

# Specifications: L5



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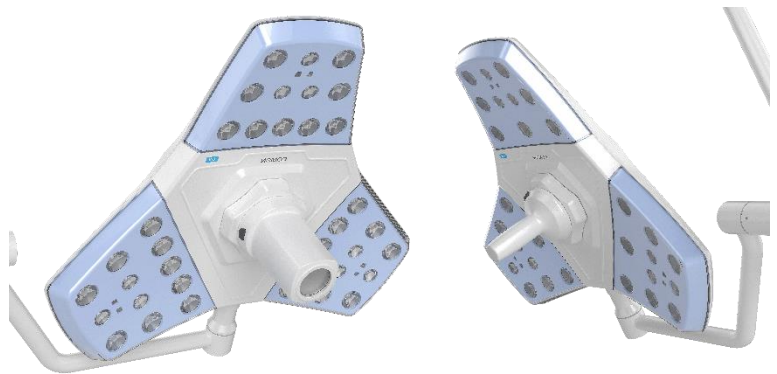
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# Surgical Light

## L5



### Physical Characteristics

#### Lamp panel

Size	660mm*600mm*45mm
Weight	Mother light panel: 13kg (including the elbow assembly) Son light panel: 13kg (including the elbow assembly)

#### Cantilever

Size	1170mm/1045mm/899.5mm/739.5mm
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#### Flange

Size	310mm*256mm/400mm/800mm/(250mm+120mm+120mm)
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#### Elbow assembly

Size	630mm*513mm (when the relative rotation angle is 0°)
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#### Handle

Size	131mm*131mm*175mm
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#### Central control camera

Size	131mm*131mm*179.5mm
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#### Standalone camera

Size	197.8mm×278.6mm×165.8mm
Rotation angle	166°±5°

#### Single display support

Size	695mm×535mm (excluding the handle)
Rotation angle	60°±5°

#### Dual display support

Size	1622mm×685mm (excluding the handle)
Rotation angle	60°±5°

#### Control panel

Dimension	140mm*127mm*40.8mm
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#### Touch screen

Type	4.3" LED-backlit resistive TFT touch screen
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Resolution	480*272
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#### Audio indication

Speaker	Buzzer; turned on when touching the buttons on the touch screen
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#### Spring arm

Onda Space	Bearing capacity: 8~16kg/15~32kg/20~40kg Angle: ±38° PIN of conductive slip ring: 0/3/5/7
AC2000	Bearing capacity: 1.5~3.5kg/3.5~7kg/3~6kg/7~12kg/8~13kg/9~15kg/ 12~18kg/13.5~21kg Angle: up 45°, down 50° PIN of conductive slip ring: 0/3/5/7/9
AC 77	Bearing capacity: 1-2.5kg/2.5-4.5kg/4.5~7.5kg/7.5~9kg/9~11kg/11~13kg Angle: up 45°, down 50° PIN of conductive slip ring: 0/3
AC LCH	Bearing capacity: 95~160Nm, 95~176Nm Angle: up 45°, down 45° PIN of conductive slip ring: 0/3/5/7

### Operation Environment

Temperature	5~40°C
Relative humidity	0%~96%
Atmospheric pressure	70~106kPa

### Power Specifications

Input voltage	100-240 VAC
Input frequency	50/60Hz
Input current	Surgical light: Max. 3.0A Standalone camera: 0.2~0.1A Central control camera: 0.6A
Maximum load of MULTIPLE SOCKET-OUTLET	2500W

Protective tube  $\phi 5 \times 20 \text{mm}$  50T-100H/10A 250V

## Illumination

(All the test distance is one meter from the lamp panel.)

Led number	Mother light: 36 leds Son light: 30 leds
Central illumination (Ec)	<b>Mother light:</b> Normal mode: 40,000~120,000lx (10 levels adjustable) Bright mode: 120,000~160,000lx (10 levels adjustable) Endoscopy mode: 0~8500lx <b>Son light:</b> Normal mode: 40,000~100,000lx (10 levels adjustable) Bright mode: 100,000~130,000lx (10 levels adjustable) Endoscopy mode: 0~8500lx
Intelligent mode	When moving up and down by $\pm 250 \text{mm}$ , the central illuminance remains at 50000 lux $\pm 18000$ lux
Light field diameter (d10)	180~300mm (10 levels adjustable) Accuracy: $\pm 23\%$
Spot distribution (d50/d10)	$\geq 50\%$
Color temperature (Tc)	4350 $\pm 15\%$
Beam depth	1250 $\pm 50 \text{mm}$ (20%)
Color rendering index (Ra)	98 $\pm 8\%$
Irradiance	<b>Mother light:</b> Ee: $\leq 470 \text{W/m}^2$ (normal mode), $\leq 530 \text{W/m}^2$ (bright mode) Ee:Ec: $\leq 3.55 \text{mW}/(\text{m}^2 \cdot \text{lx})$ <b>Son light:</b> Ee: $\leq 440 \text{W/m}^2$ (normal mode), $\leq 450 \text{W/m}^2$ (bright mode) Ee:Ec: $\leq 3.55 \text{mW}/(\text{m}^2 \cdot \text{lx})$
Shadow dilution (without shadow management function)	<b>Mother light:</b> Single cover plate: 80% $\pm 18\%$ Double cover plates: 55% $\pm 18\%$ Deep cavity and single cover plate: 75% $\pm 18\%$ Deep cavity and double cover plate: 50% $\pm 18\%$ Deep cavity: 100% $\pm 18\%$ <b>Son light:</b> Single cover plate: 95% $\pm 18\%$ Double cover plates: 55% $\pm 18\%$ Deep cavity and single cover plate: 90% $\pm 18\%$ Deep cavity and double cover plate:

Shadow dilution (with shadow management function)

Handle attachment and detachment

Vertical movement force

Acting force of light panel rotating shaft

Illuminance control

UV-irradiance

## Camera

Pixels

Lens

Zoom

Recommended illuminance

SNR

Shutter speed

Output image signal

50%  $\pm 18\%$

Deep cavity: 100%  $\pm 18\%$

## Mother light:

Single cover plate: 100%  $\pm 18\%$

Double cover plates: 65%  $\pm 18\%$

Deep cavity and single cover plate: 95%  $\pm 18\%$

Deep cavity and double cover plate: 60%  $\pm 18\%$

Deep cavity: 100%  $\pm 18\%$

## Son light:

Single cover plate: 100%  $\pm 18\%$

Double cover plates: 65%  $\pm 18\%$

Deep cavity and single cover plate: 95%  $\pm 18\%$

Deep cavity and double cover plate: 60%  $\pm 18\%$

Deep cavity: 100%  $\pm 18\%$

## Force:

Maximum:  $\leq 10 \text{N}$

Unintended detachment:  $\leq 100 \text{N}$

## Torque:

Maximum:  $\leq 1 \text{N} \cdot \text{M}$

unintended detachment:  $\leq 5 \text{N} \cdot \text{M}$  or require three or more 360° rotations

$\leq 55 \text{N}$

$\leq 25 \text{N}$

Turn the handle clockwise to increase the illuminance

Turn the handle counterclockwise to decrease the illuminance

$\leq 5.5 \text{W}/\text{M}^2$  (wavelengths below 400nm)

2.13MP

F=4.3~129mm

f=1.6~4.7

Equipped with a bright lens having 30x optical zoom and F1.6 iris

$\times 120$  (30x optical zoom  $\times 12$ x digital zoom)

100~100000lux

>50

1/1s~1/10,000s, 22 steps

1080p/59.94, 1080p/50, 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50/720p/59.94, 720p/50, 720p/29.97, 720p/25

Power source            6.0~12.0V DC  
 Image sensor            1/2.8" Exmor R CMOS

**Rotation angle and driving force**

**Spring arm moving up and down**

Rotation angle            Upper: 45°±5°  
                                  Lower: 50°±5°  
 Driving force            <45N

**Upper elbow rotates around spring arm (with limit, in X-axis direction)**

Rotation angle            <360°  
 Driving force            <25N

**Upper elbow rotates around spring arm (without limit, in X-axis direction)**

Rotation angle            >360°  
 Driving force            <25N

**Lower elbow rotates around upper elbow (in Y-axis direction)**

Rotation angle            <360°  
 Driving force            <25N

**Light panel rotates around lower elbow (in Z-axis direction)**

Rotation angle            180° (±5°)  
 Driving force            <25N

**\*Notice: Specifications subject to changes without prior notice. All rights reserved by Comen**