

High Frequency Fluorescent Lamp Flat Illuminator (Back light) for Image Processing

Our Flat Illuminator features thin design and high brightness at the light emitting surface.

Features

High-Brightness

23000Lux / 7800cd/m² to 27000Lux / 10000cd/m²
Thickness of flat luminous panel : 35mm
Operation frequency : 27~34kHz±10%

- Size A2 / A3 / A4 / 100×100mm are available.
- Balance of brightness : Over 90% at each center point divided equally into 9 surface areas.
- Average lamp life : 5000 hours
- Range of dimming : 100% to 60%

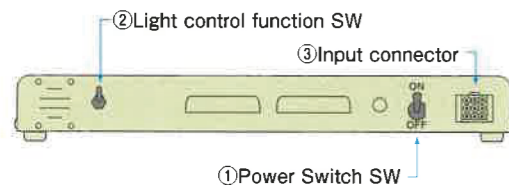
Wide range of applications

It provides ideal lighting effects for various applications.

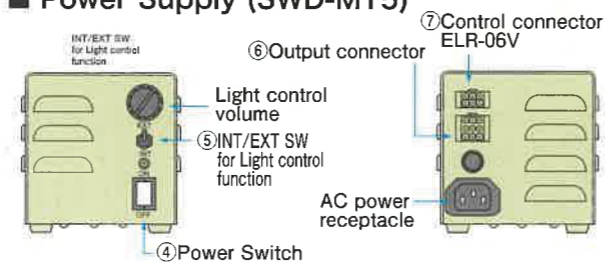
- External inspection by backlighting for transparent / translucent materials such as glass sheet, film, filter, and LCD components.
- Inspection by irradiation for flaw, surface roughness or any discoloration part in metal products.
- Inspection for raw materials of flat panel display such as LCD, ELD, PDP and FED.

Function and Operation

Flat luminous panel(HF-SL-A48LCG)



Power Supply (SWD-MT5)



① Power Switch SW

Power ON/OFF

② Light control function SW

By pushing the knob downward, illuminator operates at its full brightness.

By pushing the knob upward, the light can be controlled. Frequency switching ON/OFF may shorten the lamp life.

③ Input connector

Terminal for output cable

● Connector

	Flat luminous panel		Power Supply	
	CNA	CN1B	CN2B	
	ELR-09V		ELR-06V	
Pin 1	+24V			
Pin 2	+24V	Input 0-5V		
Pin 3	+24V	GND		
Pin 4	0V	INT/EXT SW		
Pin 5	0V	N.C		
Pin 6	0V	F.G		
Pin 7	CONT.+	-		
Pin 8	CONT.-	-		
Pin 9	F.G.	-		

● Ordering code

Flat panel illuminator	Consisting of :			Input current(mA)		Wattage consumption(W)	
	Flat panel	Power supply		100V	200/240V	100V	200/240V
HF-SL-A214LC-SWD	HF-SL-A214-LC	SWD-MT2		287	111	291	269
HF-SL-A312LC-SWD	HF-SL-A312-LC	SWD-MT2		183	72	188	179
HF-SL-A48LCG-SWD	HF-SL-A48LCG	SWD-MT5		112	44	115	108
HF-SL-100WLCG-SWD	HF-SL-100WLCG	SWD-MT5		30	13	31	32

※ Please specify your input voltage. AC100V(85~132V) or AC200V(170~260V)
※ Please choose the type of AC Power plug. (ref. P. 22)

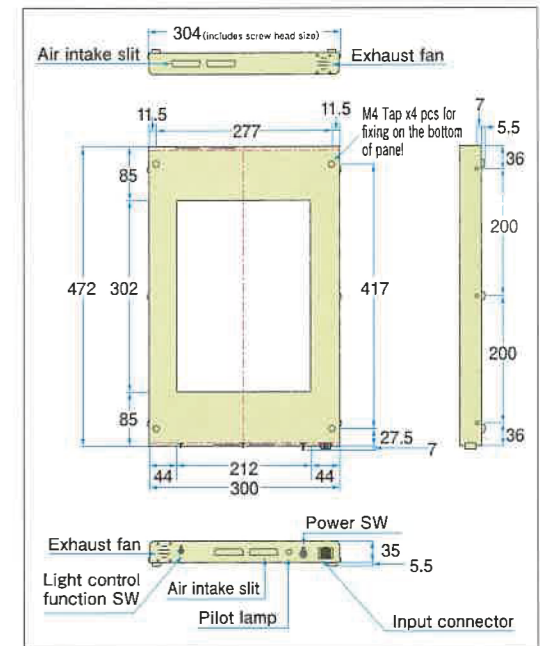
A4 HF-SL-A48LCG

Luminance : 10,000cd/m²
Brightness at the light emitting surface : 27,000lx
Light emitting surface size : 302×212mm

External light control function is provided (by VR or External voltage)



● Dimension



● Specifications

Light control function	By Volume of the power supply or External voltage	Balance of brightness	90%
Light control range	100%~60%	Operation frequency	34kHz±10kHz
Input voltage(at DC24V)	DC24V±10%	Operating temperature range	5°C~35°C
Input current(at DC24V)	2.5A	Operating humidity range	5%~85% Non-condensing
Lamp current	32mA±10%	Size of flat luminous panel	472×300×35mm
Lamp wattage(for each lamp)	6W	Weight	2.5kg
Brightness at the light emitting surface	27,000lx	Size of light emitting surface	302×212mm
Luminance	10,000cd/m ²	Applicable lamp	FS-400ND (×8pcs)
		Applicable power supply	SWD-MT5

● Ordering code

Flat panel illuminator	Consisting of :		
	Flat panel	Power supply	Cable
HF-SL-A48LCG-SWD	HF-SL-A48LCG	SWD-MT5	99Cable

100mm×100mm HF-SL-100WLCG

Luminance : 9,000cd/m²
Brightness at the light emitting surface : 27,000lx
Light emitting surface size : 100×100mm

External light control function is provided (by VR or External voltage)



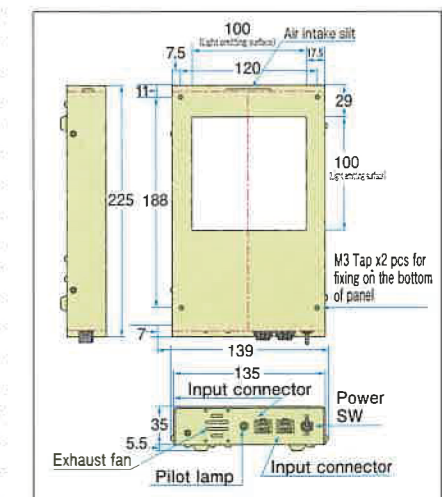
● Specifications

Light control function	By Volume of the power supply	Balance of brightness	80%
Light control range	100%~60%	Operation frequency	34kHz±10kHz
Input voltage(at DC24V)	DC24V±10%	Operating temperature range	5°C~35°C
Input current(at DC24V)	0.5A	Operating humidity range	5%~85%(Non-condensing)
Lamp current	32mA±10%	Size of flat luminous panel	225×135×35mm
Lamp wattage(for each lamp)	4.2W	Weight	600g
Brightness at the light emitting surface	27,000lx	Size of light emitting surface	100×100mm
Luminance	9,000cd/m ²	Applicable lamp	FU-150NEX/T7P (×2pcs)
		Applicable power supply	SWD-MT5

● Ordering code

Flat panel illuminator	Consisting of :		
	Flat panel	Power supply	Cable
HF-SL-100WLCG-SWD	HF-SL-100WLCG	SWD-MT5	49Cable

● Dimension



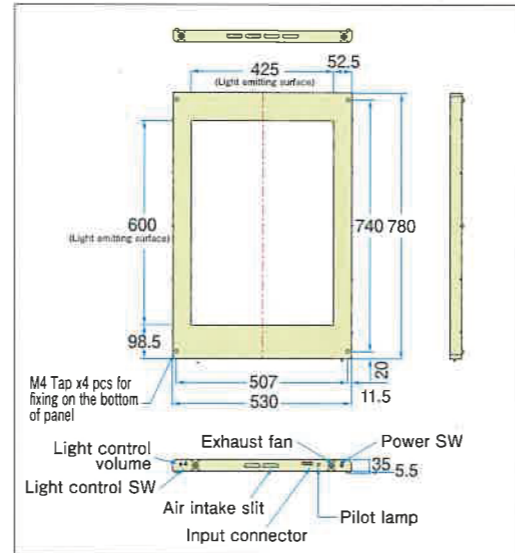
A2 HF-SL-A214-LC



Luminance : 8,800cd/m²
 Brightness at the light emitting surface : 24,000lx
 Light emitting surface size : 600×425mm

Light control by Volume of flat panel

Dimension



Ordering code

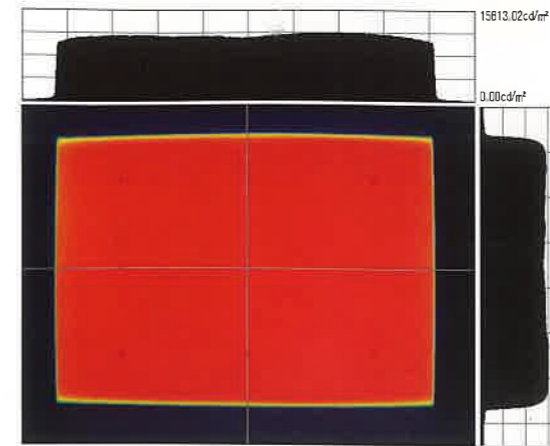
Flat panel illuminator	Consisting of :	
	Flat panel	Power supply
HF-SL-A214-LC-SWD	HF-SL-A214-LC	SWD-MT2

Specifications

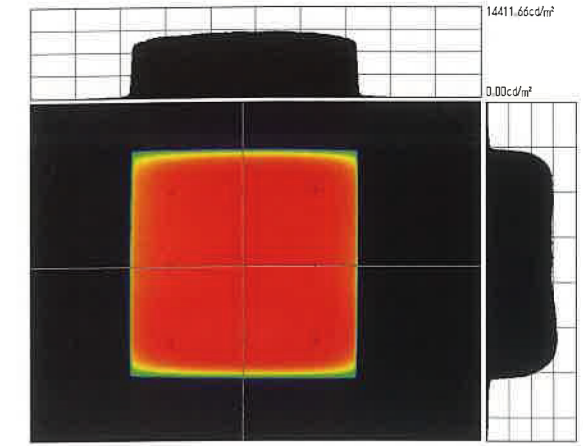
Light control function	By Volume of the flat panel	Balance of brightness	90%
Light control range	100%~60%	Operation frequency	34kHz±10kHz
Input voltage(at DC24V)	DC24V±10%	Operating temperature range	5°C~35°C
Input current(at DC24V)	7.2A	Operating humidity range	5%~85% Non-condensing
Lamp current	30mA±10%	Size of flat luminous panel	780×530×35mm
Lamp wattage(for each lamp)	10W	Weight	6.5kg
Brightness at the light emitting surface	24,000lx	Size of light emitting surface	600×425mm
Luminance	8,800cd/m ²	Applicable lamp	FS-700ND (×14pcs)
		Applicable power supply	SWD-MT2

Luminance distribution

Measuring instrument : ZERO-CORE / ZERO-M



[HF-SL-A312LC-SWD]
 Light control volume : MAX
 Average luminance : 11,500cd/m²
 Uniformity : 92%



[HF-SL-100WLCCG-SWD]
 Light control volume : MAX
 Average luminance : 10,500cd/m²
 Uniformity : 87%

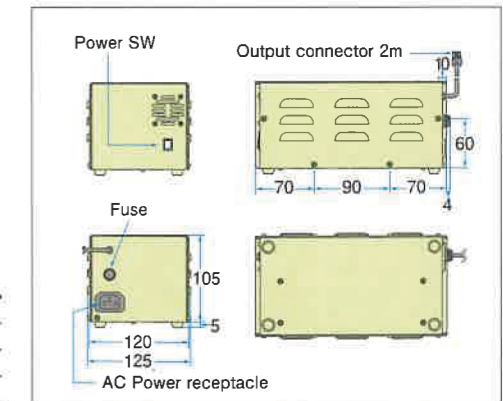
Power supply

SWD-MT2

input AC100V~120V



Dimension



Specifications

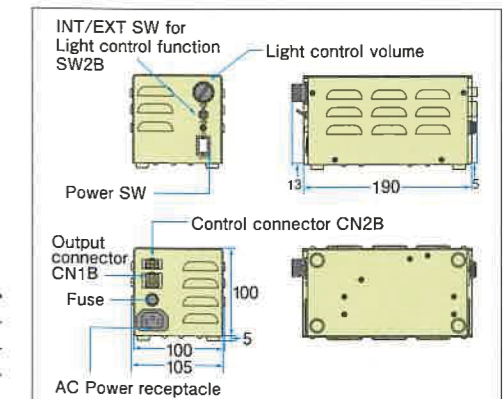
Input voltage Vin	AC85V~AC132V 50/60Hz	Operation temperature range	0°C~50°C
Output current I out	10A MAX	Operation humidity	5%~85%RH
Output current V out	DC24V	Outer size	230×120×105mm
Light control range	100%~60%(by VR of the flat panel)	Weight	2.5kg

SWD-MT5

input AC100V~120V
 with Light control function



Dimension



Specifications

Input voltage Vin	AC85V~AC132V 50/60Hz	Operation temperature range	0°C~50°C
Output current I out	5A MAX	Operation humidity	5%~85%RH
Output current V out	DC24V	Outer size	190×100×100mm
Light control range	100%~60%	Weight	1.4kg

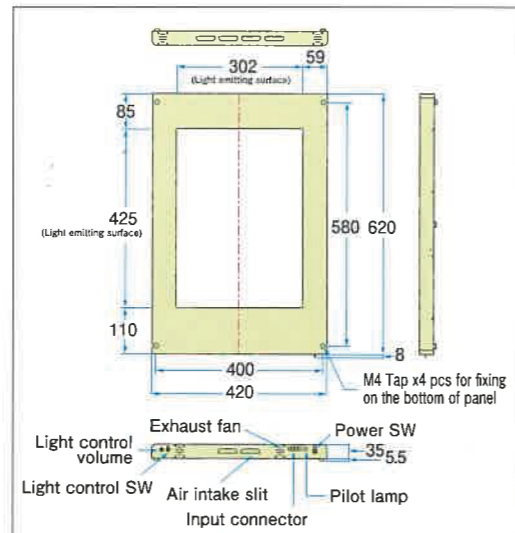
A3 HF-SL-A312-LC



Luminance : 10,000cd/m²
 Brightness at the light emitting surface : 26,000lx
 Light emitting surface size : 425×302mm

Light control by Volume of flat panel

Dimension



Ordering code

Flat panel illuminator	Consisting of :	
	Flat panel	Power supply
HF-SL-A312-LC-SWD	HF-SL-A312-LC	SWD-MT2

Specifications

Light control function	By Volume of the flat panel	Balance of brightness	90%
Light control range	100%~60%	Operation frequency	34kHz±10kHz
Input voltage(at DC24V)	DC24V±10%	Operating temperature range	5°C~35°C
Input current(at DC24V)	4.7A	Operating humidity range	5%~85% Non-condensing
Lamp current	32mA±10%	Size of flat luminous panel	620×420×35mm
Lamp wattage(for each lamp)	8W	Weight	4.2kg
Brightness at the light emitting surface	26,000lx	Size of light emitting surface	425×302mm
Luminance	10,000cd/m ²	Applicable lamp	FS-530ND (×12pcs)
		Applicable power supply	SWD-MT2