

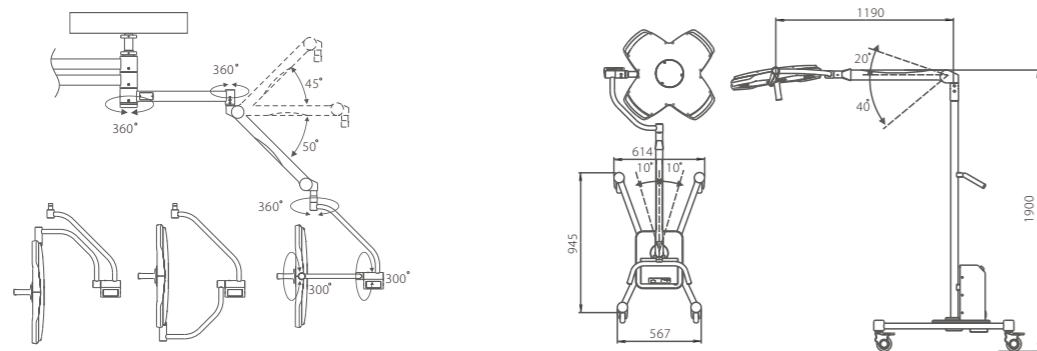
## Technical Specifications\*

	HyLED 9700	HyLED 9500/9500M
Central illuminance (at 1m distance)	160,000 lux	120,000 lux
Light field diameter(at 1m distance)	160-330mm	160-300mm
Depth of illumination (20%)	1,200mm	1,200mm
Color Temperature **	Standard: 4,350K Variable CCT: 3,000-5,000K	Standard: 4,350K Variable CCT: 3,000-5,000K
Color rendering index(Ra)	96	96
Color rendering index(R9)	97	97
Shadow dilution with tube	100%	100%
Shadow dilution with one mask	80% 90% (AICS function, Optional)	65%
Shadow dilution with tube and one mask	75% 85% (AICS function, Optional)	60%
Shadow dilution with two masks	60% 70% (AICS function, Optional)	55%
Shadow dilution with tube and two masks	55% 65% (AICS function, Optional)	50%
Ambient illumination	12,800 lux	9,600 lux
Service life of bulb	≥60,000h	≥60,000h
Max. power consumption of all light sources	118w	90w
Power supply	100VAC-240VAC, 50/60Hz	100VAC-240VAC, 50/60Hz
Number of LED Bulbs	88	60
Dimming Range	8-100%	8-100%
Light Head Dimension	740mm	620mm
Integrated Camera	Optional	Optional/No

\* All values measured according to IEC 60601-2-41.

\* Due to manufacturing and measuring tolerances, all data relating to lighting systems has a tolerance of +/- 10%.

\*\* Five ranks for variable color temperature 3,000/3,500/4,000/4,350/5,000K.



reddot design award  
winner 2011

## HyLED 9 Series LED Surgical Lights



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healthcare within reach



# HyLED 9 Series

All-Round Partner of Surgeons

## AICS- Automatic Illumination Control System

When medical teams stand below surgical lights, there is inevitable light obstruction. With the intelligent AICS, the loss of such illumination is immediately compensated. The intelligent system ensures automatic adaption of light emission dependant on the users head positioning, by maintaining obstructed light emission and enhancing remaining zones.



## SGS Proved Hygiene

The use of antimicrobial coating on the surgical light, have obvious inhibitory effect towards escherichia coli and staphylococcus aureus helping control the infection in the operation room.



## Minimum Maintenance Cost

Each LED unit has a separated circuit and therefore can be replaced individually, ensuring low maintenance cost.

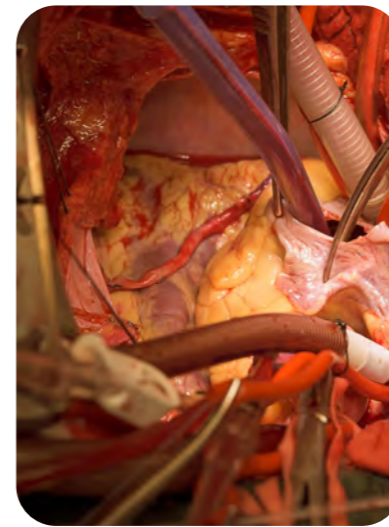




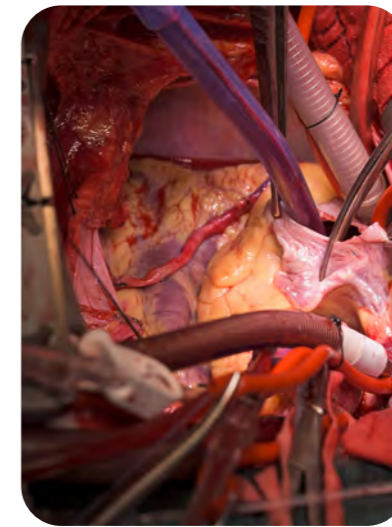
# HyLED 9 Series

All-Round Partner of Surgeons

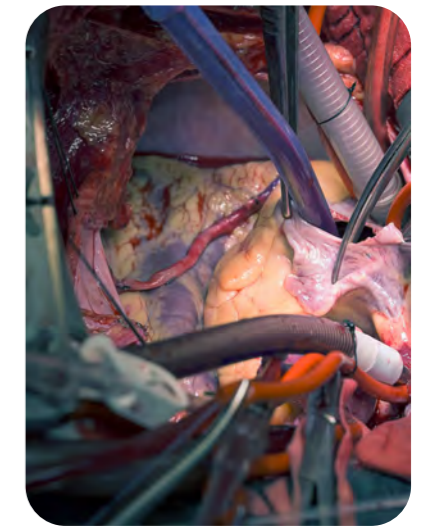
## Variable Color Temperature



3,000k



4,350k

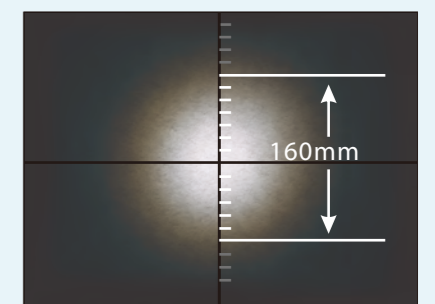
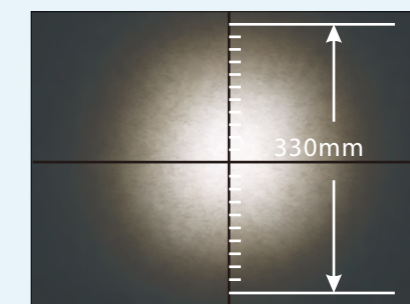


5,000k

The HyLED 9 light provides a light column with either a fixed daylight-like color temperature - 4,350K, or a color temperature variable from 3,000 - 5,000K. This function is helpful to distinguish the difference between various tissue types and the perception of true tissue colors, which is used especially within cardiac surgery. Mindray offers a special light source system with a uniform mixed light of cool white LEDs and warm white LEDs to realize the color temperature adjustment.

## Unique Electrical Light Field Adjustment

HyLED 9 Series uses the unique electrical control pattern to adjust the light field diameter: active and inactive the LED bulbs. The light field diameter may be adjusted for various size operating fields, without any mechanical parts subject to wear and tear.



# HyLED 9 Series

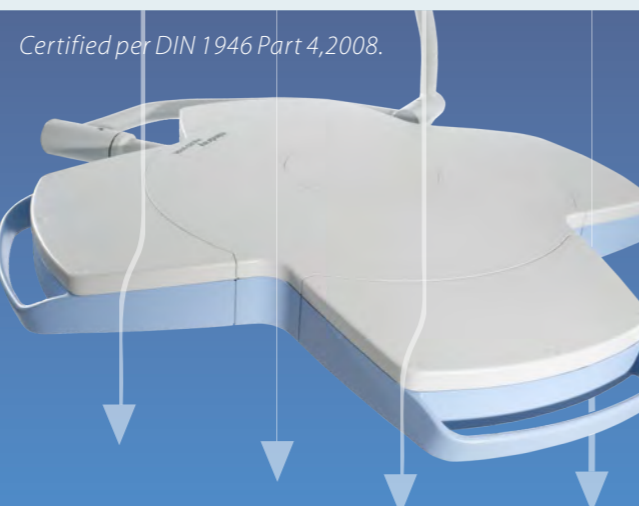
All-Round Partner of Surgeons

## Elegant Design



- Several functions can be adjusted electronically on the touch screen panel (optional)
- Switch on/off
  - Illumination intensity
  - Light field diameter
  - Color temperature (3,000-5,000K, 5 ranks)
  - Ambient mode for endoscopy
  - Camera control

Owing to the "cross" shape light head design, smooth finish and small air flow contact surfaces, HyLED 9 Series generates minimized turbulence, helping to optimize operating conditions and satisfy clinical hygiene requirements.



Perfect compatibility of multiple light heads. Easy positioning with detachable sterilized central control handle and four grip around the light head.



# HyLED 9 Series

All-Round Partner of Surgeons

Various Video Solution



There is a significant difference between the 1080p and 4K for the image details. Meanwhile, the high resolution of 4K can make the structure of the image more clear, making the user have a better visual experience at the same distance.

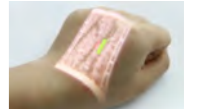


4K technology application in teaching hospital

## Projection Vein Finder



Basic mode



Unique depth detection mode



Green light mode



Inverse color mode



Pediatric size

- Providing puncture guidance for establishment of intravenous access
- Dual band 850nm & 940nm infrared detection, safe and effective
- Processed vein image synchronously and precisely projected back on to the skin

### Digital video recorder

- Supporting external USB storage device
- Supporting HDMI/YPbPr/HD-SDI/DVI-D/VGA input signal
- Default with camera control function
- Supporting video recording from other medical devices source



	HD Camera	Full-HD Camera	4K Camera
Picture Elements	2-Mega pixel	2-Mega pixel	8-Mega pixel
Picture Quality	1080i (1920×1080)	1080p(1920×1080)	UltraHD(3840×2160)
Lens	f=3.8-38mm, F1.8-3.4	f=3.8-38mm, F1.8-3.4	f=3.9-46.8mm, F1.8-2.0
Optical Zoom	10x	10x	12x
Digital Zoom	12x(120x with optical zoom)	12x(120x with optical zoom)	12x(144x with optical zoom)
Video Output	Component, YPbPr	HD-SDI	HDMI
Position	Carrier Arm Camera/ Integrated Camera	Carrier Arm Camera/ Integrated Camera	Carrier Arm Camera

## Other Accessories



Backup Power System



Disposable sterilizing handle adapter



Sterilizable handle



HyLED 9500M mobile LED surgical light



Wall control panel



Touch wall control panel

# Mindray OR Total Solution

The advanced and reliable features of Mindray technology are customized to match your needs and provide total support.

