

STERNMED[®]



Lumax 3 & 5
Surgical LED lights



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Lumax 3 & 5 are surgical lamps with LED technology. With constant attention to the evolution of technology and clinical needs, Lumax 3 & 5 are born to meet the needs of its user granting optimal performances, reliability and visual comfort. They deliver excellent light quality. The special optics of its LEDs generate shadowless, clear and homogeneous light assuring visual comfort and best working conditions for the surgeon and the medical staff.

The next generation LEDs used in Lumax 3 & 5 enable the lamp to produce a perfect illumination under every condition generating an IR-free light, an excellent colour temperature and a practically endless life cycle at low consumptions.

The Lumax 5 has 43 LEDs which are circularly positioned and divided into 5 reflectors (with 7 LEDs each one) and the other 8 LEDs are radially placed around the handle. The lamp produces a high illumination level of 130.000 lux (160.000 lux optional) for a steady life cycle of about 50.000 hours.

A microprocessor controls the electrical curves of the LEDs to remain unaltered over time and to maintain a long life cycle. The CRI (colour rendering index) of Lumax 5 is 95 and its colour temperature 4,500 K. These two values allow to reproduce the exact chromatic scale of the colours of a human body.



FEATURES OF LUMAX 5

- high quality illumination level for each kind of surgery
- colour temperature of 4.500 °K which represents the contrast of the surgical area perfectly
- clear luminosity at 130.000 lux (160.000 lux optional)
- exceptional duration with low consumptions (75 W)
- colour rendering index of 95 (CRI)
- IR-free light without heat
- ergonomics for an extraordinary simplicity of use and easy positioning for the medical team
- I-SENSE® revolutionary control system for a simple, fast and precise management

OUTSTANDING

FOCUSED and AMBIENT light

In order to achieve a correct illumination according to the different needs Lumax 5 can produce a FOCUSED and AMBIENT light.

The special optics used in Lumax 5 enable the light field focusing system adjusts the light spot diameter accurately assuring an excellent sharpness of details in the operating area.

AMBIENT light is managed by the ENDO function. This technology consents a visual comfort as well as a correct vision of the surrounding environment due to particular light beam coming from the upper part of the lamp. Lumax 5 is particularly suitable for minimal- invasive surgery and is ideal for the preparation and treatment during the operation, monitoring of the patient and microscope operations.

Practical and functional design

Comfortable and light to move, with a central handle, Lumax 5 is also practical for the medical team who can move it from the lateral handles assuring stability and constant illumination even during the movement.

Its ergonomic and practical design takes into consideration sanitary requirements essential for the operating room. For this reason, Lumax 5 has been manufactured with a smooth and resistant material that makes cleaning quick, easy and complete. Its removable and sterilizable central handle can house a video camera on demand recoding the surgical operations accurately (the video camera can be placed on a separate arm alternatively). The lamp shape assures visual comfort and is particularly suitable for laminar flows in the operating room.

LUMAX 3 & 5 CONTROL PANEL

All the functions of Lumax 3 & 5 are managed by the handy, digital and easy-to-read I-SENSE® control panel positioned on the cardanic structure and adjusting:

- ON/OFF function
- Light intensity
- SIZE - Light spot diameter dimension (light beam focusing)
- ENDO - Light for endoscopy
- DOF - Depth of field - for a full visualization of the operating field
- SYNC - Mode (optional) to synchronize controls among the combined lamps: LUMAX 5 double (twin dome configuration) and LUMAX 5 with LUMAX 3 . The SYNC mode grants simplicity of use, saving time and giving the possibility of being managed by a single operator.



LUMAX 3

Lumax 3, assuring cold light, long life and low energy consumption. The lamp is suitable for countless applications both for surgery and operating room. It is ideal for diagnosis, dental sector, gynaecology, dermatology, general medicine and surgery.

LUMAX 3 grants a homogeneous and shadowless light, the special LEDs optics direct the light beams at best according to the needs.

The visual area is perfectly illuminated assuring both excellent visual comfort and working conditions.

Its next generation LEDs produce an unparalleled quality of light with a colour temperature (CCT) of 4.500 °K and a colour rendering index (CRI) of 95.

LUMAX 3 has a light intensity of 130.000 lux (160.000 lux optional) with a low energy consumption of 69 W. The life cycle of its LEDs is about 50.000 hours.

LUMAX 3 is composed by three reflectors that produce a well-blended and intense cone of light focusable through the automatic adjustment of the light spot diameter.



Its slim, practical and compact design makes it perfect for several uses. The lamp is ergonomic, easy to move and to position and suitable for the laminar flows of the operating room.

Its ENDO function (light for endoscopy) gives the possibility to use LUMAX 3 for minimal-invasive surgery too.

The easy-to-clean shape and material of LUMAX 3 as well as its removable, sterilizable and easy-to-grip handle assure an excellent cleanliness.

Functions are adjusted by its innovative easy-to-read, ergonomic and easy-to-clean I-SENSE® control panel.

LUMAX 3 is also available in the following versions:

- Ceiling mounted
- Wall mounted
- Trolley mounted

TECHNICAL SPECIFICATIONS

Lumax 3 & 5 | SternMed Surgical LED light

	LUMAX 3	LUMAX 5
Power Supply	100 - 240 VAC \pm 10%	100-240 VAC \pm 10%
Power consumption	69 W	75 W
Frequency	50/60 Hz	50/60 Hz
Light source	LED	LEDs
Average life	50.000 hrs about	50.000 hrs about
Lighting at the centre, E _c @ 100 cm	130.000 lux (160.000 lux optional)	130.000 lux (160.000 lux optional)
Light adjustment	from 5 % to 100%	from 5% to 100%
Colour temperature, CCT	4.500 K	4.500 K
Variable colour temperature	from 3.700 K to 4.700 K continuous (optional)	from 3.700 K to 4.700 K continuous (optional)
Colour rendering index, Ra	95	95
Index R9	> 90	> 90
Chromaticity coordinates	x = 0.365 , y = 0.370	x = 0.365 , y = 0.370
Light field diameter	24 - 33 cm	24 - 33 cm
Focusable working distance	70 - 150 cm	70 - 150 cm
Lighting depth L1+ L2 (20%)	117 cm	114 cm
Lighting depth L1+ L2 (60%)	71 cm	64 cm
DIMENSIONS, WEIGHT AND FURTHER DATA		
Light head weight	4 kg	12 kg
Light head diameter	50 cm	67 cm
Ceiling pole and arm weight	6,0 - 9,0 kg	6,0 - 9,0 kg
Wall arm weight	5,3 kg	N/A
Trolley weight	23 kg	N/A
Low ceiling height arm (LCH)	Optional	Optional
Handle	Removable and sterilizable	Removable and sterilizable
Product Class (EN 60601 - 2 - 41)	I	I



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