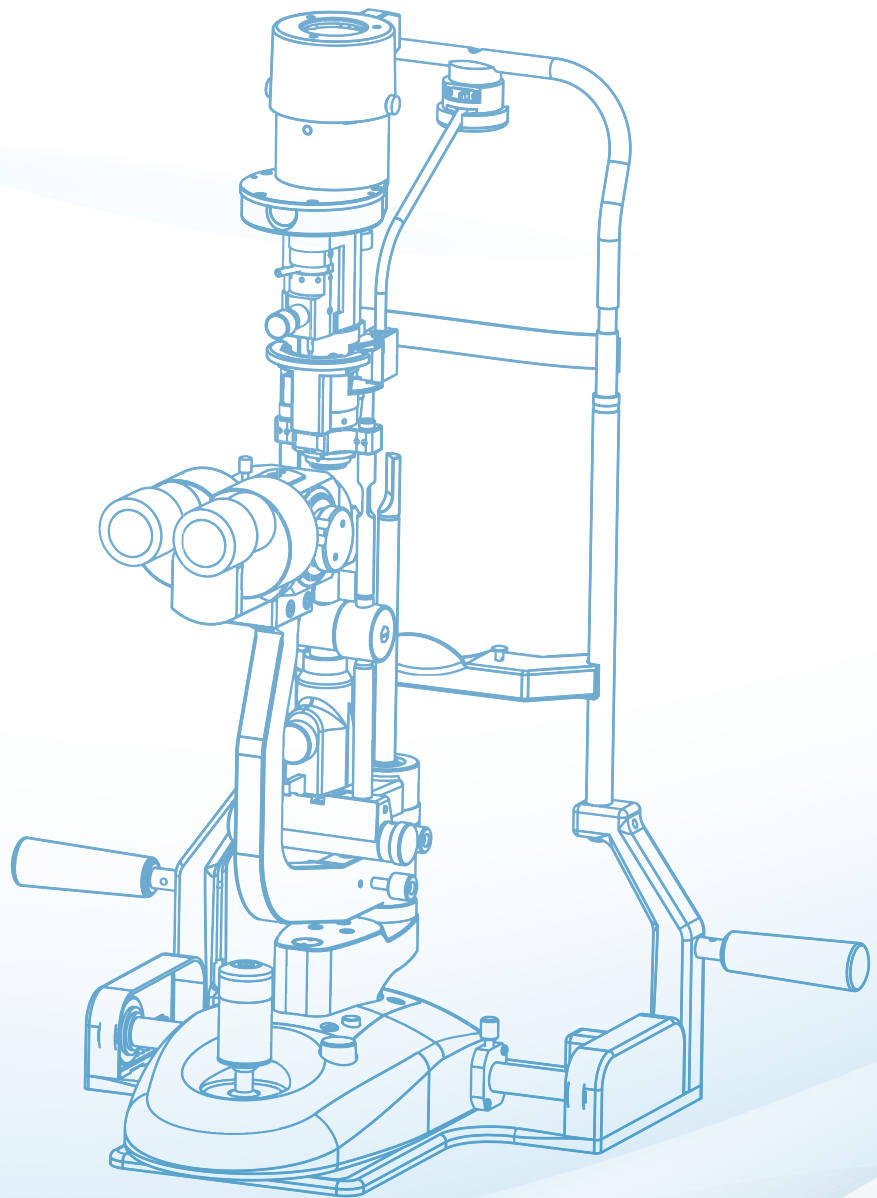


LED & Halogen SLIT LAMPS

Quality Optics



MADE IN JAPAN

www.inami.co.jp/english



www.facebook.com/inami.japan

Here comes the **LED**

PHAROS LED
EGG LED

- ✓ **Sharp and even illumination**
- ✓ **Environmentally-friendly**
- ✓ **Powerful and long-lasting light source**
- ✓ **Less stress to patient's eye**

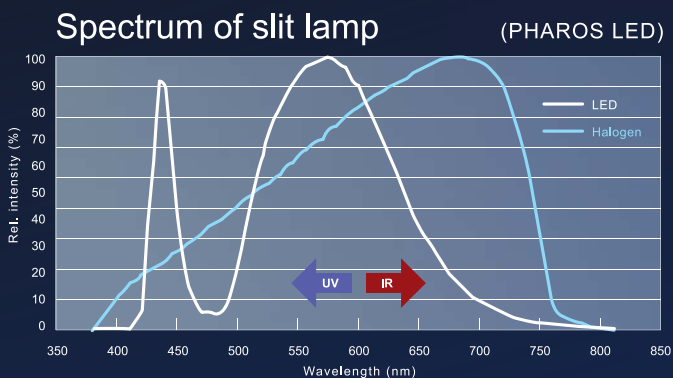
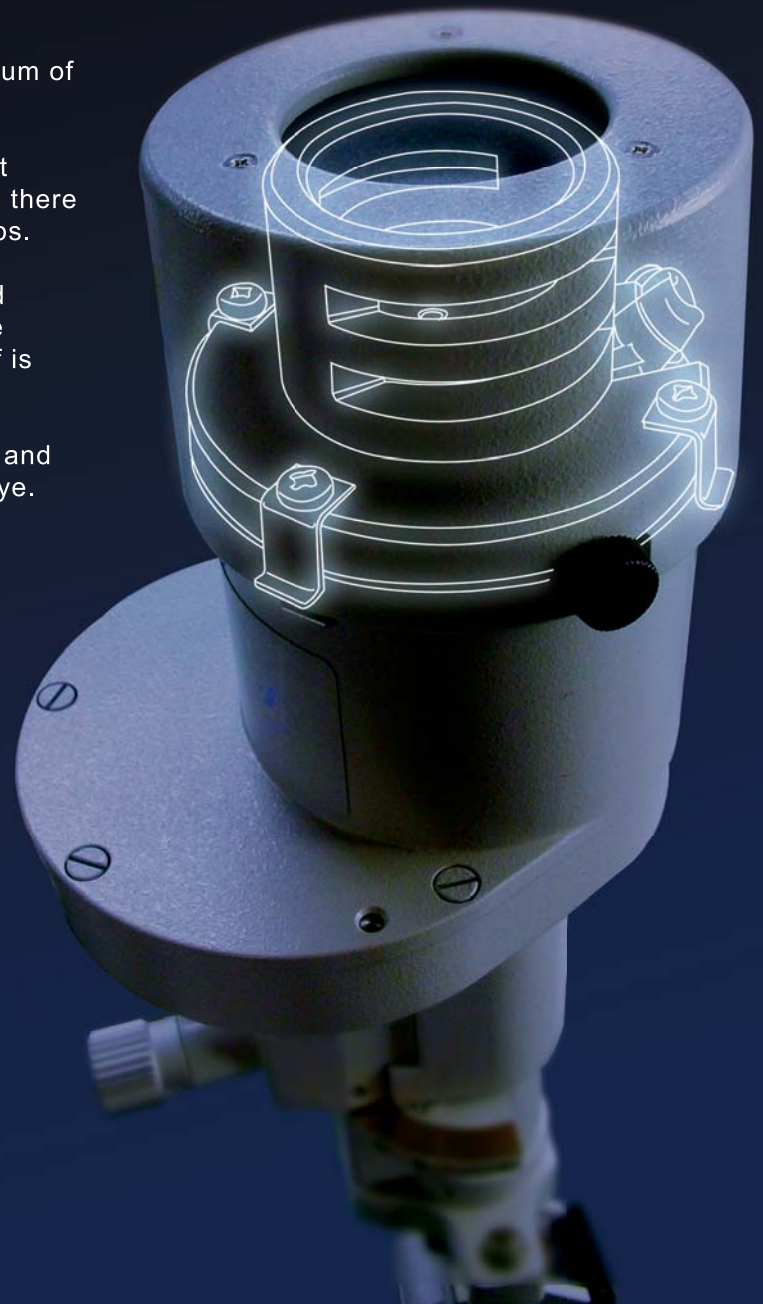
Inami's slit lamp series "PHAROS" and the high-end model "EGG" now have LED powered version.

The original LED technology optimises the spectrum of light for sharp, clear and even observation.

One of the most valuable advantages of LED light source is that it lasts nearly lifetime which means there will be no need to purchase and change light bulbs.

Even if the LED lamp house needs to be changed somehow, users do not have to change the whole column part since the lamp house assembly itself is replaceable.

This energy saving light source generates no UV and less heat, which reduces the stress to patient's eye.



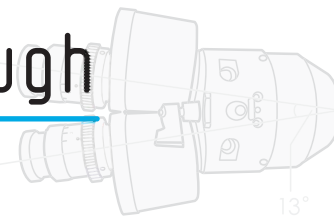
Inami's LED spectrum is specially designed to ensure the best setting for various kinds of slit lamp observation.

2

Greenough

LED: L-0185-LED

Halogen: L-0185



L-0185-LED



Lamp house of L-0185
Halogen type



10x & 16x



With built-in C-mount (factory option) camera can be attached



Continuous light volume controller for fine adjustment



Colour selectable base top for your interior theme



Built-in yellow filter for clearer fluorescein images



Convergent optics for user's comfort



Half-moon type column for laser system attachment



Light booster for momentary extra-brightness (halogen type only)



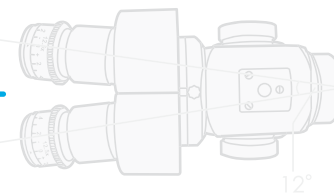
Digital camera controlable base for easy photography (activating this function is optional)

3

3 Steps

LED: L-0187-LED

Halogen: L-0187



L-0187-LED



Lamp house of L-0187
Halogen type



10x 16x 25x



Continuous light volume controller for fine adjustment



Colour selectable base top for your interior theme



Digital video camera beam splitter can be attached



Convergent optics for user's comfort



Half-moon type column for laser system attachment



Light booster for momentary extra-brightness (halogen type only)



Digital camera controlable base for easy photography (activating this function is optional)

5



Lamp house of L-0189
Halogen type



L-0189-LED

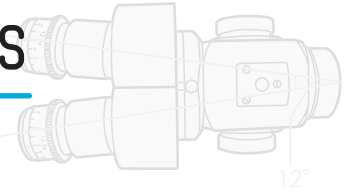


5 STEPS
6x 10x 16x 25x 40x

5 Steps

LED: L-0189-LED

Halogen: L-0189



12°



Continuous light volume controller for fine adjustment



Colour selectable base top for your interior theme



Digital video camera beam splitter can be attached



12°

Convergent optics for user's comfort



Half-moon type column for laser system attachment



Light booster for momentary extra-brightness (halogen type only)



Digital camera controllable base for easy photography (activating this function is optional)

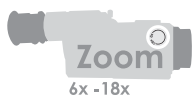
Z



Lamp house of L-0240
Halogen type



L-0240-LED

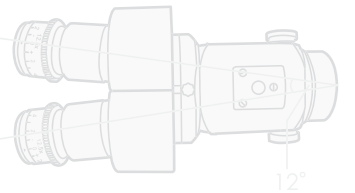


Zoom
6x -18x

Zoom

LED: L-0240-LED

Halogen: L-0240



12°



Continuous light volume controller for fine adjustment



Colour selectable base top for your interior theme



Digital video camera beam splitter can be attached



12°

Convergent optics for user's comfort



Half-moon type column for laser system attachment



Light booster for momentary extra-brightness (halogen type only)



Digital camera controllable base for easy photography (activating this function is optional)

Versatility

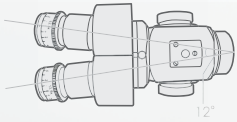
EGG SLIT LAMP

Digital Camera Compatible

LED: L-0229-E-LED

Halogen: L-0229-E

L-0229-E-LED and L-0229-E Digital Camera Compatible Slit Lamp Microscope "EGG" are ideal for taking digital images both still and movie by our digital video camera beam splitter L-0541DC-1.3. All the extended functions were thoroughly designed for your comfort.



Continuous light volume controller for fine adjustment



12° Convergent optics for user's comfort



14:8 S.I. Grande for 14mm illumination field

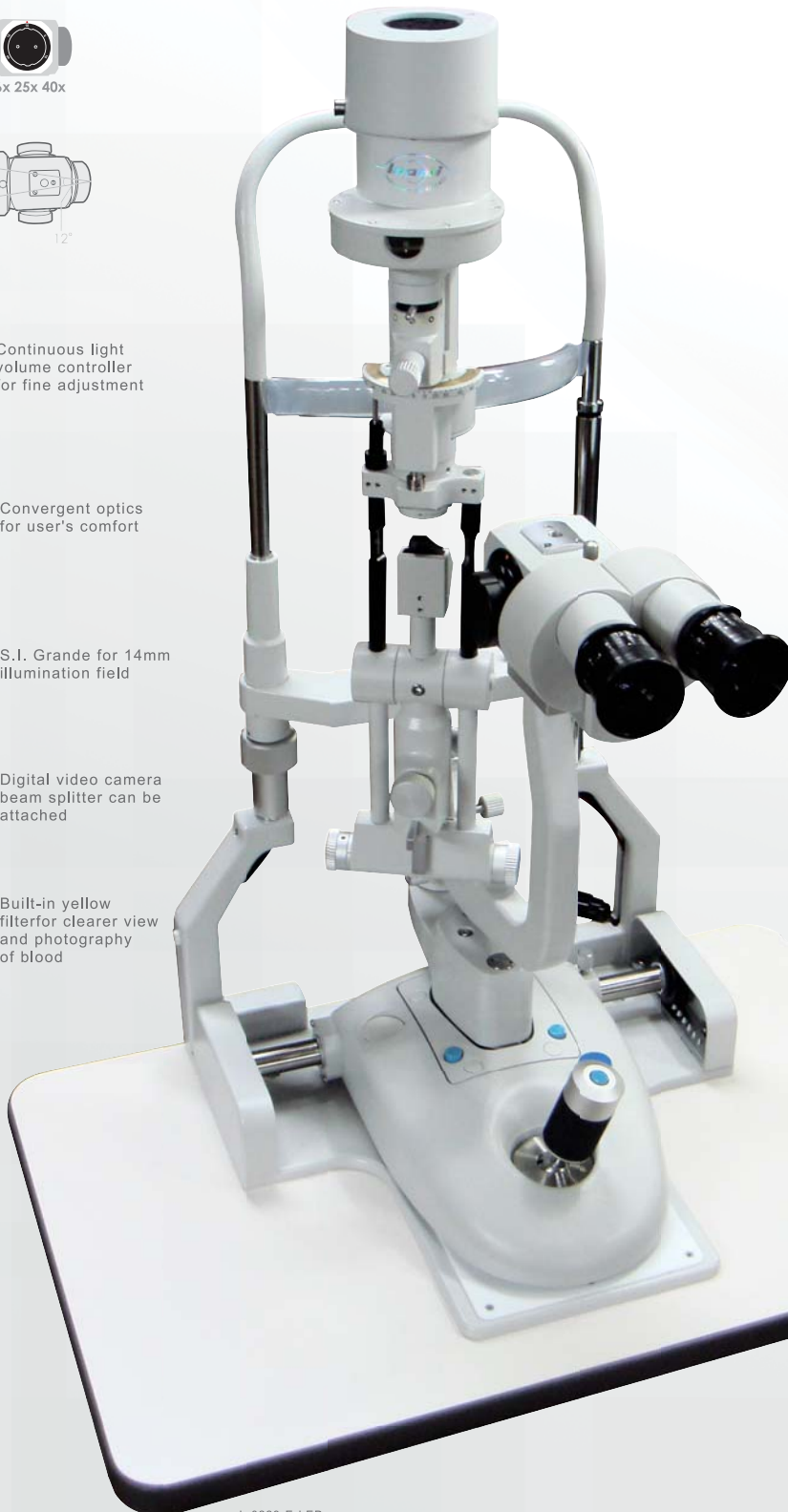


Digital video camera beam splitter can be attached



Built-in yellow filter for clearer view and photography of blood

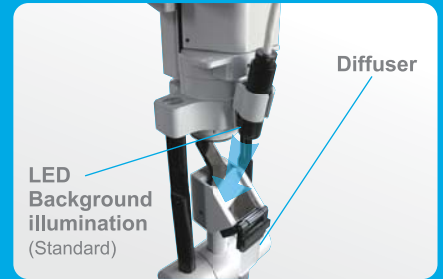
(Light source side)



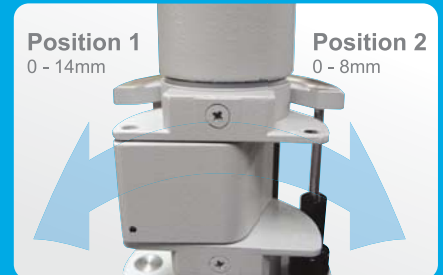
L-0229-E-LED



The Joy-stick features a shutter release, a video recording function, a background illumination switch and a light intensity control. Everything is on the unique shaped base of this slit lamp for ease of use. Still images and videos can be taken in one position.



L-0229-E-LED and L-0229-E feature the LED background illumination system which allows you to take clear and bright images of slit light. The light intensity of LED is set within the extent that does not give too much damage to human eyes. The light diffuser is useful when the full view of an eye is observed.



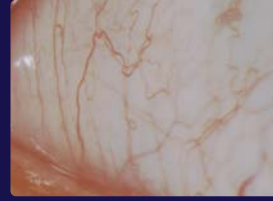
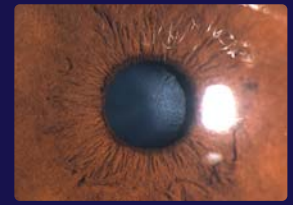
The unique function of L-0229-E-LED and L-0229-E called "S.I. GRANDE" enables you to optically change the illumination field up to 14mm by single click action. This is ideal for contact lens fitting observation. "S.I. GRANDE" is registered as Inami's patent.



Lamp house of L-0229-E Halogen type

EGG LED
EGG

Digital Imaging



L-0541DC-1.3

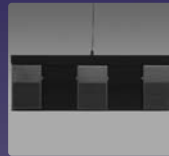
Digital Video Camera Beam Splitter



Taking fine and crisp digital images is now so easy with L-0541DC-1.3 which features a high quality sensor and a simple connection system of USB. Optional items are also available for even clearer images and a superior usability.



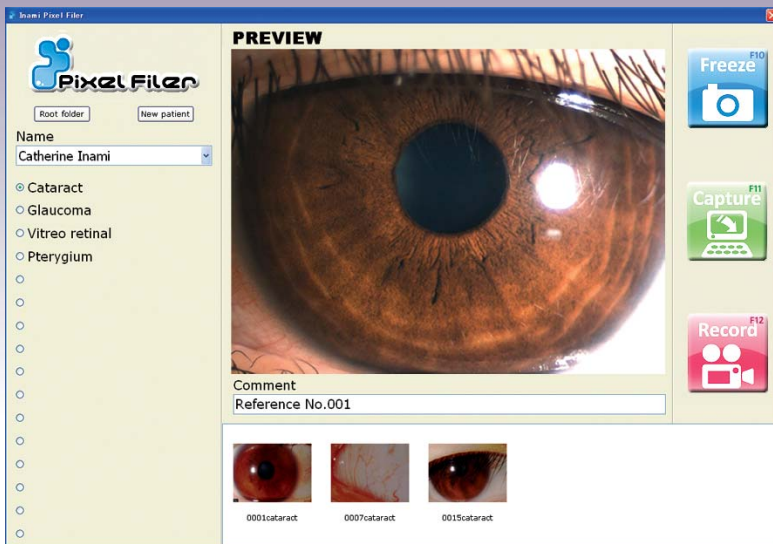
LED external background illumination (option)



Foot remote controller (option)

SPECIFICATIONS

Image Sensor Type	Sony progressive scan interline transfer CCD's with square pixels and global shutter	Digital Interface	automatic / manual modes, programmable via software, 0.01 ms to 66 ms
Image Sensor Model	ICX445 1/3" h EXview HAD CCD(TM)	Transfer Rates	2 W (max) at 5 V
Maximum Resolution	1280(H) x 960(V)	Partial Image Modes	pixel binning and region of interest modes via Format_7
Pixel Size	3.75 μm x 3.75 μm	General Purpose I/O Ports (For advanced use only)	7-pin JST GPIO connector, 4 pins for trigger and strobe, 1 pin +3.3 V, 1 VEXT pin for external power
Analog-to-Digital Converter	5-pin Mini-B USB 2.0 digital interface for camera control, video data transmission, and power	Gain Control	automatic / manual / one-push gain modes, programmable via software, 0 dB to 24 dB in 0.04 dB increments
Video Data Output / Max Frame Rate	15FPS / 1296x964 Y8 at 18 FPS	Shutter Speed	automatic / manual / one-push modes, programmable via software, 0.01 ms to greater than 10 seconds
Image Data Formats	automatic / manual gain modes, programmable via software, 0 dB to 24 dB in 0.04 dB increments	Power Consumption	2 W (max) at 5 V



FREE!
When you buy
L-0541DC-1.3

Pixel Filer Ver. 2.0
Image Filing System by Inami

An easy-to-use application for taking pictures, capturing videos and sorting files is included in a package of L-0541DC-1.3. Categories of images can be freely edited and a comment can be added to an image captured. 6 camera property settings can be stored for different types of observation. For quick start, 6 preset camera property settings are available as soon as the system is installed.

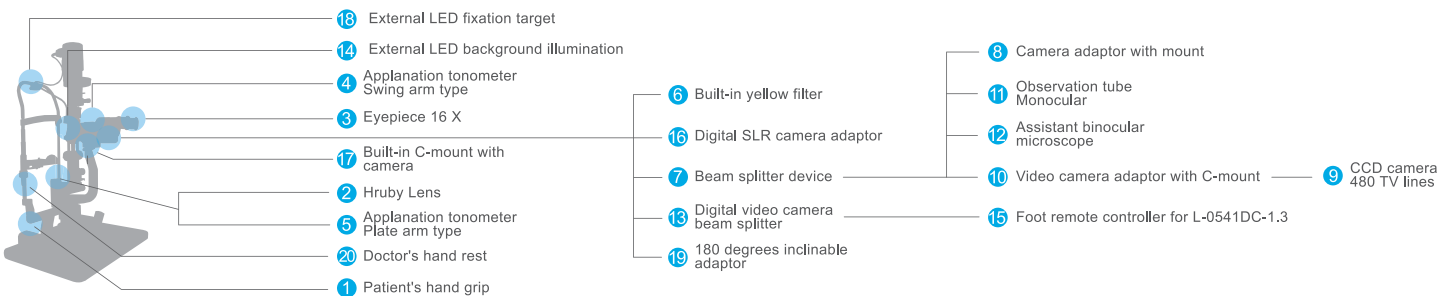
Specifications

	Standard / Option	L-0185-LED (LED) L-0185 (Halogen)	L-0187-LED (LED) L-0187 (Halogen)	L-0189-LED (LED) L-0189 (Halogen)	L-0240-LED (LED) L-0240 (Halogen)	L-0229-E-LED (LED) L-0229-E (Halogen)
Microscope						
Type		Greenough Type Stereoscopic Microscope	Convergent Type Binocular Microscope	Convergent Type Binocular Microscope	Convergent Type Binocular Microscope	Convergent Type Binocular Microscope
Magnification Changer		2 steps by changing knob	3 steps by drum rotation	5 steps by drum rotation	Continuous Zoom by drum rotation	5 steps by drum rotation
Stereo angle		13°	12°	12°	12°	12°
Eyepiece	Standard	10x	12.5x	12.5x	12.5x	12.5x
	Option	16x	—	—	—	—
Magnification Ratio (Field of View)		10x (20.13mm) 16x (16.13mm)	10x (28.5mm) 16x (14mm) 25x (7mm)	6x (38mm) 10x (24mm) 16x (15mm) 25x (9mm) 40x (6mm)	Continuous from 10x ~ 30x (22mm~8mm)	6x (38mm) 10x (24mm) 16x (15mm) 25x (9mm) 40x (6mm)
		52 - 90 mm	53 - 83 mm	53 - 83 mm	53 - 83 mm	53 - 83 mm
Focus Distance		100 mm	106 mm	106 mm	106 mm	106 mm
Diopter Adjustment		+ 8 to -8 diopters	+ 8 to -8 diopters	+ 8 to -8 diopters	+ 8 to -8 diopters	+ 8 to -8 diopters
Slit Illumination						
Slit Width		0 -10 mm	0 -10 mm	0 -10 mm	0 -10 mm	0 -14 mm
		—	—	—	—	0 -8 mm (S.I. GRANDE position 2)
Aperture Diameter		0.2, 1, 3, 4, 6, 10 mm	0.2, 1, 3, 4, 6, 10 mm	0.2, 1, 3, 4, 6, 10 mm	0.2, 1, 3, 4, 6, 10 mm	0.3, 1.4, 4.2, 5.5, 8.3, 14 mm
		—	—	—	—	0.2, 0.8, 2.4, 3.2, 4.8, 8mm (S.I. GRANDE position 2)
Slit Length		0 -10 mm	0 -10 mm	0 -10 mm	0 -10 mm	0 -14 mm
		—	—	—	—	0 -8 mm (S.I. GRANDE position 2)
Slit Rotation		± 90°	± 90°	± 90°	± 90°	± 90°
Filters	Standard	Cobalt blue, Heat absorption, Red-free, 1/2 ND	Cobalt blue, Heat absorption, Red-free, 1/2 ND	Cobalt blue, Heat absorption, Red-free, 1/2 ND	Cobalt blue, Heat absorption, Red-free, 1/2 ND	Cobalt blue, Heat absorption, Red-free, 1/2 ND, Yellow
	Option	UV, IR, 1/10 ND etc. (To be replaced with standard filters)	UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57)	UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57)	UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57)	UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57)
Slit Inclination		5° 10° 15° 20°	5° 10° 15° 20°	5° 10° 15° 20°	5° 10° 15° 20°	5° 10° 15° 20°
Light Source		LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: (White) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)
Max. intensity (Lux)		45,000Lux	45,000Lux	45,000Lux	45,000Lux	58,000Lux
Background Illumination						
Light Source		—	—	—	—	15VDC 0.1A
Base						
Vertical Movement		30 mm	30 mm	30 mm	30 mm	30 mm
Longitudinal Movement		79 mm	79 mm	79 mm	79 mm	80mm (Optional 103 mm is also available)
Lateral Movement		115 mm	115 mm	115 mm	115 mm	115 mm
Fine Base Movement		± 10 mm	± 10 mm	± 10 mm	± 10 mm	± 10 mm
Colour selectable base		Selectable	Selectable	Selectable	Selectable	—
Chinrest						
Vertical Movement		75 mm	75 mm	75 mm	75 mm	75 mm
Fixation Target		LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2)	LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2)	LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2)	LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2)	LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2)
Input Voltage		AC100, 120V, 220V, 240V 50/60Hz	AC100, 120V, 220V, 240V 50/60Hz	AC100, 120V, 220V, 240V 50/60Hz	AC100, 120V, 220V, 240V 50/60Hz	AC100, 120V, 220V, 240V 50/60Hz
Power Consumption		LED: 25VA Halogen: 65VA	LED: 25VA Halogen: 65VA	LED: 25VA Halogen: 65VA	LED: 25VA Halogen: 65VA	LED: 25VA Halogen: 80VA
Size & Weight (Without table top)						
Weight		18.5 Kgs	18.5 Kgs	18.5 Kgs	18.5 Kgs	23 Kgs
Dimension		LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm	LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm	LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm	LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm	LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm

Optional accessories

Compatibility

Code	Description	L-0185		L-0187		L-0189		L-0240		L-0229-E	
		LED	Halogen	LED	Halogen	LED	Halogen	LED	Halogen	LED	Halogen
1	136A-3080 Patient's hand grip	○	●	○	●	○	●	○	●	○	●
2	L-1-0100 Hruby Lens	○	●	○	●	○	●	○	●	○	●
3	OCL-002 Eyepiece 16 X	○	●								
4	L-5110 Applanation tonometer Swing arm type	○	●	○	●	○	●	○	●	○	●
5	L-5130 Applanation tonometer Plate type	○	●	○	●	○	●	○	●	○	●
6	YF-57 Built-in yellow filter	Equipped		○	●	○	●	○	●	○	●
7	L-0541 Beam splitter device			○	●	○	●	○	●	○	●
8	L-0543 Camera adaptor with mount			○	●	○	●	○	●	○	●
9	L-0568 CCD camera 480 TV lines			○	●	○	●	○	●	○	●
10	L-0554 L-0564 Video camera adaptor with C-mount (f=70mm) Video camera adaptor with C-mount (f=50mm)			○	●	○	●	○	●	○	●
11	L-0542 Observation tube Monocular			○	●	○	●	○	●	○	●
12	L-0542-CB Assistant binocular microscope			○	●	○	●	○	●	○	●
13	L-0541DC-1.3 Digital video camera beam splitter (1.3M)			○	●	○	●	○	●	○	●
14	Z0023 External LED Background illumination	○	●	○	●	○	●	○	●	Equipped	
15	L-0541DC-FR Foot remote controller for L-0541DC-1.3	○	●	○	●	○	●	○	●	○	●
16	L-0551 Digital SLR camera adaptor			○	●	○	●	○	●	○	●
17	Z0070 Built-in C-mount unit with camera <small>*Please select digital camera (1.3M, w/filing software) or analogue CCD</small>	○	●								
18	Z0069 External LED fixation target	○	Equipped (Halogen bulb)	○	Equipped (Halogen bulb)	○	Equipped (Halogen bulb)	○	Equipped (Halogen bulb)	○	Equipped (Halogen bulb)
19	Z0026 180 degree inclinable binoculars adaptor			○	●	○	●	○	●	○	●
20	136A-3652 Doctor's hand rest	○	●	○	●	○	●	○	●	○	●



Standard accessories

Focusing rod, Chin rest paper (100 sheets), Dust cover, Cap for focusing rod hole, Fuse, Light bulb, Breath shield, Gear rack cover, Hexagon wrench (2 sizes), Fixation lamp bulb (Halogen type slit lamp only), Cap for objective lens, Eyepiece rubber, Operation manual (English)

Designs and specifications are subject to change.

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