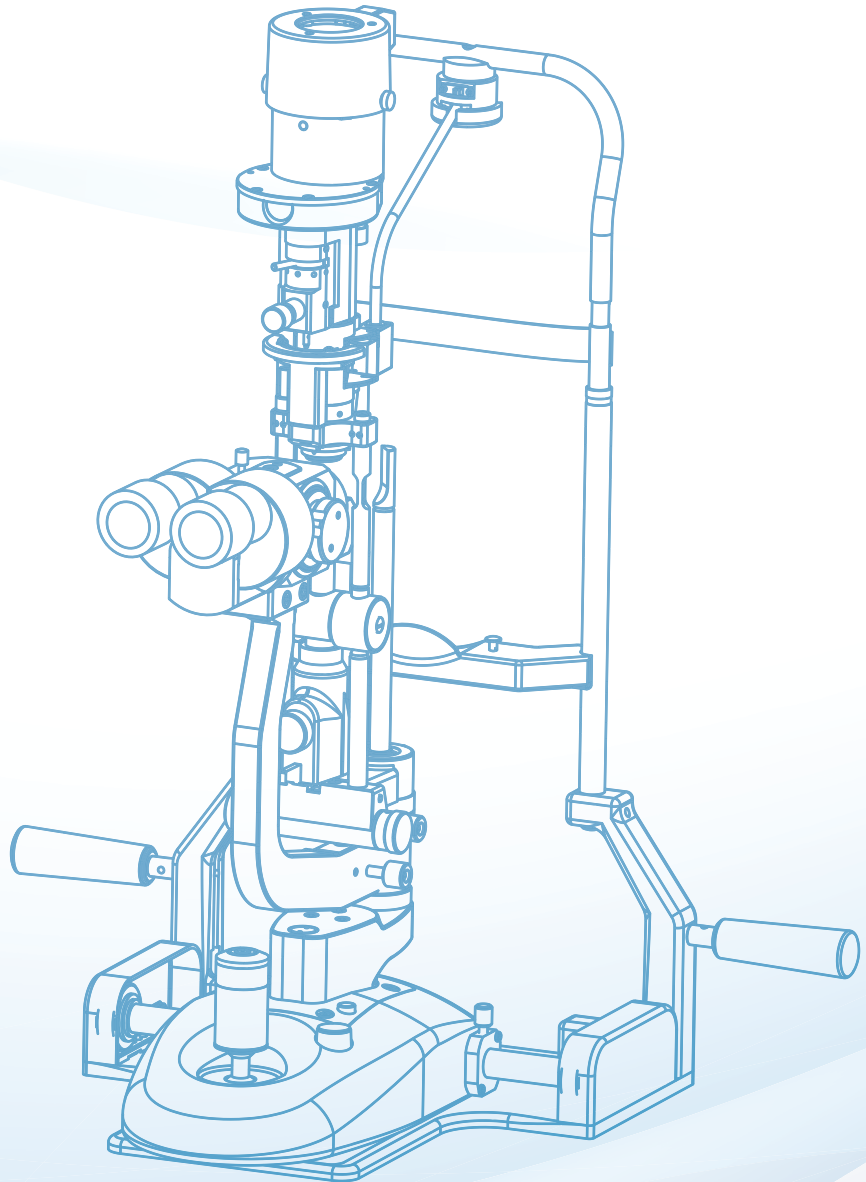


# LED & Halogen SLIT LAMPS

Quality Optics



**MADE IN JAPAN**

[www.inami.co.jp/english](http://www.inami.co.jp/english)



[www.facebook.com/inami.japan](https://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

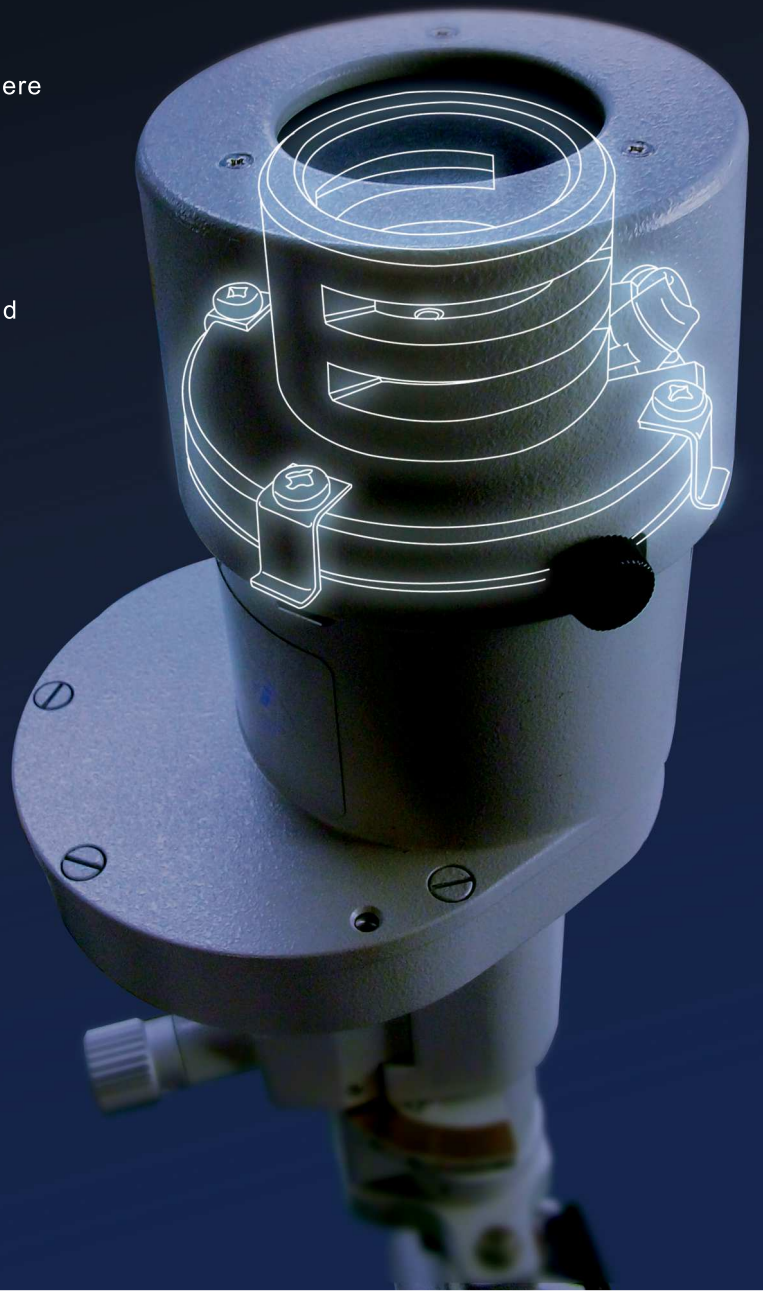
Inami's slit lamp series "PHAROS" and the high-end model "EGG" now have LED powered version.

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

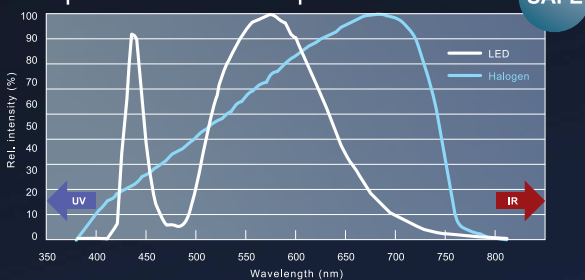
One of the most valuable advantages of LED light source is that it lasts nearly lifetime which means there will be no need to purchase and change light bulbs.

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.

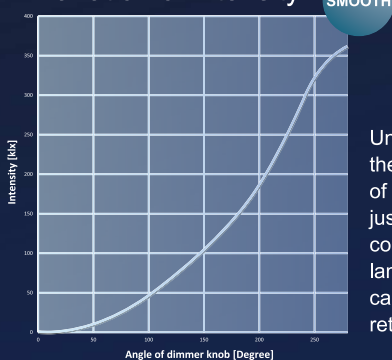


Spectrum of slit lamp



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

Variation of intensity

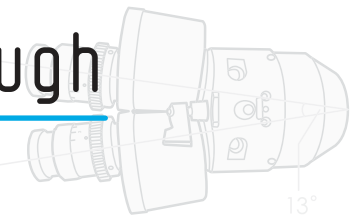


Unlike many other brands, the light intensity control of Inami's LED slit lamp is just as smooth as conventional halogen slit lamp. Even very low range can be freely controlled for retinal observation etc.

# Greenough

**LED:** L-0185-LED

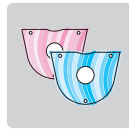
**Halogen:** L-0185



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 fluorescence 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 control base for easy photography (activating this function is optional)

# G



Lamp house of L-0185 Halogen type

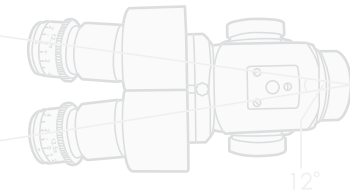


L-0185-LED

# 3 Step

**LED:** L-0187-LED

**Halogen:** L-0187



Digital video camera beam splitter can be attached



Continuous light volume controller for fine adjustment



Colour selectable base top for your interior theme



Half-moon type column for laser system attachment



Convergent optics for user's comfort



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



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

# 3



Lamp house of L-0187 Halogen type



L-0187-LED

# 5



Lamp house of L-0189 Halogen type



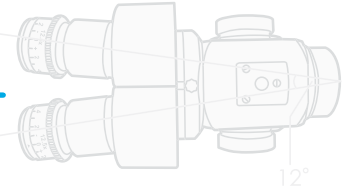
L-0189-LED



6x 10x 16x 25x 40x

## 5 Step

**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



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)

# 7



Lamp house of L-0240 Halogen type



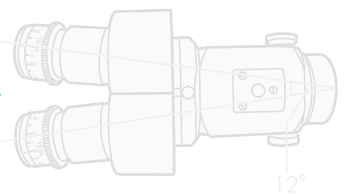
L-0240-LED



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



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)

# Versatility

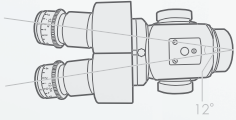
## EGG SLIT LAMP

**Digital Camera Compatible**

**LED: L-0229-E-LED**

**Halogen: L-0229-E**

Digital camera compatible slit lamp microscope series "EGG" is ideal for digital photographing and video recording with our digital video camera beam splitter L-0541DC series. "EGG" is available in both LED and halogen light source type. All the extended functions of "EGG" have been thoroughly considered to maximise users' comfort.



Lamp house of L-0229-E Halogen type

L-0229-E-LED



Continuous light volume controller for fine adjustment



12° Convergent optics for user's comfort



S.I. Grande for 14mm illumination field

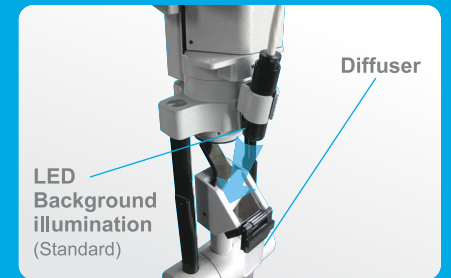


Digital video camera beam splitter can be attached

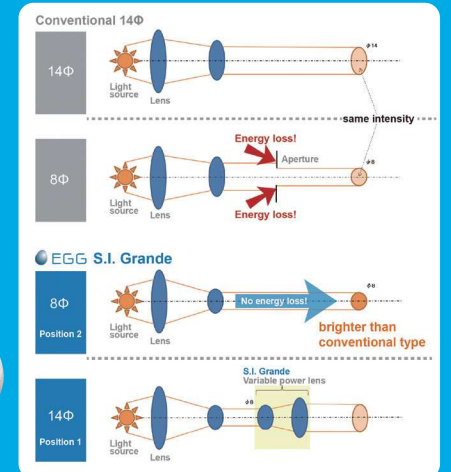
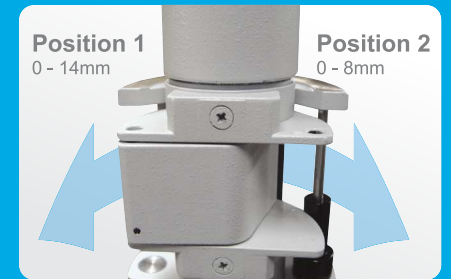
EGG LED EGG



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.

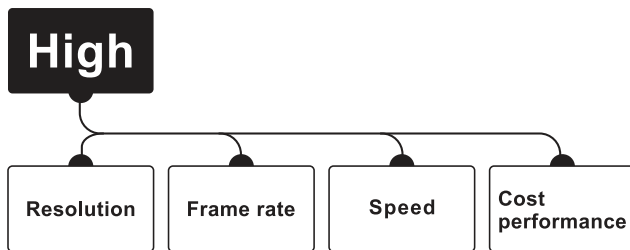


The unique function of L-0229-E-LED and L-0229-E called "S.I. GRANDE" enables you to optically change the illumination field up to 14mm by single click action. This is ideal for contact lens fitting observation. "S.I. GRANDE" is registered as Inami's patent.

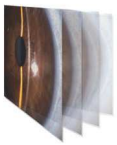
# 5M pixels

# USB3.0

L-0541DC-5  
Digital Video camera Beam Splitter for Slit Lamp



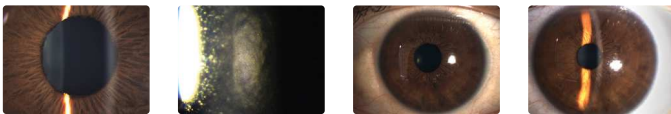
The Sony's finest 1/2.8" imaging sensor clearly captures even subtle details of an eye observed thanks to its 5M pixels resolution and distinguished sensitivity.



The incomparable smoothness provided by 30fps frame rate assures the success in taking the most wanted moment during observation of patient's eye.



High speed data transfer of the newest serial bus USB3.0 assures a stable connection between the camera and your PC, supplying necessary electricity.



<b>Image sensor</b>	IMX334ROI
<b>Sensor type</b>	CMOS, 1/2.8", Color, Rolling Shutter
<b>Resolution</b>	5M pixels (2592 x 1944)
<b>Frame rate</b>	30fps (Maximum performance)
<b>Interface</b>	USB 3.0 interface

## Related products

L-0541DC-12  
Digital Video camera Beam Splitter for Slit Lamp



This high end model USB3.0 camera for slit lamp offers 12M pixels crisp images and 30fps smooth preview and movies.



"Pixel Filer" is a user-friendly filing application bundled with L-0541DC series cameras. The interface designed especially for clinical use allows user to take pictures and record movies intuitively. New functions such as "touch panel compatible" and "display function" have been added to the version 5.0 according to feedbacks from existing users of previous versions.

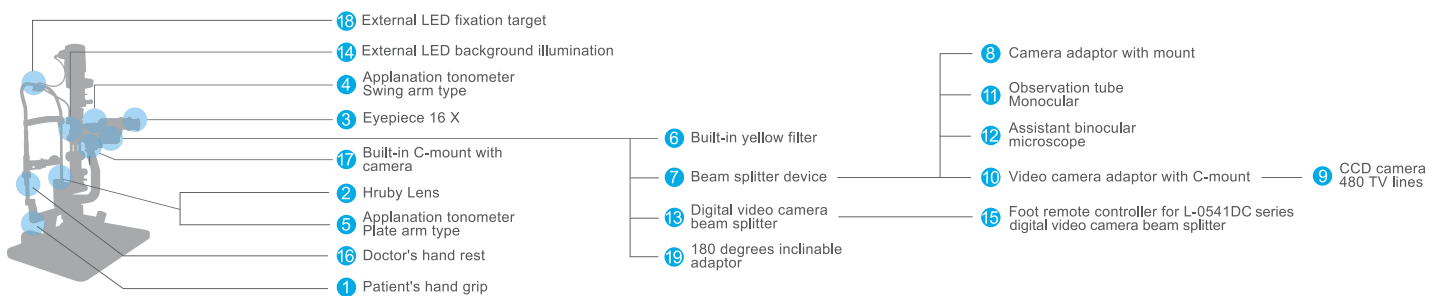
\*Theoretical figure. Actual performance depends on PC and other factors.

# 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)
<b>Microscope</b>						
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)
Pupillary Adjustment		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
<b>Slit Illumination</b>						
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 Built-in binoculars yellow filter	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: 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)	LED: 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1)
Max. intensity (Lux)		LED: 350,000Lux Halogen: 350,000Lux	LED: 350,000Lux Halogen: 350,000Lux	LED: 350,000Lux Halogen: 350,000Lux	LED: 350,000Lux Halogen: 350,000Lux	LED: 400,000Lux Halogen: 350,000Lux
<b>Background Illumination</b>						
Light Source		—	—	—	—	15VDC 0.1A
<b>Base</b>						
Vertical Movement		30 mm	30 mm	30 mm	30 mm	30 mm
Longitudinal Movement		103 mm	103 mm	103 mm	103 mm	103 mm
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	—
<b>Chinrest</b>						
Vertical Movement		75 mm	75 mm	75 mm	75 mm	75 mm
Fixation Target		LED: LED 3V 0.01A (Option)	LED: LED 3V 0.01A (Option)	LED: LED 3V 0.01A (Option)	LED: LED 3V 0.01A (Option)	LED: LED 3V 0.01A (Option)
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
<b>Size &amp; Weight</b> (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

	Code	Description	Compatibility											
			L-0185		L-0187		L-0189		L-0240		L-0229-E			
			LED	Halogen	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-0568-231S2-N L-0568-231S2-P	Analogue CCD camera 480 TV lines (NTSC) Analogue CCD camera 480 TV lines (PAL)			○	●	○	●	○	●	○	●	○	●
10	L-0554	Video camera adaptor with C-mount (f=70mm)			○	●	○	●	○	●	○	●	○	●
11	L-0542	Observation tube Monocular			○	●	○	●	○	●	○	●	○	●
12	L-0542-CB	Assistant binocular microscope			○	●	○	●	○	●	○	●	○	●
13	L-0541DC-1.3 L-0541DC-3.2	Digital video camera beam splitter (1.3M) Digital video camera beam splitter (3.2M)			○	●	○	●	○	●	○	●	○	●
14	Z0023	External LED Background illumination	○	●	○	●	○	●	○	●	○	●	Equipped	
15	L-0541DC-FR	Foot remote controller for L-0541DC-1.3	○	●	○	●	○	●	○	●	○	●	○	●
16	136A-3652	Doctor's hand rest	○	●	○	●	○	●	○	●	○	●	○	●
17	Z0070	Built-in C-mount unit with camera <small>*Please select digital camera (1.3M, wiring software) or analogue CCD</small>	○	●										
18	L-01R2	External LED fixation target	○	●	○	●	○	●	○	●	○	●	○	●
19	L-02LM	180 degree inclinable binoculars adapter			○	●	○	●	○	●	○	●	○	●



## 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.

**Inami & Co., Ltd.**

No.24-2, Hongo 3-chome, Bunkyo-ku,  
Tokyo 113-0033, Japan  
Tel: +81 (3) 3814-5916 Fax: +81 (3) 5684-2126  
E-mail: corpinfo@inami.co.jp



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Management  
System  
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