

LED OR-LIGHTS
LED EXAMINATION LIGHTS
PENDANT SYSTEMS



SURGICAL LIGHT EMALED® 300D or EMALED® 300D+

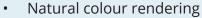


The surgical light EMALED 300D or EMALED 300D+ grants a high light quality and optimal illumination for diagnostical examinations and surgical interventions. The 4-step focusing via the control panel with LCD display enables to adapt the light field as needed.

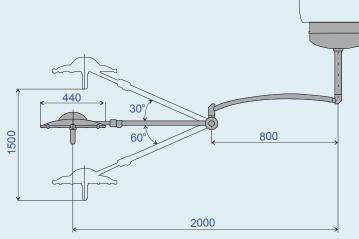
TECHNICAL DETAILS

| | EMALED 300D | EMALED 300D+ |
|---|--------------|------------------|
| Illumination (at 1 m) | 100.000 lx | up to 160.000 lx |
| Lighting intensity | 10 - 100 % | 10 - 100 % |
| Focusable diameter of lightning field D10 | 150 - 300 mm | 150 - 300 mm |
| Operating distance | 70 – 140 cm | 70 – 140 cm |
| Colour temperature | 4.500 K | 4.500 K |
| Colour rendering index | 95 Ra | 95 Ra |
| Life expectancy of LEDs | 50.000 hrs | 50.000 hrs |
| Diameter of light head | 440 mm | 440 mm |
| Number of LEDs | 42 | 42 |
| Main voltage | 230 V | 230 V |
| Frequency | 50 – 60 Hz | 50 – 60 Hz |
| Power consumption | 24 VA | 24 VA |
| Height adjustment | 1.500 mm | 1.500 mm |
| Weight of lighting element | 4,0 kg | 4,0 kg |
| Weight of complete system | ca. 30 kg | ca. 30 kg |





- 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
- 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











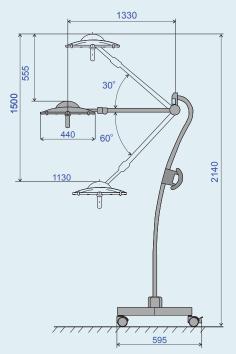
SURGICAL LIGHT EMALED® 300F or EMALED® 300F+



This mobile surgical light EMALED 300F or EMALED 300F+ 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.

TECHNICAL DETAILS

| | EMALED 300F | EMALED 300F+ |
|--|--------------|------------------|
| Illumination (at 1 m) | 100.000 lx | up to 160.000 lx |
| Lighting intensity | 10 - 100 % | 10 - 100 % |
| focusable diameter of lightning field D10 | 150 - 300 mm | 150 - 300 mm |
| Operating distance | 70 – 140 cm | 70 – 140 cm |
| Colour temperature | 4.500 K | 4.500 K |
| Colour rendering index | 95 Ra | 95 Ra |
| Life expectancy of LEDs | 50.000 hrs | 50.000 hrs |
| Diameter of light head | 440 mm | 440 mm |
| Number of LEDs | 42 | 42 |
| Main voltage | 230 V | 230 V |
| Frequency | 50 – 60 Hz | 50 – 60 Hz |
| Power consumption | 24 VA | 24 VA |
| weight of lighting element | 4,0 kg | 4,0 kg |
| weight of complete system | 30 kg | 30 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







SURGICAL LIGHT EMALED® 300W or EMALED® 300W+



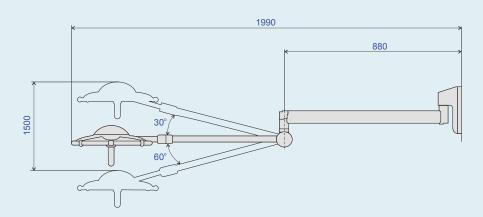
The multifunctional wall mounted surgical light EMALED 300W or EMALED 300W+ grants a great flexibility, smooth movement and is a great help in examination rooms as well as in operating rooms.



TECHNICAL DETAILS

| | EMALED 300W | EMALED 300W+ |
|---|--------------|------------------|
| Illumination (at 1 m) | 100.000 lx | up to 160.000 lx |
| Lighting intensity | 10 - 100 % | 10 - 100 % |
| Focusable diameter of lightning field D10 | 150 - 300 mm | 150 - 300 mm |
| Operating distance | 70 – 140 cm | 70 – 140 cm |
| Colour temperature | 4.500 K | 4.500 K |
| Colour rendering index | 95 Ra | 95 Ra |
| Life expectancy of LED's | 50.000 hrs | 50.000 hrs |
| Diameter of light head | 440 mm | 440 mm |
| Number of LEDs | 42 | 42 |
| Main voltage | 230 V | 230 V |
| Frequency | 50 – 60 Hz | 50 – 60 Hz |
| Power consumption | 24 VA | 24 VA |
| Weight of lighting element | 4,0 kg | 4,0 kg |
| Weight of complete system | 12 kg | 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





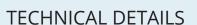






OLED SURGICAL LIGHT EMALED 500 mobile or EMALED 560 mobile

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.



| | 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 | 95 Ra | 95 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)

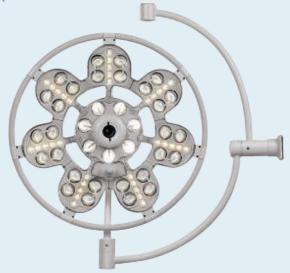








SURGICAL LIGHT EMALED® 500



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 | 95 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 25000 min 2000 min 20

- 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 | 95 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 2000 min 200

- 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)







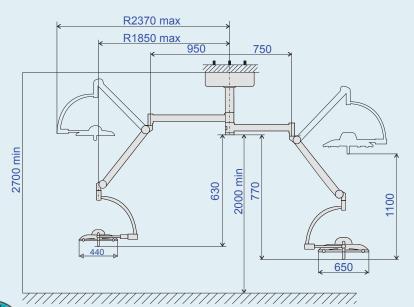


OLED SURGICAL LIGHT EMALED® 560/300 or 560/300+ or EMALED® 500/300 or 500/300+

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 or EMALED 300+ |
|--|--------------|--------------|--------------------------------------|
| Illumination (at 1 m) | 160.000 lx | 120.000 lx | 100.000 lx or up to 160.000 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 | 95 Ra | 95 Ra | 95 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)

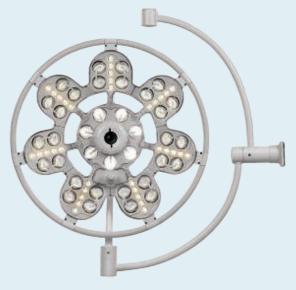






SURGICAL LIGHT EMALED® 560/560 or EMALED® 500/500

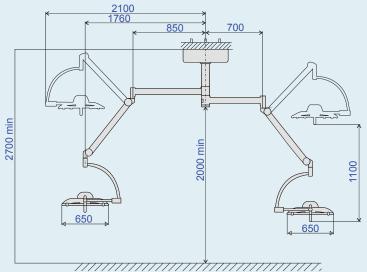
or EMALED® 560/500



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 | 95 Ra | 95 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:



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

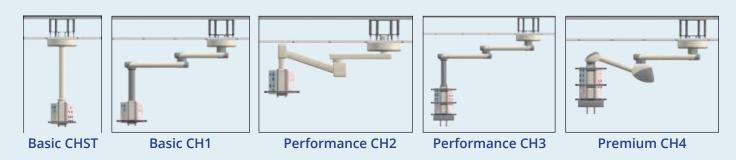
Pendant systems finder mainly used in the following areas:

OPERATING ROOM

Basic ANST Basic AN1 Basic AN2 Performance AN3 Performance AN4 Premium AN5

Anesthesia

General Surgery



INTENSIVE CARE UNIT



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 M
EMALED 560/500 V
EMALED 560/500 VM
EMALED 560/560
EMALED 560/560 M
EMALED 560/560 V
EMALED 560/560 VM
EMALED 560/300 EMALED 560/300 M
EMALED 560/300 V
EMALED 560/300 VM
EMALED 560/560/560

EMALED 560/500/500 EMALED 560/560/300 EMALED 560/500/300 EMALED 560/560/560 V EMALED 560/560/560 VM

EMALED 560/560/300 V 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 / 300+

Illumination: 100.000 lx / up to160.000 lx

Variants:

EMALED 300D: for ceiling mounting EMALED 300W: for wall mounting EMALED 300F: mobile floor light

Combination: EMALED 300/300







Technical details of light heads

| | 300 / 300+ | 500 | 560 |
|---|---|---|---|
| Illumination level 100.000 lx / up to160.000 lx | | 120.000 lx | 160.000 lx |
| Colour temperature | 4.500 K | 4.500 K | 4.500 K |
| Colour rendering index | 95 Ra | 95 Ra | 95 Ra |
| Power supply | 230 V | 100 - 240 V | 100 - 240 V |
| Operating voltage | 24 V DC | 24 V DC | 24 V DC |
| Focus | adjustable (on control panel) | adjustable (on control panel) | adjustable (on control panel) |
| Dimming | 10 - 100% | 10 - 100% | 10 - 100% |
| Number of LEDs | 42 | 70 | 70 |
| Weight | 4,0 kg | 9,5 kg | 9,5 kg |
| Rated input 24 VA | | 60 VA | 60 VA |
| Service life of LEDs 50.000 hrs | | 50.000 hrs | 50.000 h |
| | Control panel with LCD-dis- play 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 |