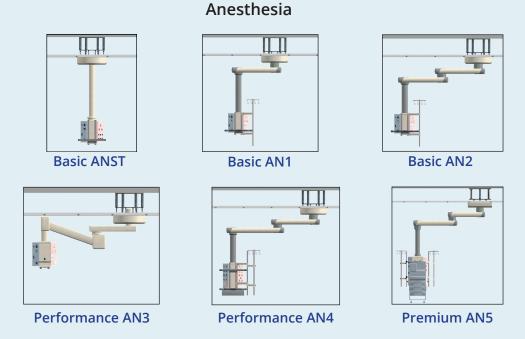




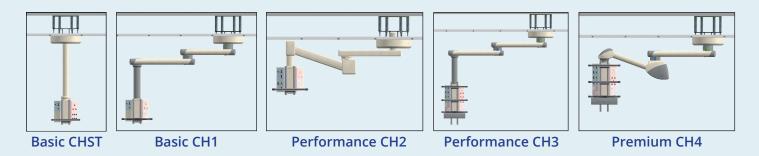
PENDANT SYSTEMS

Pendant systems finder mainly used in the following areas:

OPERATING ROOM



General Surgery



INTENSIVE CARE UNIT

Basic IC1 Performance IC2 Premium CH3

Intensive Care

Please contact us to get more information.



OR-/ EXAMINATION LIGHTS

OR-Lights:

EMALED® 560

Illumination: 160.000 lx

Variants:

EMALED 560
EMALED 560 M
EMALED 560 V
EMALED 560 VM
EMALED 560 mobile
EMALED 560 V mobile

Combination:
EMALED 560/500
EMALED 560/500 W
EMALED 560/500 V
EMALED 560/500 VM
EMALED 560/560 W
EMALED 560/560 W
EMALED 560/560 V
EMALED 560/560 VM
EMALED 560/300 W
EMALED 560/300 M
EMALED 560/300 W
EMALED 560/300 V
EMALED 560/300 VM
EMALED 560/300 VM
EMALED 560/300 VM
EMALED 560/560/560
EMALED 560/560/560

EMALED 560/560/300

EMALED 560/500/300

EMALED 560/560/560 V

EMALED 560/560/300 V

EMALED 560/560/560 VM

EMALED 560/560/300 VM

EMALED® 500

Illumination: 120.000 lx

Variants:

EMALED 500 EMALED 500 M EMALED 500 V EMALED 500 VM EMALED 500 mobile EMALED 500 V mobile

Combination:

EMALED 500/500 EMALED 500/500 M EMALED 500/500 V EMALED 500/500 VM EMALED 500/300 EMALED 500/300 M EMALED 500/300 V EMALED 500/300 VM EMALED 500/500/500

EMALED® 300

Illumination: 100.000 lx

Variants:

EMALED 300 D: for ceiling mounting EMALED 300 W: for wall mounting EMALED 300 F: mobile floor light EMALED 300 M: mobile light with battery for 5 hours of operation without main power connection

Combination:

EMALED 300/300

MADE IN GERMANY



Examination Lights:

EMALED® 200

Illumination: 50.000 lx

Variants:

EMALED 200 D: for ceiling mounting EMALED 200 W: for wall mounting EMALED 200 F: mobile floor light EMALED 200 M: mobile light with battery for 24 hours of operation without main power





The surgical and examination lights are classified in accordance with Council Directive 93/42 / EEC of 14 June 1993 on medical devices under Regulation 12, Class I (not a Class IIa product), Annex VII and are suitable for use.

The company EMA-LED GmbH is certified according to DIN EN ISO 13485: 2016 + AC: 2016.

According to customer requirements, other combinations are possible.

Technical details of light heads

<u> </u>				
	200	300	500	560
Illumination level	50.000 lx	100.000 lx	120.000 lx	160.000 lx
Colour temperature	4.500 K	4.500 K	4.500 K	4.500 K
Colour rendering index	95 Ra	96 Ra	96 Ra	96 Ra
Power supply	230 V	230 V	100 - 240 V	100 - 240 V
Operating voltage	24 V DC	24 V DC	24 V DC	24 V DC
Focus	fixed	adjustable (on control panel)	adjustable (on control panel)	adjustable (on control panel)
Dimming	30 - 100%	10 - 100%	10 - 100%	10 - 100%
Number of LEDs	7	42	70	70
Weight	1,0 kg	4,0 kg	9,5 kg	9,5 kg
Rated input	10 VA	24 VA	60 VA	60 VA
Service life of LEDs	50.000 hrs	50.000 hrs	50.000 hrs	50.000 h
Operating	Control panel on light head	Control panel with LCD-display on light head	Control panel with LCD-display on light head, optional remote control	Control panel with LCD-display on light head, optional remote control