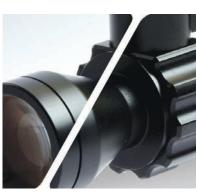
FD∕A C € CFDA IS013485:2016 IS014001:2015

SURGICAL TELESCOPE, portable LED Headlight, wireless LED Headlight, wireless Camera











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
- IP Frames
- Super light weight & comfortable aircraft aluminum front
- Hypoallergenic titanium temple
- Ion Plating Color

• IPAL Frame







Brown

Grey(Graphite)

• IPAX Frame







Grey(Graphite)

Navy Brown







Navy

Brown

Grey(Graphite)

• IPHX Frame







Navy

Brown

Grey(Graphite)

SPECIFICATIONS

Model	Mag.	F.O.V. @40cm	Weight*
Looks2500	2.5x	160 mm @ 40 cm	33.0g
Looks2500L	2.5x	150 mm @ 40 cm	30.0g
Looks2800	2.8x	130 mm @ 40 cm	31.8g
Looks3200	3.2x	86 mm @ 40 cm	49.1g
Looks3500	3.5x	98 mm @ 40 cm	69.1g
Looks5000	5.0x	62 mm @ 40 cm	77.4g
Looks7500	7.5x	41 mm @ 40 cm	83.6g
Flip-up	Magnification: 2.5x Working Distance choice among: 30 cm, 36 cm, 42 cm, 48 cm		

^{*} Weight based on TTL loupe with plano lens with IPAL frame

>>> Looks 2500 >>>> Looks 2500L





>>> Looks 2800





>>> Looks 3200





>>> Looks 3500





>>> Looks 5000



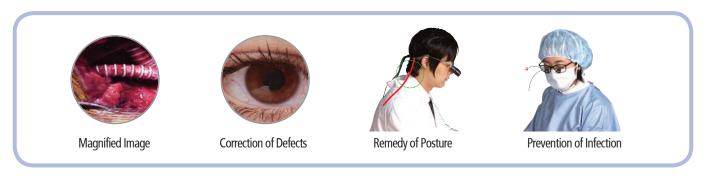


Looks surgical telescopes



Reasons for choosing 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



What features are important in Surgical Telescope?

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. Two conditions of selection are as follows;

- 1. Optical: Magnification, FOV (Field of View), Depth of Focus, Resolution, Unaffected Color, Aligned Axis.
- $\label{eq:continuous} \textbf{2. Mechanical: Rigidity, Durability, Hypoallergenic materials, Appearance.}$

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

L²S15 BRIGHTEST PORTABLE LED LIGHT SYSTEM - L²S15





Electrical Specifications

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

LED Illumination

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

Replacement Components

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

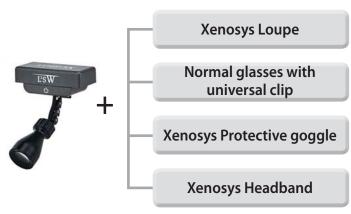






L²SW WIRELESS LED Headlight System - L²SW





Attachment

FEATURES

- Wireless Headlight with uniform & Clear vision
- Weight only 26.5g with small battery
- Battery running time maximum 8 hours 30 minutes (at the lowest level with Large size battery)
- 4 pcs Complimentary Battery packs provided (2 large, 2 small size)
- Universal Clip for other frame types
- Designed for Dentist (Anti-curing Filter included in full set)
- Quick launch & Faster to use
- Multilink part provides Shadowless & Co-axial View
- Up-To-Date USB C type charger



L²SW Full Set Box

Specification

Electrical Specification

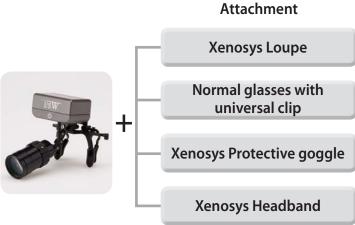
Medical DC Power Supply	Input: AC100-240V, 50-60Hz, 0.3A	
Operating Power	Output: DC5V ==== 2.2A	
Charger Power	Input: DC5V === 2.2A Output: DC4.2V === 1.0A	
Battery Pack	BTPWL: DC3.7V === 620mAh Li-polymer BTPWS: DC3.7V === 380mAh Li-polymer	
Operating Time (BTPWS)	Approx. 5 hours 30 minutes (1st step mode: Minimum Intensity), Approx. 2 hours 20 minutes (2nd step mode), Approx. 1 hour 15 minutes (3rd step mode: Maximum Intensity)	
Operating Time (BTPWL)	Approx. 8 hours 30 minutes (1st step mode: Minimum Intensity), Approx. 3 hours 50 minutes (2nd step mode), Approx. 2 hours 30 minutes (3rd step mode: Maximum Intensity)	
Full Charging Time (BTPWS)	Approx. 1 hour 50 minutes	
Full Charging Time (BTPWL)	Approx. 2 hours 40 minutes	
Light Source	High Power LED (White Color)	

LED Illumination

5.1.1. (1.)	Туре	LLMW	
Brightness(lx)	1st step	4,800	
[±2000 lx] @ WD400mm	2nd step	10,000	
3 115 100mm	3rd step	15,500	
Field of View (mm)	@WD400mm	Ø 82mm	
Color Temperature, Wavelength Range		6000 K, 400 ~ 700 nm(Visible)	
Uniformity LED Life Span (Guaranteed Time)		More than 80% @WD400mm	
		50,000 hours	

L²SWE WIRELESS LED Headlight System For ENT - L²SWE





FEATURES

- Wireless Headlight for ENT with Diameter Adjustable Function (Ø 10~82mm)
- Weight only 26.5g with small battery
- Battery running time maximum 8 hours 30 minutes (at the lowest level with Large size battery)
- 4 pcs Complimentary Battery packs provided (2 large, 2 small size)
- Universal Clip for other frame types
- Designed for ENT with Warm White LED color
- Quick launch & Faster to use
- Multilink part provides Shadowless & Co-axial View
- Up-To-Date USB C type charger



L²SWE Full Set Box

Specification

Electrical Specification

Medical DC Power Supply	Input: AC100-240V, 50-60Hz, 0.3A	
Operating Power	Output: DC5V === 2.2A	
Charger Power	Input: DC5V === 2.2A Output: DC4.2V === 1.0A	
Battery Pack	BTPWL: DC3.7V === 620mAh Li-polymer BTPWS: DC3.7V === 380mAh Li-polymer	
Operating Time (BTPWS)	Approx. 5 hours 30 minutes (1st step mode: Minimum Intensity), Approx. 2 hours 20 minutes (2nd step mode), Approx. 1 hour 15 minutes (3rd step mode: Maximum Intensity)	
Operating Time (BTPWL)	Approx. 8 hours 30 minutes (1st step mode: Minimum Intensity), Approx. 3 hours 50 minutes (2nd step mode), Approx. 2 hours 30 minutes (3rd step mode: Maximum Intensity)	
Full Charging Time (BTPWS)	Approx. 1 hour 50 minutes	
Full Charging Time (BTPWL)	Approx. 2 hours 40 minutes	
Light Source	High Power LED (Warm White Color)	

LED Illumination

5.1.1. (1.)	Туре	LED Lens Module	
Brightness(lx) [±2000 lx]	1st step	4,800	
(±2000 IX) @ WD400mm	2nd step	8,500	
3 110 100mm	3rd step	13,000	
Field of View (mm) @WD400mm		Ø 10 ~ Ø 82mm	
Color Temperature, Wavelength Range Uniformity LED Life Span (Guaranteed Time)		3500 K, 400 ~ 700 nm(Visible Ligth)	
		More than 80% @WD400mm	
		50,000 hours	

XD Light Simple & Easy LED Light System - XD Light



FEATURES

- Maximum Brightness 29,000lx.
- Control Unit and Battery integrated
- Designed for 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 = = = 550mA	
	About 22 hours.	
	(1 st step mode: Minimum)	
Operating Time	About 11 hours. (2 nd step mode)	
Operating Time	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 ==== 1A	
Light Source	High Power LED (White Color)	
Embedded Battery	• DC3.7V = = = 3000mAh Li-ion	

LED Illumination

Daishte see (le)	1 st step	9,000	3,000
Brightness (lx)	2 nd step	16,000	6,000
[± 2000 lx]	3 rd step	23,000	9,000
@WD400mm	4 th step	29,000	11,400
Field of View Size (mm)	Field of View Size (mm) @WD400mm		Ø 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 = = = 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 ==== 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 = = = 2A - Output: DC 4.2V = = = 1.5A
Medical Power Supply	- Input: AC 100~240V, 50-60Hz, 0.3A - Output: DC 5V = = 2A
Light Source	High power LED (WHITE COLOR)

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 Illumination

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

LED Lens Module (3 types) 82 mm 66 mm

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)





Looks CAM II Wearable Camera System





FEATURES

- Auto Focus function (Continuous or Fixed mode)
- Digital Zoom (x1.5, x2.0, x3.0)
- EIS (Electronic Image Stabilization)
- WiFi support 5.0 GHz
- Longer operating time: 4 hours 20 minutes
- More storage 128 GB
- Provide two camera lens (f=14, 20 mm)
- Enable to use Mobile Viewer: iOS and Android



LED Illumination

	STEP	lx @WD400mm
Brightness &	1 st	19,000
Current Consumption	2 nd	27,000
	3 rd	37,000
Field of View Size (mm) @WD400mm		Ø82 (Standard)
Weight(g)		25 g
Color Temperature, Spectrum		6000 K, 400 - 700 nm(Visible Ray)
Uniformity		More than 80% @WD400mm
LED Operating Power		2W (max.)
LED Life Time (Guaranteed)		50,000 hours
LED Source		High power LED (White color)

Specification

Rated Input Voltage	DC3.6V	
Image Sensor	1/3 inch 4.0M Pixel CMOS	
Recording Resolution	Full HD 1920 x 1080p	
FOV (Crosswise)	f14mm Lens: H137mm @ WD 400mm f20mm Lens: H94mm @ WD 400mm	
Recording Frame	30fps	
Video Quality (Bitrate)	CBR type 10 Mbps	
WiFi streaming	Rec (EIS) + WiFi: 1920 x 1080/30fps Rec (EIS) + WiFi + HDMI: 480 x 360p	
Video Compression	H.264	
Audio Codec	AAC (Advanced Audio Coding), 12 KHz	
Function Button	REC/Snap shot/LED	
Speaker	Built-in 8 ohm	
Micro SDHC Card	128GB Micro SDHC Card, More than Class 10, MLC Type File System: FAT32, File Allocation Size: 32KB File Length: 30 minutes (About 2.5GB)	
Operating Temperature / Storage Temperature	6℃ - 40℃ / 10℃ - 40℃	
Consecutive Recording Time (LED light 3 step, WiFi On status)	4 hours 20 minutes LED 2 step: 6 hours 20 minutes LED 1 step: 7 hours 20 minutes	
Full Charging Time (Capacity)	6 hours (10.50 Ah)	
Input power of DC POWER SUPPLY	100-240 V~, 50-60 Hz, 0.3A	
Output power of DC POWER SUPPLY	5.0V 2.2A	
Battery Input Power	5.0V 2.2 A	

Replacement Components

Battery Pack	DC3.6V 10.05 Ah (Lithium ion)
DC POWER SUPPLY	Input: 100-240 V~, 50/60 Hz, 0.3A
	Output: DC5.0V 220 2200mA

Dimension & Weight

Dimension	W 410 x H 320 x T 180 (mm)
Total Weight	3.80 kg (With total outer package 4.22 kg)

Optional Items XENOSYS POWER SOURCE - XPS-30W



FEATURES

- Without changing the battery pack, you can continue your surgery or recording LooksCAM I, II
- Compatible to LooksCAM I, II (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



Optional LooksCAM II Lens

• f=12.5 mm Field of View H160 mm @ WD 400 mm



Attachment to Xenosys Light System







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