

SURGICAL TELESCOPE, PORTABLE LED HEADLIGHT SYSTEM, & WIRELESS CAMERA SYSTEM



LOOKS[®] telescopes bring the clarity of Daylight into the surgical site.





Looks[®] SURGICAL TELESCOPES

FEATURES

- Larger field of view & superior depth of focus
- Lighter & Smaller Telescopes
- Clear & Bright vision over the full field
- No Distortion image
- No Fatigue on eye
- Frames
 - Frames of hypoallergenic pure Titanium one
 - Ergonomic & Stylish titanium frame with plastic temples
 - Super light weight & comfortable aircraft aluminum frame
- PA Frame (Pure Aluminum)



Navy

Brown

Grey(Graphite)

- HT Frame Options

Front part



Rear part



Front / Rear



SPECIFICATIONS

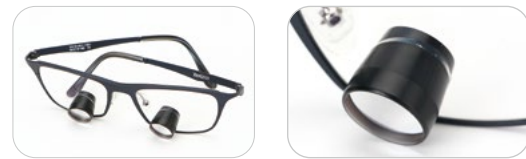
Model	Mag.	F.O.V. @40cm	Weight*	
Looks2500	2.5x	160 mm @ 40 cm	PA	27.0g
			HT	41.0g
Looks2500L	2.5x	150 mm @ 40 cm	PA	21.5g
			HT	35.5g
Looks2800	2.8x	130 mm @ 40 cm	PA	26.0g
			HT	40.0g
Looks3200	3.2x	86 mm @ 40 cm	PA	45.0g
			HT	56.6g
Looks3500	3.5x	98 mm @ 40 cm	PA	62.0g
			HT	75.5g
Looks5000	5.0x	62 mm @ 40 cm	PA	79.0g
			HT	83.0g
Flip-up	Magnification : 2.5x Working Distance : 30cm, 36cm, 42cm, 48cm			

* Weight based on TTL loupe with plano lens

>>> Looks 2500



>>> Looks2500L



>>> Looks2800



>>> Looks3200



>>> Looks3500



>>> Looks5000



»» Flip-up 2.5x

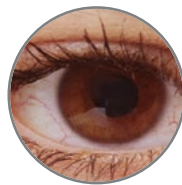


Why do we wear the Surgical Telescope?

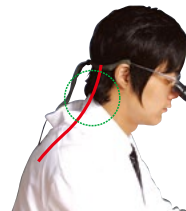
1. Magnified Image → Resolution limit that be accorded sensor density of human-eye
2. Correction of Defects → Myopia, Hypermetropia, Astigmatism, Presbyopia, Strabismus
3. Improved posture → Maintain a straight & better posture to prevent backache or stiff shoulders.
4. Protection from Infection → Eye-wear like protective goggle



Magnified Image



Correction of Defects



Remedy of Posture

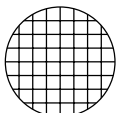
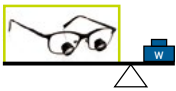

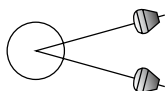
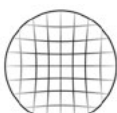

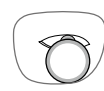
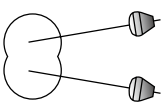


Prevention of Infection

What kind of Surgical Telescope shall be recommended?

A good surgical telescope should have small size, optimization of optical performance, and co-axial alignment & convergence of its two sight lines into one point. It is important to select products properly manufactured through accurate evaluation technology. Three conditions of selection are as follows ;

1. Optical: Magnification, FOV (Field of View), Depth of Focus, Resolution, Unaffected Color, Aligned Axis.
2. Mechanical: Rigidity, Durability, Hypoallergenic materials, Appearance.

	Optical performance	Weight	Size	Convergence
Good	No distortion / Clear 	Light 	Small 	Aligned axis 
Bad	Distortion / Blur 	Heavy 	Large 	Misaligned axis 

L²S15 STUNNINGLY BRIGHT LED LIGHT SYSTEM - L²S15



Electrical Specifications

Operating Power	• DC3.7V \approx 800mA
Operating Time	• About 23 hrs. (1 st step mode: Minimum intensity) • About 11 hrs. (2 nd step mode) • About 8 hrs. (3 rd step mode) • About 5 hrs. (4 th step mode: Maximum intensity)
Charging Time (Full charge)	• 5 hours
Power of Charger	• Input: DC5V \approx 2A • Output: DC4.2V \approx 1.5A
Medical Power Supply	• Input: AC100~240V, 50~60Hz, 0.3A • Output: DC5V \approx 2A
Light Source	• High Power LED (White Color)

LED Illumination

Brightness (lx) @WD400mm	Type	LLM1582	LLM1574	LLM1566
	1 st step	12,000	13,000	17,000
	2 nd step	22,000	24,000	32,000
	3 rd step	30,000	32,000	44,000
	4 th step	39,000	43,000	59,000
Field of View Size (mm) @WD400mm		∅ 82	∅ 74	∅ 66
Weight (g)		30.0	25.1	29.0
Color Temperature, Wavelength Range	• 6000K, 400 ~ 700nm (Visible Ray)			
Uniformity	• More than 80% @WD400mm			
LED Operating Power	• DC3.0V \approx 0.7A			
LED Lifetime (Guaranteed Time)	• 50,000 hours			

Replacement Components

Battery Pack	• DC3.7V \approx 5200mA Li-ion
Medical Power Supply	• Input: AC100/240V, 50/60Hz, 0.3A • Output: DC5V \approx 2A

FEATURES

- Maximum Brightness 59,000lx. (LLM1566 Model, Battery powered)
- Separate Remote Controller (Safe from wire defective)
- Comes with durable carrying case
- Battery running time maximum 23 hours (at the lowest level)
- Extremely bright LED light even it's battery powered
- Simple & Easy operating
- Improved battery pack from external shock & efficiency
- Quick recognition of battery status by LCD
- Extended battery running time is provided by XPS30W (optional item)



Carrying Case



Additional battery(INCLUDED)



Remote Controller



XD Light Simple & Easy LED Light System - XD Light



FEATURES

- Maximum Brightness 29,000lx. (Only one Model: 82mm)
- Control Unit and Battery integrated
- Focused on Dentist (Reasonable investment)
- Comes with durable carrying case
- Battery running time maximum 22 hours (at the lowest level)
- Simple & Easy operating
- Quick Response
- Easy to charge
- Extended battery running time is provided by XPS30W (optional item)



Carrying Case



Electrical Specifications

Operating Power	• DC3.7V \approx 550mA
Operating Time	• About 22 hours. (1 st step mode: Minimum) • About 11 hours. (2 nd step mode) • About 7.5 hours. (3 rd step mode) • About 5.5 hours. (4 th step mode: Maximum)
Charging Time (Full charge)	• About 4 hours
Medical Power Supply	• Input: AC100~240V, 50~60Hz, 0.3A • Output: DC5V \approx 1A
Light Source	• High Power LED (White Color)
Imbedded Battery	• DC3.7V \approx 3000mA Li-ion

LED Illumination

Brightness (lx) [\pm 2000 lx] @WD400mm	1 st step	9,000	3,000
	2 nd step	16,000	6,000
	3 rd step	23,000	9,000
	4 th step	29,000	11,400
Field of View Size (mm) @WD400mm		\varnothing 82	\varnothing 150
Weight (g)		23.0	18.6
Color Temperature, Wavelength Range	• 6000 K, 400~700nm (Visible Ray)		
Uniformity	• More than 80% @WD400mm		
LED Operating Power	• DC3.0V \approx 500mA		
LED Life Span (Guaranteed Time)	• 50,000 hours		

Package External Figures & Weight

External Figures	• W 240×H 240×T 100(mm)
Total Weight	• 1.3kg

L²S PORTABLE LED LIGHT SYSTEM - L²S14C



Electrical Specifications

Operating Power	DC3.7V \approx 550mA
Operating Time	More than 27 hours (min. brightness), More than 4 hours (max. brightness)
Charging Time (Full charge)	3 hours
Power of Charger	- Input: DC 5V \approx 2A - Output: DC 4.2V \approx 1.5A
Medical Power Supply	- Input: AC 100~240V, 50-60Hz, 0.3A - Output: DC 5V \approx 2A
Light Source	High power LED (WHITE COLOR)

LED Illumination

Color Temperature, Wavelength Range	6000 K, 400~700nm (Visible Ray)
Field of View / Brightness, Uniformity (LLM14XX)	\varnothing 82mm/22,000 lx, 60% @WD400mm \varnothing 74mm/25,000 lx, 60% @WD400mm \varnothing 66mm/32,000 lx, 60% @WD400mm
LED Operating Power	DC3.0V \approx 500mA
LED Life Span (Guaranteed Time)	50,000 hours @70% of Maximum level

Replacement Components

Battery Pack	DC3.7V 2600mAh
Medical Power Supply	- Input: AC100~240V, 60Hz, 0.3A - Output: DC 5V 2,000mA

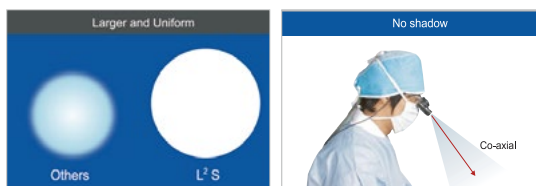
External Figures & Weight

External Figures	W 410×H 320×T 180 (mm)
Total Weight	3.50 kg (0.30 kg - only L2S14C including one battery pack)

FEATURES

- Illumination is similar to sunlight
- Fully integrated headlight
- Lightweight
- Easy to control
- Wireless
- Included extra battery pack
- Long battery life
- “C” means “Comfortable” and “Compact”
- Optional: Anti-curing filter for dentistry

LED Lens Module (3 types)



LooksCAM Wearable Camera System

Operating time : 3 hours 30 minutes
Video Quality : Full HD (1920×1080p, 30 fps)



FEATURES

- Two options for connection (Wifi or Video-out cable)
- No limitation of movement in operating theatre
- Video files are stored in Micro SD Card (Full HD quality)
- Great depth of focus will provide the comfort to the operator
- The recorded video file is from the view point from the operator which will give better understanding to the trainee

Specifications

Rated Input Voltage	• DC7.4V
Rated Operating Power	• 5.6W
Stand-by Operating Power	• 0.002W
Image Sensor	• 1/3 inch 3.0M Pixel CMOS
Recording Resolution	• Full HD 1920×1080p
Recording Frame	• 30fps
WiFi streaming	• Recording Off: 1920×1080/30fps, delay 1sec. • Recording On: 432×240/30fps, delay 1sec.
Video Compression	• H.264
Audio Codec	• AAC (Advanced Audio Coding)
Function Button	• REC / WiFi / LED
Speaker	• 8 ohm / 0.1W
Micro SDHC Card	• 32GB Micro SDHC Card, More than Class 10, MLC Type • File System : FAT32 • Allocated Digit Size : 32KB • Digit of stored file : 50 minutes (about 2.5GB)
Operating Temperature / Storage Temperature	• 0°C ~ 40°C / 0°C ~ 60°C
Consecutive Recording Time (LED Light 3 step, WiFi On Status)	• 3 hours 30 minutes
Input power of DC Power Supply	• 100/240 VAC, 50/60Hz, 0.5A
Output power of DC Power Supply	• DC 12V 1.5A
Charger Input	• DC 12V 1.5A
Charger Output	• DC 8.4V 1.0A

LED Illumination

Brightness and	STEP	lx @WD400mm	Current Consumption(mA)
	1 st	17,000	300
	2 nd	27,000	500
	3 rd	38,000	700
Field of View Size (mm) @WD400mm		∅ 82 (Standard model)	
Weight (g)		35.1	
Color Temperature, Spectrum		• 6000K, 400 ~ 700nm (Visible Ray)	
Uniformity		• More than 80% @WD400mm	
LED Operating Power		• 2W (max.)	
LED Lifetime (Guaranteed Time)		• 50,000 hours	
LED Source		• High Power LED (White Color)	

Replacement Components

Battery Pack	• DC7.4V 3000mAh (Lithium Polymer)
DC Power Supply	• Input: AC100/240 VAC, 50/60Hz, 0.5A • Output: DC12V 1500mA

Dimensions & Weight of Total Package

Dimensions	• W 410×H 320×T 180 (mm)
Total Weight	• 3.92kg

Optional Items

Xenosys Power Source - XPS-30W

FEATURES



- Without changing the battery pack, you can continue your surgery or recording LooksCAM
- Compatible to LooksCAM (DC 12 V cable), L2S15, L2S14C, XD Light (DC 5 V cable)
- Digital sign for battery remaining percentage
- Comes with waist belt to carry XPS-30W and other system unit



Attachment to Xenosys Light System



Rigid Headband



Cloth Headband



Protective Goggle



Xenosys TTL Loupe



Universal Clip



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