



Medical LED Illumination  
Surgical LED Light

**Luvis**





L200



M300/M310

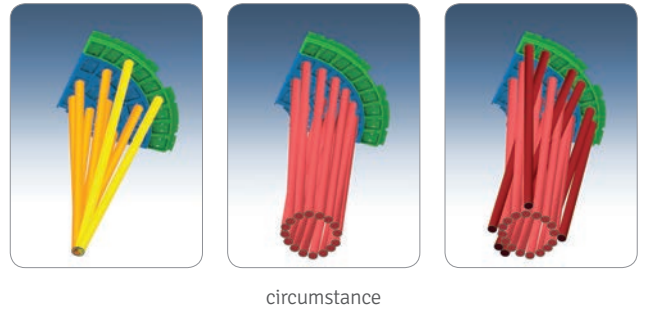


M200/M210

# Stable Illumination

Luvis L200 delivers stable illumination even for a long time use. Only 2% intensity drop after 12 hours continuous use. With Patented CIS (Channel Illumination System), the intensity is maintained despite of Focus size.

- **CIS** (Channel Illumination System)
  - ▶ Channel illumination technology helps to prevent large falling of intensity as enlarging the pattern size.
  - ▶ Only 5% of difference will come as the pattern size enlarged while many others show 50% of intensity falling.
  - ▶ Channel illumination technology will help the surgeon to have stable well-lit



# Effective Illumination

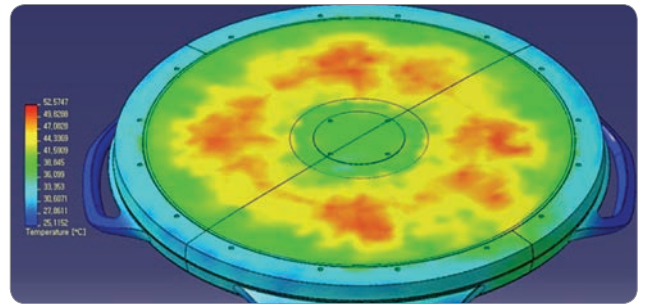
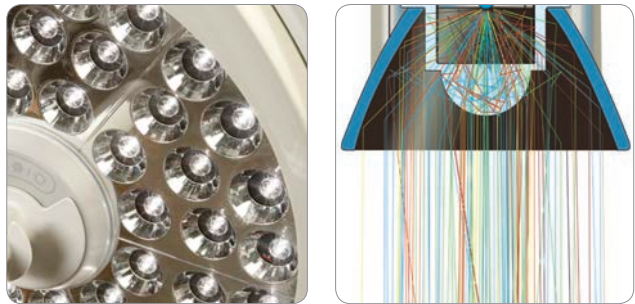
By Adopting Hybrid LED Reflector, the efficiency of the illumination is maximized. With high efficiency, Luvis LED light minimize the heat emission.

- **Hybrid LED System**

Hybrid optical system delivers energy saving performance which directly link to lower heat emission. Hybrid optical system enables more various function such as color temperature change and focal size change even with less consumption of energy and heat. 30% higher efficiency comparing to normal reflector and less weighted solution comparing to lens system

- **Cool Light**

LED technology lets Luvis keep cool. Operating theatre light should detain the irradiation of light as the heat dry up the affected part. Standard recommends not to exceed 1000W/m2 but all of LUVIS surgery lights irradiate far less than the standard requests. Minimum heat emission will protect patients' wounds during the surgery.

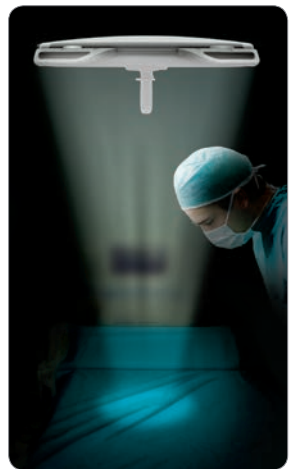


# Excellent Optical Performance

- **Dilution Effect**

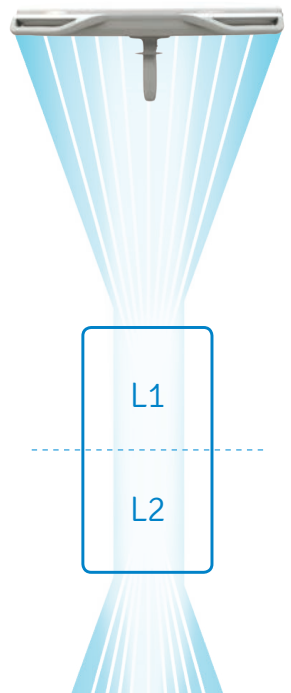
All Medical lights have tested the dilution test to ensure the proper dilution performance which is highly crucial for performance of medical surgery. Luvis have excellent dilution effect comparing to any other existing medical illuminations.

- ▶ Luvis L200 : 75~100%
- ▶ Luvis M300/M310 : 55~100%
- ▶ Luvis M200/M210 : 50~100%



- **Depth of Illumination**

The distance between the point of maximum intensity of illumination at the center of the illuminated field (1 meter from the surface emission of light) and the detection of the value of 20% of the maximum intensity of illumination, measuring in the direction of the emission surface (L1) that in the opposite direction (L2). These values, added together (L1 + L2), gives the depth of illumination without the need to refocus. A higher level of illumination depth is very important especially in cases of narrow and deep wound channels



- L200
    - ▶ Ec x 60% : 85cm
    - ▶ Ec x 20% : 150cm
  - M300/M310
    - ▶ Ec x 60% : 85cm
    - ▶ Ec x 20% : 150cm
  - M200/M210
    - ▶ Ec x 60% : 65cm
    - ▶ Ec x 20% : 125cm

Model No.		L200	M300/M310	M200/M210
Dilution Effect	With Tube(%)	100	100	100
	1 mask(%)	75	55	50
	2 mask(%)	60	52	48

# L200 / L200 Ceiling Type

160,000 Lux + 160,000Lux

## Synchronized Intuitive Control Panel

touch sensor control



**Illumination Intensity**  
160,000Lux (Max.)



**Focus Size**  
6 steps adjustment  
(Max. 30cm / Min. 20cm)



**Color Temperature**  
3,800K / 4,300K / 4,800K



**ENDO-MODE**  
Suitable for endo-surgery by one click, EC\*5%



## HD Camera (Option)

Installation Guide Video



Model	Code No.
L/L200	L2-MAS1000

## Other Configuration



HD Camera

Camera Block	FCB-EV7100
Image Sensor	1 / 2.8 -Type CMOS
Lens	10x optical zoom f = 3.8 mm (wide) to 38 mm (tele) F1.8 to F3.4
Picture Quality	Full HD 1080p (1920 *1080)
Digital Zoom	12x (120x with optical zoom)
Output	HD SDI
Resolution	2.34Mega Pixel



### 320° Rotating Arm

With HD Camera 320°  
Rotating Arm

### Hybrid LED System

Lower heat emission & Less  
consumption of energy



### Center Grip

Quick controller & Autoclav-  
able handle



### Smart Sensor

Detect the obstacle &  
Increase the intensity auto-  
matically



Wall Mount Box

Classification	Description
Box Size	WxLxD=30x40x15cm
Control Box Material	Stainless
Number of controlled unit	1 or 2
Switch Type	Touch

Classification	Description
Range of wireless Com.	<10m
Protocol of Wireless Com.	IEEE802.15.4 (ISM 2.4GHz)
Input Voltage	220VAC, 50/60Hz
Out put Voltage	28VDC x 2

# L200 / M200 Ceiling Type

160,000 Lux + 120,000Lux

## Synchronized Intuitive Control Panel

touch sensor control



**Illumination Intensity**  
160,000Lux (Max.)



**Focus Size**  
6 steps adjustment  
(Max. 30cm / Min. 20cm)



**Color Temperature**  
3,800K / 4,300K / 4,800K



**ENDO-MODE**  
Suitable for endo-surgery by  
one click, EC\*5%

## Center Grip

Quick controller & Autoclavable handle

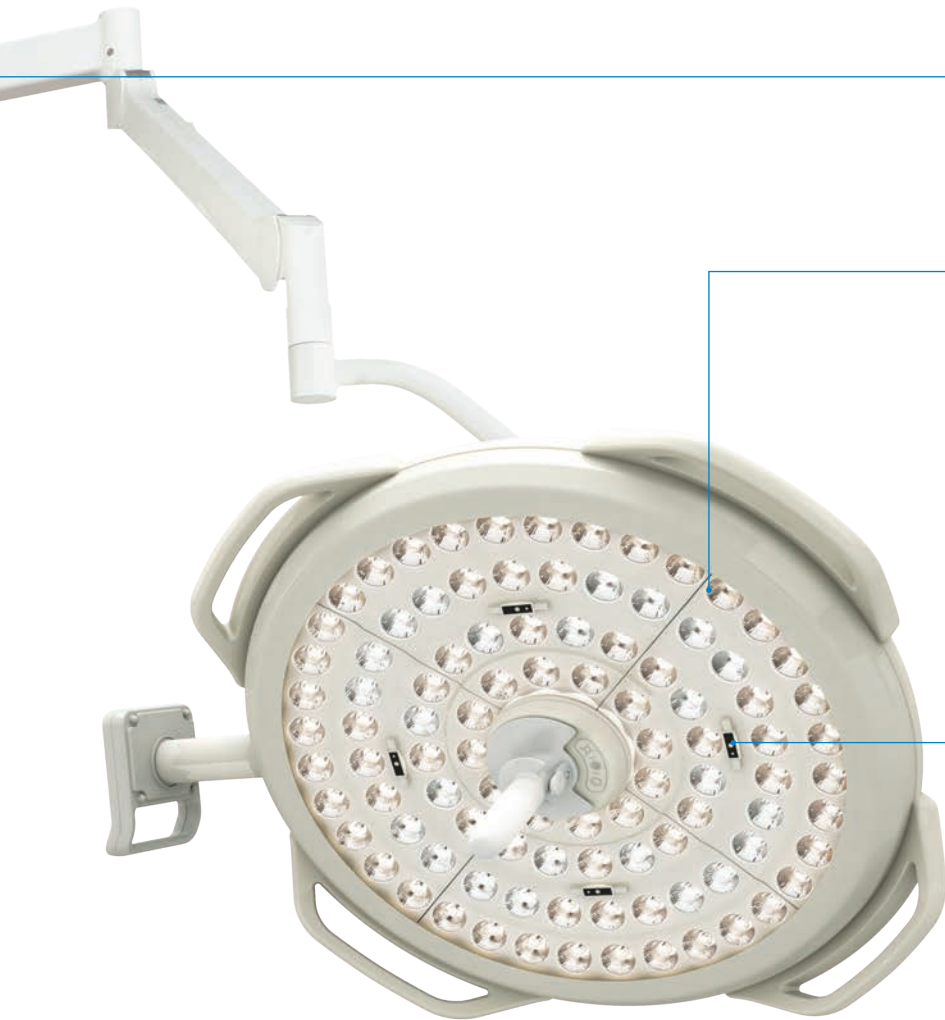


M200/M210

Installation Guide Video



Model	Code No.
L/M200	L2M2-DAD7000
L/M210	L2M2-DAD7100



**360° Rotating Arm**

**Hybrid LED System**

Lower heat emission & Less consumption of energy



**Smart Sensor**

Detect the obstacle & Increase the intensity automatically



L200



# M300 / M200 Ceiling Type

160,000 Lux + 120,000Lux

## Synchronized Intuitive Control Panel

touch sensor control



**Illumination Intensity**  
160,000Lux (Max.)



**Focus Size**  
6 steps adjustment  
(Max. 30cm / Min. 20cm)



**Color Temperature**  
3,800K / 4,300K / 4,800K



**ENDO-MODE**  
Suitable for endo-surgery by one click, EC\*5%

## Center Grip

Quick controller & Autoclavable handle



M200/M210

Installation Guide Video



Model	Code No.
M300/M200	M3M2-SAD7000
M310/M210	M3M2-MAD7000

## Other Configuration



Model	Code No.
M/M300	M3M3-SAD1000
M/M310	M3M3-MAD1000





M300/M310

**360° Rotating Arm**

**Smart Sensor**

Detect the obstacle & Increase the intensity automatically



**Hybrid LED System**

Lower heat emission & Less consumption of energy



Model	Code No.
M300	M3-SAS1000
M310	M3-MAS1000



Model	Code No.
M200	M2-SAS2000
M210	M2-MAS2000



Model	Code No.
M/M200	M2M2-SAD2000
M/M210	M2M2-MAD2000

# S200 Ceiling Type

100,000 Lux + 100,000Lux

## Intensity Control in 5 Steps



**Illumination Intensity**  
100,000Lux (Max.)



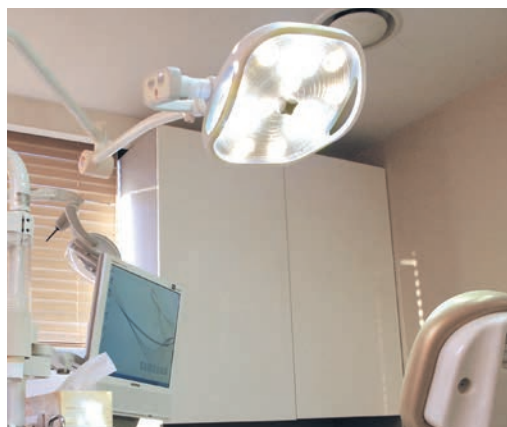
**Color Temperature**  
3,800K / 4,300K / 4,800K



Installation Guide Video



Model	Code No.
S200 DUAL CEILING	PL2S50- 002E0(S200)





### Adjustable Focus

Select focal size easily from 18cm to 30cm

### Detachable Handgrip

Easy and stable handling autoclavable material



## Other Configuration



Model	Code No.
S200 CEILING	PL2S40-002D0(S200)



Model	Code No.
S200 WALL	PL2S30-002C0(S200)

# L200 Mobile Type

160,000 Lux



## Smart Sensor

Smart sensor will detect the obstacle and increase the Intensity automatically. So Luvis can deliver more stable illumination



Main Control Panel



Quick Controller on central grip



Detachable and autoclavable hand grip

## L200

- Max 160,000LUX INTENSITY
- 3 Steps of color Temperature selectable (3,800K/4,300K/4,800K)
- Excellent Depth of Volume of Light (L1+L2 150cm)
- 95Ra of Highest Level of CRI
- R9 90 of red color rendering ability
- Selectable Focal Size (Dia.20cm ~ Dia.30cm)
- Excellent Dilution Effect with 96 LED units (56%~98%)
- 4 Smart Sensors for maintaining intensity
- Dentis Patent Channel Illuminating Technology
- Intuitive control with one touch panel
- No UV emission & Lowest level of heat emission
- Detachable & Autoclavable Hand Grip
- Ergonomic & friendly design
- HD Camera Option (Internal & External)

Model		Code No.
L200	With Battery	L2-MBM5001(L200)
L200	Without Battery	L2-MBM5000(L200)

# M300 / M310 Mobile Type

160,000 Lux



## Smart Sensor

Smart sensor will detect the obstacle and increase the Intensity automatically. So Luvis can deliver more stable illumination



Main Control Panel



Quick Controller on central grip



Detachable and autoclavable hand grip

## M300 / M310

- Max 160,000LUX INTENSITY
- Color Temperature (M300 : 4,300K / M310 : 3,800K/4,300K/4,800K)
- Excellent Depth of Volume of Light (L1+L2 150cm)
- 95Ra of Highest Level of CRI
- R9 90 of red color rendering ability
- Selectable Focal Size (Dia.20cm ~ Dia.30cm)
- Excellent Dilution Effect with 96 LED units (48%~100%)
- 4 Smart Sensors for maintaining intensity
- Dentis Patent Channel Illuminating Technology
- Intuitive control with one touch panel
- No UV emission & Lowest level of heat emission
- Detachable & Autoclavable Hand Grip
- Ergonomic & friendly design
- HD Camera Option (Internal & External)

Model		Code No.
M300	With Battery	M3-SBM5001(M300)
	Without Battery	M3-SBM5000(M300)
M310	With Battery	M2-MBM5001(M210)
	Without Battery	M2-MBM5000(M210)

# M200 / M210 Mobile Type

120,000Lux



Main Control Panel



Quick Controller on central grip



Detachable and autoclavable hand grip

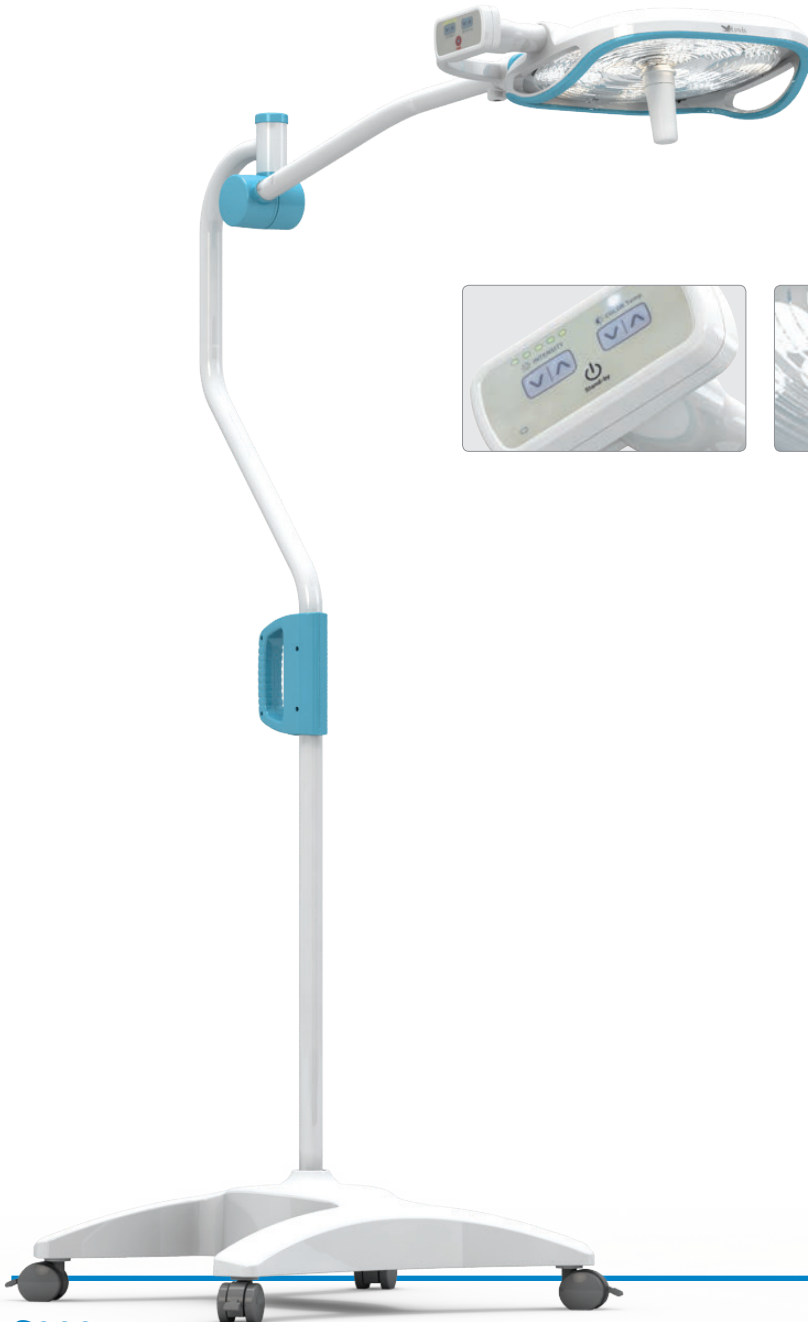
## M200 / M210

Max 120,000LUX INTENSITY  
 Color Temperature (M200 : 4,300K / M210 : 3,800K/4,300K/4,800K)  
 Excellent Depth of Volume of Light (L1+L2 125cm)  
 95Ra of Highest Level of CRI  
 R9 90 of red color rendering ability  
 Adjustable Focus Size (Dia.20cm ~ Dia.30cm)  
 Excellent Dilution Effect with 54 LED units (48%~100%)  
 No UV emission & Lowest level of heat emission  
 Intuitive control with one touch panel  
 Detachable & Autoclavable Hand Grip  
 Ergonomic & friendly design  
 HD Camera Option (Internal & External)

	Model	Code No.
M200	With Battery	M2-SBM5001(M200)
	Without Battery	M2-SBM5000(M200)
M210	With Battery	M2-MBM5001(M210)
	Without Battery	M2-MBM5000(M210)

# S200 Mobile Type

100,000 Lux



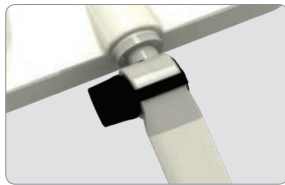
## S200

- Max 100,000LUX INTENSITY
- Intensity Control in 5 steps
- 3 Steps of color Temperature selectable (3,800K/4,300K/4,800K)
- 95 Ra of Highest Level of CRI
- R9 90 of red color rendering ability
- Adjustable Focus (Min 18cm, Max 30cm)
- Excellent Dilution Effect with 18 LED Units
- No UV emission & Lower Level of heat emission
- Detachable & Autoclavable Hand Grip

Model		Code No.
S200	Without Battery	PL2S10-002A0(S200)

# E100 Mobile Type

60,000 Lux



## E100

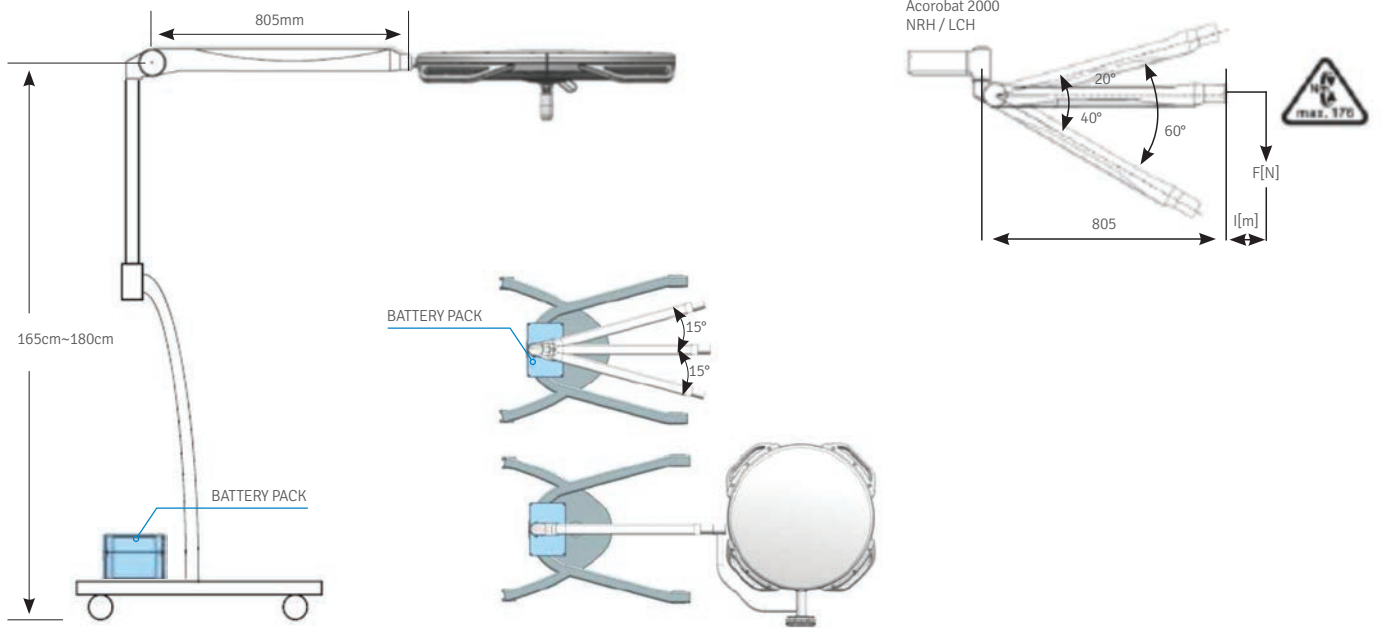
High Level of illumination intensity: 60,000Lux at 0.5 m  
17cm focal size  
3 steps of intensity control  
Accurate color rendering  $R_a > 95$   
3 Steps of color Temperature selectable (3,500K/4,000K/4,500K)  
Easy to use, simple control unit on the head  
Low maintenance cost  
Lowest heat emission and no UV from the light

	Model	Code No.
E100	Without Battery	E1-M(E100)
	With Battery	E1-MB(E100)

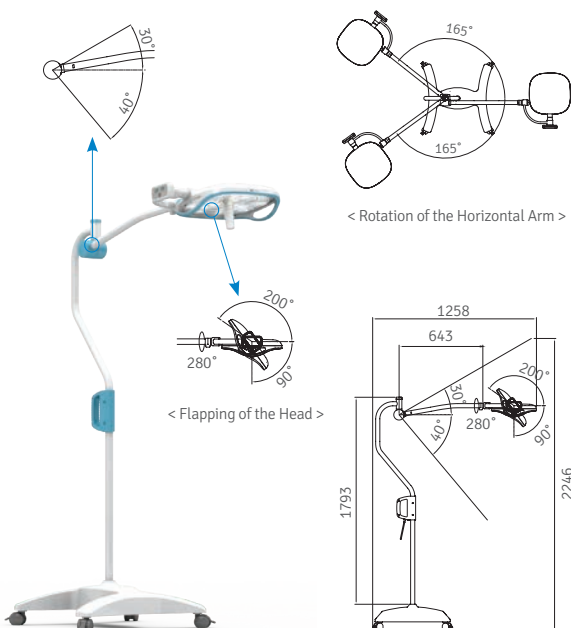


# Movement & Installation

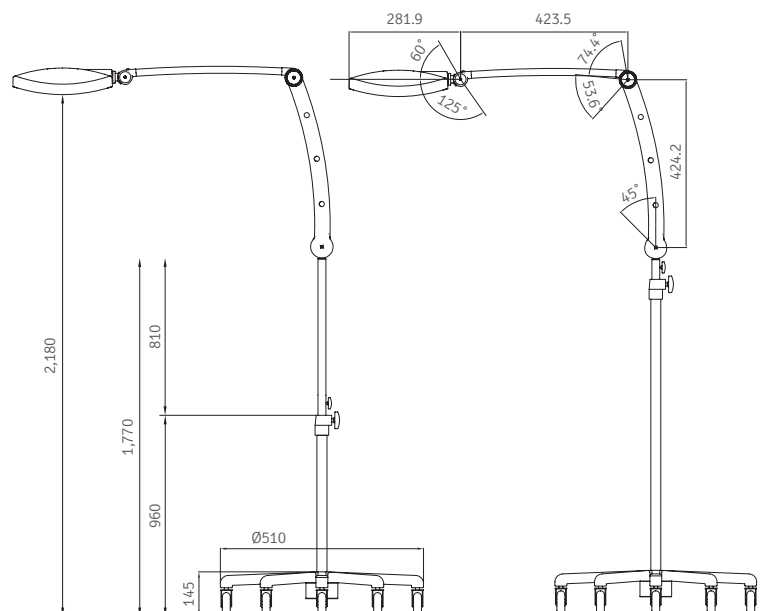
## ► Luvis M/L Dimension (Unit : mm)








## ► Luvis S200 Dimension (Unit : mm)

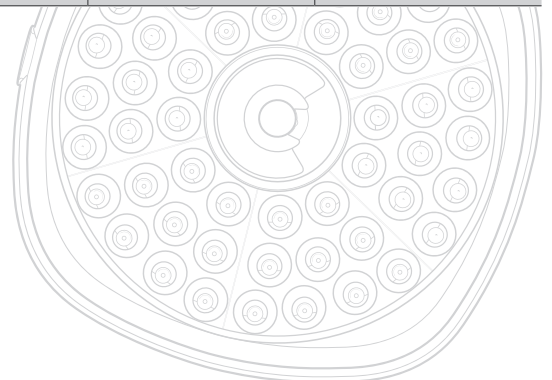
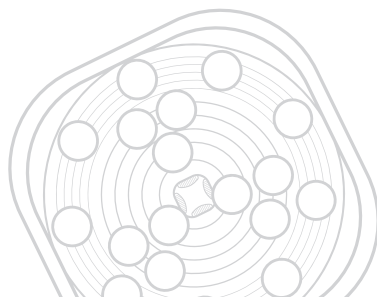
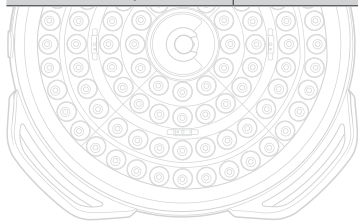




## ► Luvis E100 Dimension (Unit : mm)



# Technical Specification

Class.	L200	M310	M300	M210	M200
Design (Light Head)					
Installation	Ceiling / Dual Ceiling/Mobile	Ceiling / Dual Ceiling/Mobile	Ceiling / Dual Ceiling/Mobile	Ceiling / Dual Ceiling/Mobile	Ceiling / Dual Ceiling/Mobile
Head size(cm)	67cm	60cm	60cm	50cm	50cm
No. of LED(ea)	96	84	84	54	54
Intensity(LUX)	Max 160,000LUX at 1 M	Max 160,000LUX at 1 M	Max 160,000LUX at 1 M	Max 120,000LUX at 1 M	Max 120,000LUX at 1 M
Intensity Control	6steps (40,000LUX ~ 160,000LUX)	6steps (40,000LUX ~ 160,000LUX)	6steps (40,000LUX ~ 160,000LUX)	6steps (40,000LUX ~ 120,000LUX)	6steps (40,000LUX ~ 120,000LUX)
C.R.I.(Ra)	96	95	96	95	96
Color Temp.(K)	3,800/4,300/4,800	3,800/4,300/4,800	4,300	3,800/4,300/4,800	4300
Light field size(ø)	20cm~30cm at 1M	20cm~30cm at 1M	20cm~30cm at 1M	20cm~30cm at 1M	20cm~30cm at 1M
Depth of illumination	150cm(at20%) 85cm(at60%)	150cm(at20%) 90cm(at 60%)	150cm(at20%) 90cm(at 60%)	125cm(at20%) 65cm(at 60%)	125cm(at20%) 65cm(at 60%)
Smart sensor(*1)	4ea	4ea	4ea	No	No
Detachable Centre grip	Yes(2X)	Yes(2X)	Yes(2X)	Yes(2X)	Yes(2X)
LED Life	50,000Hrs	50,000Hrs	50,000Hrs	50,000Hrs	50,000Hrs
(option) built-in Camera	Adoptable	Adoptable	Adoptable	Adoptable	Adoptable
(option) Wall controller	Adoptable	Adoptable	Adoptable	Adoptable	Adoptable
(option) Backup battery	Adoptable	Adoptable	Adoptable	Adoptable	Adoptable
Certificate	CE/FDA/CSA	CE/FDA	CE/FDA	CE/FDA/CSA	CE/FDA/CSA
Power Consumption	63W	111W	99W	53W	46W



Class.	S200	E100
Design (Light Head)		
Intensity	Max. 100,000 Lux @1M	Max. 60,000 Lux @ 0.5M
CRI	90	95
Color Temperature	3,800K / 4,300K / 4,800K	3,500K / 4,000K / 4,500K
Focus Size	18cm (circle) / 30cm (circle)	17cm (circle)
Focal Distance	1M	0.5M
Head Size	35cm x 34cm	25cm x 24.6cm
Power Consumption	25W	17W
Input Power	90~264Vac, 50/60Hz	90~264Vac, 50/60Hz
LED Life Span	50,000hr	50,000hr



[www.luvis.co.kr/eng/](http://www.luvis.co.kr/eng/)



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Company Introduction



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