Motion Activated Solar LED Street Lighting

SSL-B Series: Solar LED street lighting with microwave motion detection in 30W, 50W & 60W models

The ENSA™ SSL-B Series comprises motion-activated, solar-powered LED street lights, designed to deliver standalone lighting to outdoor locations without mains power access. SSL-B Series models couple monocrystalline silicon solar panel technology and high capacity lithium iron phosphate (LiFePO4) batteries for efficient use & extended operating time.

Models feature a customisable motion detection system that can be configured for street, area & security lighting, and other off-grid outdoor lighting purposes. They are ideal for use in remote or under-developed locations such as on rural roads, at remote fences/gates, in construction sites, and in general street lighting applications.

- Outstanding energy efficiency at >180lm/W performance
- Up to 21% conversion rate monocrystalline solar panels
- Dusk/dawn switch, motion sensing & on-time delay
- Configure power output for different times of the day

- 60° tilt-adjustable LED modules for lighting customisation
- Multiple days of use from full charge (sensor mode, overcast)
- LED available in 5700K cool white colour temperature
- IP65 weather rated with included bird guard (optional)

Contact your local ENSA™ supplier for full warranty details.

Superb off-grid lighting

Superior lighting in challenging locations

SSL-B Series Solar LED Street Lights offer superb lighting results for an off-grid system. Models feature incredible light output and LED lifespan, making them an ideal long-term street or area lighting solution for locations without access to mains power.

- High efficiency +180lm/W LED lighting module
- 50,000hrs LED lifespan & microwave motion sensing
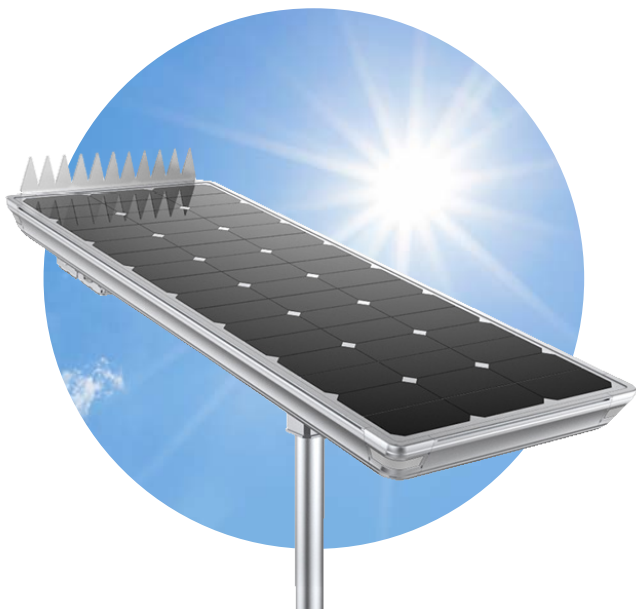- Adjustable LED light module, tilt -30° ~ 30°

Latest solar technology

Excellent solar energy generation & storage

SSL-B Series monocrystalline solar panels are built for high performance with large panel surface area to maximise solar energy generation. Models are paired with the latest lithium battery technology for increased light uptime, even in extended periods of sub-optimal solar generation conditions.

- Monocrystalline panel for ≥21% panel conversion
- Lithium iron phosphate batteries (LiFePO4)
- Multiple days of light uptime across the range

Optimise your solar light

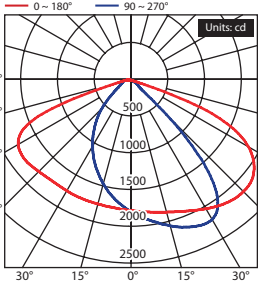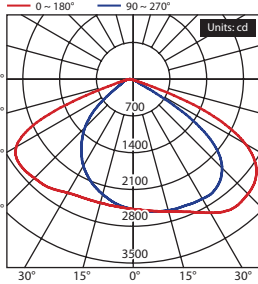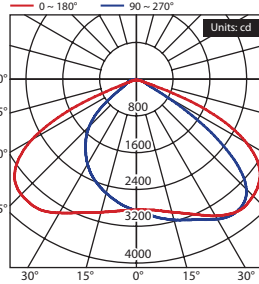## Fully configure your LED solar lighting system

Customise SSL-B Series Solar LED Street Lights to your exact specifications quickly via infrared remote control. Monitor system health, set motion detection properties and configure as per your application requirements.

- Panel & battery control and panel-driven dusk/dawn
- Configure light output for up to 5 time periods
- Setup motion detection lighting with motion sensor adjustment & dimmed light output levels
- Set custom on-time delay from 0s up to 120s

Series Specifications

Model	SSL-B20	SSL-B30	SSL-B50	SSL-B60
Product Image				
Series Name	SSL-B Series Motion Activated Solar LED Street Lights			
Light				
Light Output	3900lm	5500lm	9400lm	11100lm
Luminous Efficacy	>180lm/W			
Colour Temperature	5700K Cool White			
Beam Angle	145° x 75°		145° x 100°	
Rated LED Lifespan	50,000hrs			
LED Testing	LM80 / TM21 (available on request)			
Power Consumption	20W	30W	50W	60W
Internal Battery	218Wh LiFePO4	320Wh LiFePO4	500Wh LiFePO4	1200Wh LiFePO4
Input Voltage	12.8VDC	12.8VDC	12.8VDC	25.6VDC
Operating Time	72~120 hours (intelligent mode, rainy weather)		120~168 hours (int. mode, rainy weather)	
Light Bracket	Adjustable bracket angle -30° ~ 30°			
Solar Panel				
Panel Type	Monocrystalline silicon			
Panel Wattage	56W	80W	120W	180W
Panel Conversion Rate	≥21%			
Panel Bracket	Adjustable bracket angle -60° ~ 60°			
Rec. Install Height	5 ~ 7m		8 ~ 10m	
Detection				
Motion Detection	Microwave motion sensor			
Detection Range	Ø8 ~ 15m (height: 5 ~ 7m)		Ø8 ~ 15m (height: 8 ~ 10m)	
Light Mode Settings — Normal	Mode time period / Brightness			
Light Mode Settings — Morning	Mode time period / Brightness			
Light Mode Settings — Sensor	Mode time period / Brightness on motion / On-time delay / Brightness after motion			
General				
Ingress Protection	IP65			
Pole Diameter	Ø50~60mm			
Product Dimensions	821 x 450 x 161mm	1015 x 525 x 161mm	1321 x 525 x 161mm	1496 x 685 x 161mm
Photometry				
Luminous Light Distribution				

Ordering Information

Type	Series	Wattage	Sensor Type	Colour Temperature
SSL	- B	20 (20W LED light) 30 (30W LED light) 50 (50W LED light) 60 (60W LED light)	M (Microwave)	C (Cool white)

SSL-B60MC: 60W Motion Activated Solar LED Street Light in Cool White
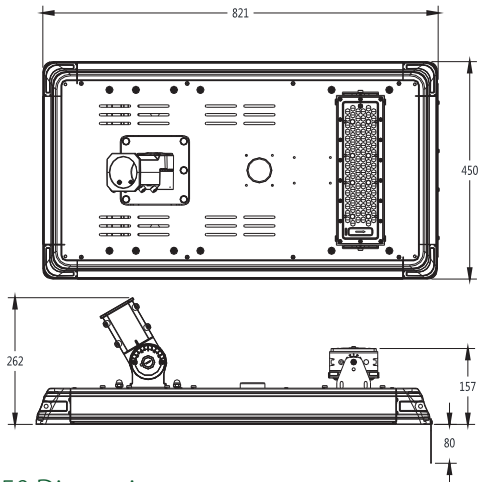
Included Accessories

Check status and adjust settings of the SSL-B Series with the included infrared configuration remote.

Control motion sensor operation, battery charge/discharge settings, allocate light power and more.
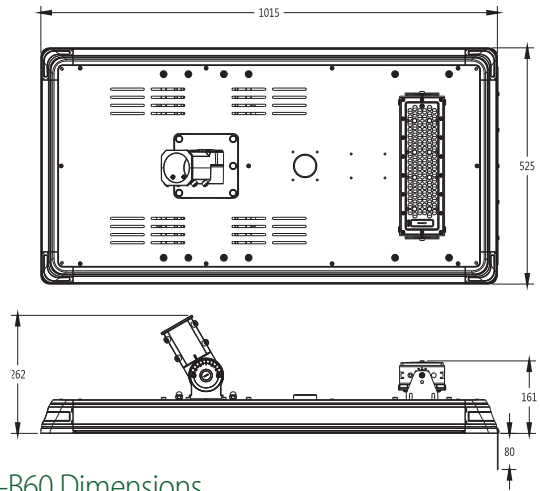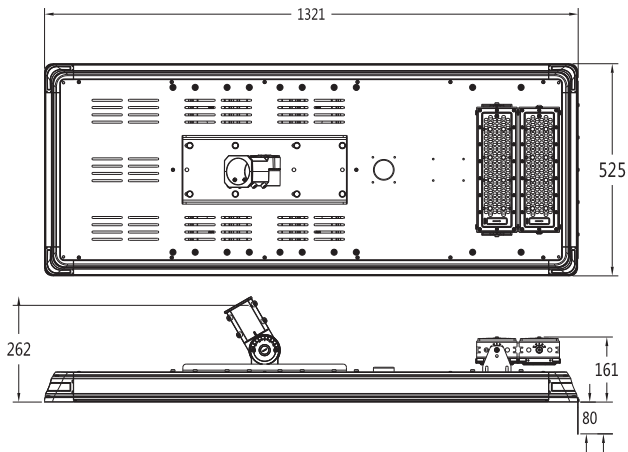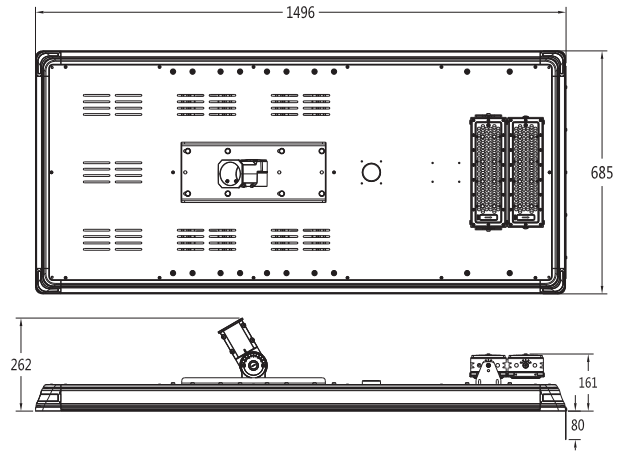
Series Diagrams

SSL-B20 Dimensions

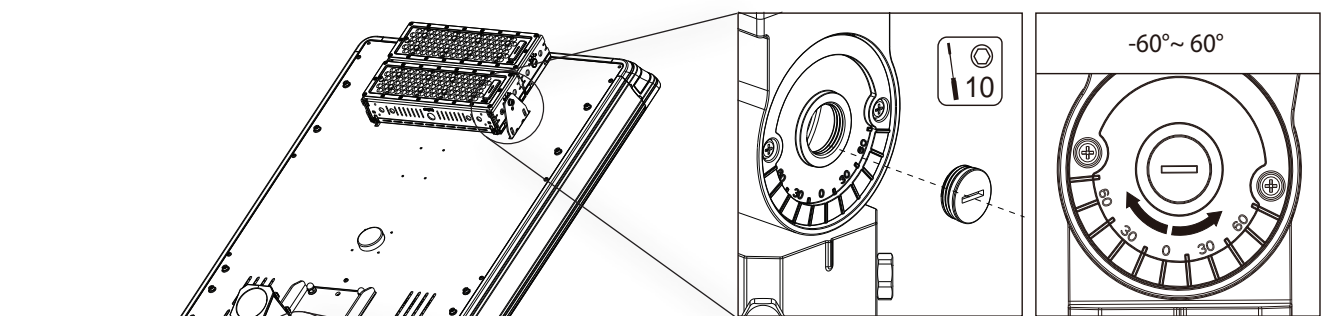
SSL-B30 Dimensions

SSL-B50 Dimensions

SSL-B60 Dimensions

Light Angle Adjustment

-60°~ 60°

Solar Panel Angle Adjustment

-30° ~ 30°