



Heal Force

TopLED

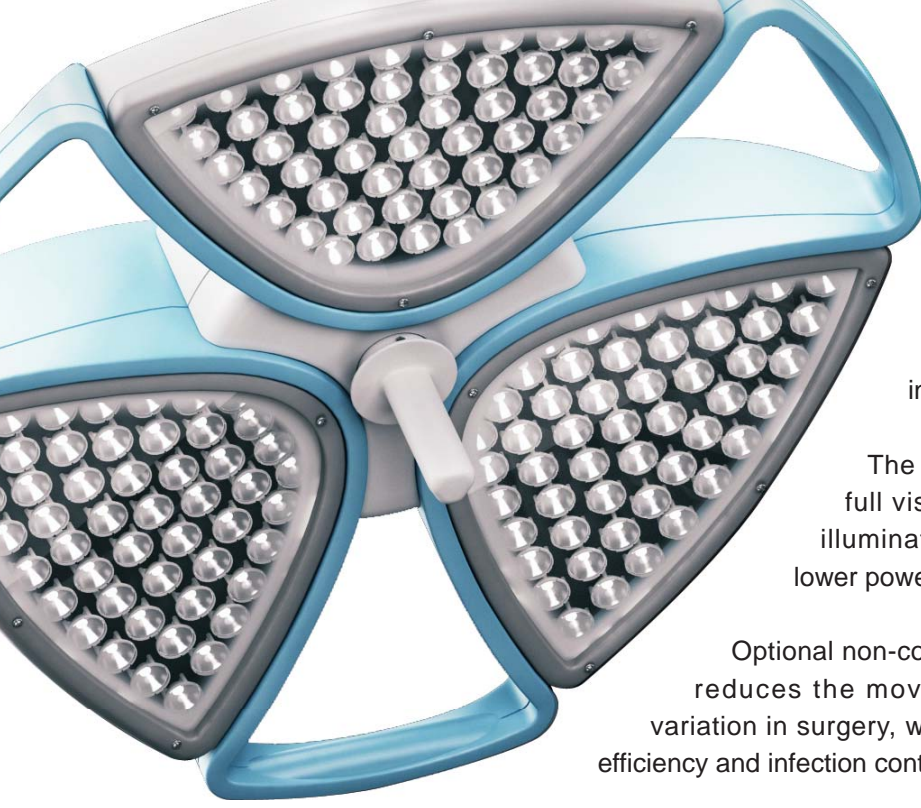
Surgery Shadowless Lamp



CE



*Variable & fixed focus LED lighting
for surgery and diagnosis*



Product overview

The new generation of variable and fixed focus TOPLED surgical lighting series, incorporate innovative shamrock design to minimize the influence to laminar flow in the operating theatre.

The latest LED lighting technology allows full visible spectrum and excellent cooling illumination for long-time surgery with much lower power consumption.

Optional non-contact light intensity adjustment further reduces the movement need of lamp head against variation in surgery, which will greatly promote the surgical efficiency and infection control.

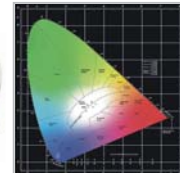
Depending on practical surgery requirement and space limitation, hospitals and clinics can flexibly configure hardware and installation solution, as well as multi-media extension for surgery monitoring, teaching and multidisciplinary purpose.

Feature

50,000 hrs lifespan of LED bulb

Full visible spectrum of cool lighting without drying-out effect to patient' s tissue even during long-time surgery.

Minimal power consumption and environment impact.



Modular design for low maintenance

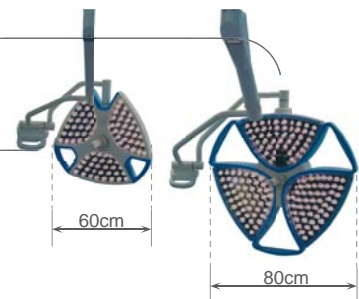
Three LED beams reflected and overlapped to produce a clear, homogenous spot with minimal shadows.



Laminar flow can smoothly pass the hollow to blow the surgical table top
- Modular bulb-group allows for independent replacement overtime.

Different size of head available

Either size or hybrid lamp system is available depending on surgical needs and space limitation.



Variable or fixed focus

Variable focus system: Seamless adjustment of lighting focus, intensity and head positioning with sterile handle.

Fixed focus system: Max 160,000 lux intensity for deep-cavity illumination with homogenous spot with minimal shadows.



Contact or Non-contact control



20 levels of intensity adjustment for both contact and non-contact adjustment

Unique non-contact (IR) control requires no movement or re-positioning of lamp head

IR probes



Ultra-flexible configuration

- Number of lamp head: single-head, dual-head, triple-head
- Mount installation: Ceiling, wall and mobile
- Installation height: 2400~2900mm, 2900~3100mm, >3100mm
- Lamp type: Variable focus, fixed focus or hybrid system



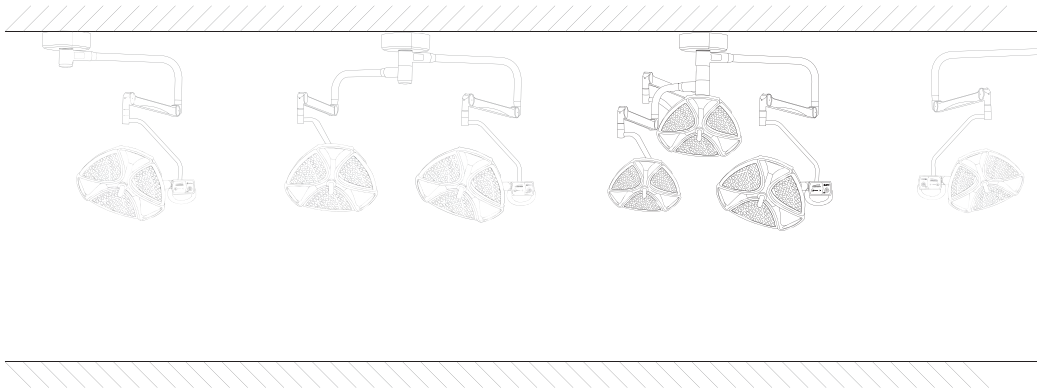
Mobile LED system

Ceiling single

Ceiling Dual

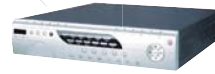
Ceiling Triple

Wall mount



HD multi-media extension

- Camera Mount: Built-in, Arm-mount or Wall-mount
- Video format: PAL, NTSC and other
- Purpose: Surgery monitoring, teaching or multi-disciplinary application



Technical data

TopLED-6000

TopLED-8000

Optical and photometric

	LED	LED
Light source	LED	LED
Focus	Fixed focus	Variable focus
Diameter of lamp head (cm)	60	80
Number of lamp head	1	1
Number of bulbs for each head	90	150
Illumination (lx)	130,000~160,000	130,000~160,000
Illumination field diameter* (mm)	$d_{10}: \geq 160; d_{50}: \geq 50\% \times d_{10}$	$d_{10}: \geq 160; d_{50}: \geq 50\% \times d_{10}$
Light field depth L1+L2 (mm)	≥ 800	≥ 800
Colour rendering index (CRI)(Ra)	95 \pm 5	95 \pm 5
Colour temperature (K)	4300 \pm 300	5100 \pm 300
Radiant energy (mW/m ² .lx)	≤ 2.9	≤ 6

Electrical data

Input voltage (V)	100-120/200-230	100-120/200-230
Power consumption	1 watt/bulb x 90	1 watt/bulb x 150
Frequency (Hz)	50/60	50/60
Rated current(A)	0.68	0.68
LED power (W)	1	1
LED voltage (V)	vf: DC 3.2	vf: DC 3.2
Service life (hrs)	50,000	50,000
Weight (kg)	50	57

* Optional installation height may require special suspension arm or extra accessories.

Brief ordering guide

Order No.	Diameter of head	Number of head	Mount
TopLED-6000	60cm	1	Ceiling
TopLED-6000W	60cm	1	Wall
TopLED-6000L	60cm	1	Mobile
TopLED-6000LE	60cm	1	Mobile (with battery)
TopLED-8000	80cm	1	Ceiling
TopLED-6060	60cm+60cm	2	Ceiling
TopLED-8060	80cm+60cm	2	Ceiling
TopLED-8080	80cm+80cm	2	Ceiling
TopLED-606060	60cm+60cm+60cm	3	Ceiling
TopLED-806060	80cm+60cm+60cm	3	Ceiling



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