



# FLAT SERIES

## Solar Streetlight

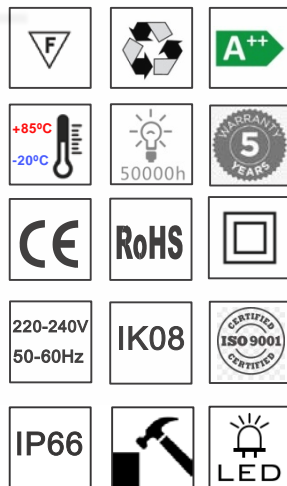


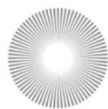
 **SSFL** The solar light is a solar-powered LED lighting solution that can be used at any location where there is no mains power supply. Thanks to its timeless prizewinning design, the Flat series is excellent for lighting modern urban space as well as protected monumental structures. The ingenious operating system guarantees flawless function for several nights even during the worst weather.

 **SSFL** La luce solare è una soluzione di illuminazione a LED a energia solare che può essere utilizzato in qualsiasi luogo privo di alimentazione di rete. Grazie per il suo design senza tempo, pluripremiato, la serie Flat è eccellente per l'illuminazione spazio urbano moderno e strutture monumentali protette. L'ingegnoso il sistema operativo garantisce un funzionamento impeccabile per diverse notti anche durante il peggior tempo.

### TECHNICAL DATA

Type	Solar Streetlight
Installation	Pole Top
Housing	Die-cast aluminium
Processing	Powder Coated
Diffuser	Safety Glass
Glow wire test	850°
Safety Class	II
Direct Mounting on Normal Flammable Surface	Yes
Driver Included	Yes
Adjustable	Yes

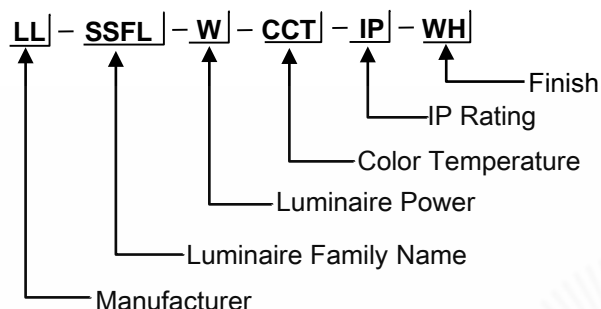




# LA LUCE

LIGHT - DESIGN - MORE

## ORDERING CODE



Code No.	System Power (W)	Lumen Output (lm)	Luminaire Efficacy (lm/W)	CRI
<input type="checkbox"/> SSFL-12W	12	1860	155	>90
<input type="checkbox"/> SSFL-15W	15	2325	155	>90
<input type="checkbox"/> SSFL-20W	20	3100	155	>90
<input type="checkbox"/> SSFL-30W	30	4650	155	>90
<input type="checkbox"/> SSFL-40W	40	6200	155	>90
<input type="checkbox"/> SSFL-50W	50	7750	155	>90
<input type="checkbox"/> SSFL-60W	60	9300	155	>90
<input type="checkbox"/> SSFL-80W	80	12400	155	>90
<input type="checkbox"/> SSFL-100W	100	15500	155	>90
<input type="checkbox"/> SSFL-120W	120	18600	155	>90

## COLOR TEMPERATURE OPTION



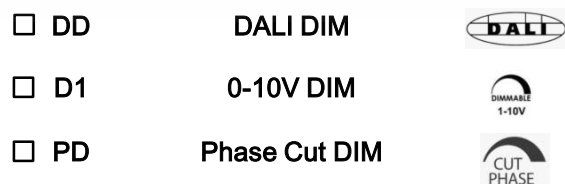
## BEAM ANGLE OPTION



## FINISH OPTION



## CONTROL OPTION



## LED CHIPS

OSRAM

CREE

TRIDONIC

TCLED

SEOUL

Panasonic

bridgelux

NICHIA

LUMINUS

CITIZEN ELECTRONICS CO., LTD.

LUMILEDS

more information in [www.la-luce.it](http://www.la-luce.it)

## LED DRIVERS



TRIDONIC



DONE

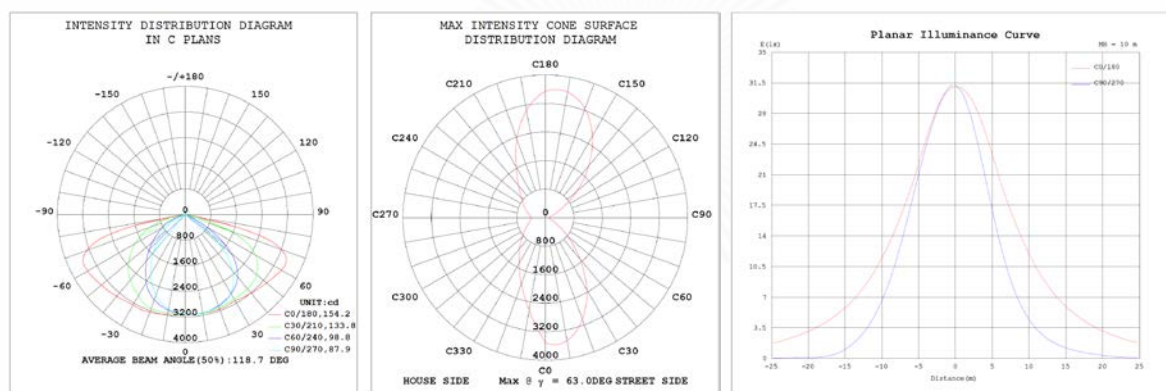


PHILIPS

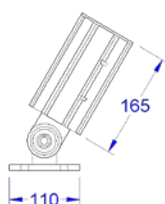
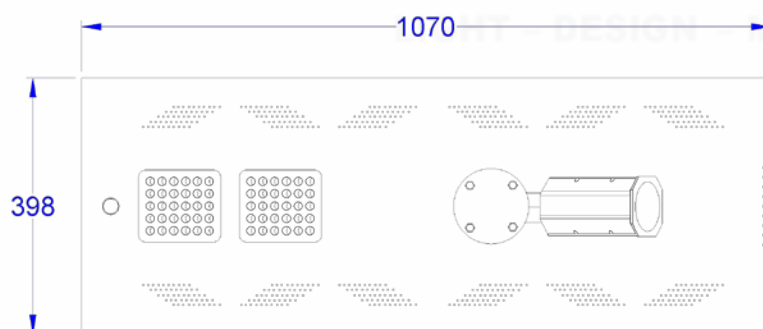
Helvar

OSRAM

## PHOTOMETRIC



## 3D MODULE



## SOLAR PANEL:

- Quality solar cells with high solar energy conversion up to 24%
- Mono-crystalline silicon solar cells.
- Transparent low-iron tempered glass and anodized aluminum frame to ensure modules working in extreme outdoor environment
- span up to 25 years ( 90% power output for 10 years, and 80% power output for 25 years)



Item No:	Mono-120W
Solar Cell:	156 Mono
Maximum Power(W):	120
Optimum Power Voltage (Vmp)	18
Optimum Operating Current (Imp)	6.66
Open Circuit Voltage (Voc)	21.24
Short Circuit Current (Isc)	7.32
Size of Module(mm)	1070*398*4.5mm
Front Glass Thickness(mm)	3.2mm
Temperature Coefficients of Isc (%)°C	0.065+/-0.015%/°C
Temperature Coefficients of Voc (%)°C	_(22.3+/-0.1) mV°C
Temperature Coefficients of Pm (%)°C	_(0.5+/-0.05)/°C
Temperature Coefficients of Im (%)°C	+0.1/°C
Temperature Coefficients of Vm (%)°C	-0.38/°C
Temperature Range	-40°C to +85°C
Tolerance Wattage(e.g. +/-5%)	±3%
Surface Maximum Load Capacity	6 0m/ s ( 5 k g / s q .m)
Allowable Hail Load	23m/s ,7.53g
Weight Per Piece(KG)	4.5
Junction Box Type	Pass the CE,IEC 61215
Cell Efficiency (%)	22%
FF (%)	70-72%

## BATTERY DETAILS:

- LiFePO4 battery 12.8V 48AH
- In-ground solution and on-pole solution are available.
- Completely maintenance-free
- Long service life 5-8 Years
- Environmental & Non-pollution
- Safety & Reliability



Model:	IFR26650-35A(EV)
Nominal capacity	3500mAh @1C
Nominal voltage	3.20V
Max Charging voltage	3.65 ±0.05 V
Discharge ending voltage	2.00 ±0.05 V
Energy density	129 Wh / Kg
Standard charge current	0.5C
Max charge current	1C
Standard discharge current	1C
Max discharge current:	5C
Max recommended charge and discharge cell surface temperature:	Charge: 0 ~ 55°C Discharge: -20 ~ 65°C
Storage environment:	1year : -20 ~ 25°C 85%RH Max 3months : -20 ~ 45°C 90%RH Max 1month : -20 ~ 60°C 90%RH Max
Internal resistance:	≤18mΩ (AC Impedance, 1000 Hz)
Cell dimension:	Height:65.5mm, Diameter: 26.9mm
Voltage:	3.32V ~ 3.34V
Weight:	About 88g

### Cautions:

- If the cell leaks and the electrolyte get into your eyes, don't wipe eyes, instead, thoroughly rinse the eyes with clean running water for at least 15 minutes, and immediately seek medical attention. Otherwise, eyes injury can result.
- If the cell gives off an odor, generates heat, becomes discolored or deformed, or in any way appear abnormal during usage, recharging or storage, immediately remove it from the device or cell charger and stop using it.
- In case the cell terminals get dirty, clean the terminals with a dry cloth before use.
- If the cell beyond the useful-life, please fully discharged, sticks the cell with insulating tape, then put the cell to the specialized recycle bin.

## CONTROLLER & SENSOR:

- Three types advanced controller provide three optimal solar solutions with different function and cost.
- Features
- IP67 Water proof protection
- PWM charging mode with high charging efficiency
- Protection for over charge, over discharge, over load and anti-reverse connection

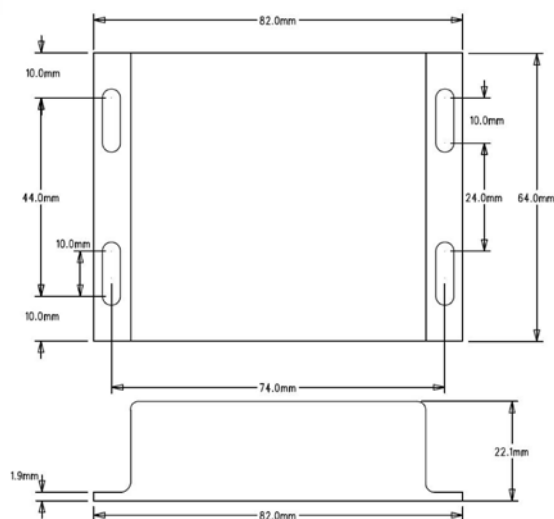


Model No:	9108A3 (boost induction)
suitable for batteries	Lithium battery 12V/24V. / Colloid battery 12V/24V.
LED lamp holder:	voltage $\leq 36V$ .
Solar panel charging current	$\leq 8A$ .
driving current:	20MA-2000MA.
output current accuracy error:	$< 3\%$ .
maximum conversion efficiency:	96%.
Battery overcharge protection voltage:	can be set.
Battery overcharge return voltage:	can be set.
Battery under voltage protection voltage:	can be set.
exit under voltage protection voltage:	can be set.
Optically controlled voltage:	can be set.
Protection function:	protection against overvoltage, overheating, overpower, open circuit, short circuit, reverse connection, etc.
Shell material of the controller:	industrial cast aluminum.
Protection level:	IP67.
temperature control:	can be set (upper and lower temperature limits for charging and discharging of lithium batteries).
Power saving intelligent management:	can be set (automatic power reduction according to battery capacity).
Human body sensing:	infrared / microwave sensing, induction delay can be set according to actual requirements.

## STATUS INDICATION

Indicator light	Status	Indicator light description
Blue light (battery)	Bright	The battery charge is normal.
	Out	No output voltage of battery
	Flash	Battery under voltage
Red light (photovoltaic)	Bright	The battery is in a state of charging saturation.
	Out	The output voltage of the solar panel is lower than the light voltage (dark night)
	Flash	solar panels are charging the battery
	Slow flash	During the charging process, the protection is started because the temperature is too high or too low.
Green light (load)	Bright	The light is on, and the load has output.
	Out	The light is turned off, and the load has no output.
	Flash	Load output open circuit protection, short circuit protection, over current protection, over power protection
	Slow flash	In the process of slow flash discharge, the protection is started because the temperature is too high or too low.
Yellow light (induction).	Bright	Sense that someone is walking or an object is moving (the controller with induction has this light)
Red, green and blue lights take turns flashing:		Battery protection board protection, the system is opening and restarting the battery protection board (the indicator light is the power supplied by the solar panel at this time).

## CONTROLLER DIMENSION:



## SENSOR DIMENSION:

