



A Smart Renewable Energy Solution

## A1 Series

## All-in-One Integrated

# Solar LED Street Light

## **Specifications**

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Hitechled Optoelectronics Co.,Ltd.



#### **Brief Introduction:**

All-in-one integrated solar led street light is a new kind of solar led street light for the road and/or area lighting. It is an green and clean renewable energy product. It integrates the high efficient solar panel, super high-output LED lamp, powerful LiFePO4 lithium battery and a smart power management controller system into a slim compact body. In addition, there is a light sensor on the lamp. At daytime, the solar panel can absorb the solar energy for battery charging, while at dusk, the LED lamp will be on automatically and the battery will supply the energy to the lamp for area illumination. What's more, the lamp can be customized with motion sensor or time control mode. Its brightness standard can be adjusted by movement or time schedule. The system continuously monitors the remaining battery charge and regulates light output automatically to extend operating time. It is extremely versatile, robust and prefect suit for those areas where there is sufficient sunlight. It is 100% powered by solar. It has solved the problem of complex installation and expensive transportation compared with traditional solar LED street light. No external cables, then it is very easy for the installation. It is extremely suit for those places where grid power is not available or wiring is not economical or convenient.

#### **Key Features:**

- Solar panel, LED lamp, battery, controller all-in-one integrated compact design;
- No external wires or cables needed; Friendly easy installation;
- Using high brightness Bridgelux/Cree chips(LM80) from USA, efficiency upto 200LM/W;LED lamp upto 140LM/W~180LM/W
- Professional optical lens design adopts light transmittance over 95%, light utilization over 60%;
- IP65 modular LED lamp with fast assembly connector;
- High quality monocrystalline PV adopt over 20% conversion efficiency(IPCE);
- MSDS passed high quality lithium Ion battery adopt lifetime over 2000cycles(5~8 years);
- 100% solar powered green renewable energy;
- Auto turn on at dusk and turn off at dawn;
- PIR motion sensor optional, help to save more power;
- Unique elegant combined anti-storm profile design adopts corrosion protection;
- Different LED lamp source available

#### Benefits:

- Small volume helps to save freight cost and storage cost;
- No need trenching or wiring job ,reduce labor cost and materials cost;
- Renewable energy ,no electronic bills any more;
- Professional light distribution design eliminate the light waste;
- High quality durable components ensure 5 to 8 years minimum maintenance;
- User friendly. Plug & Play design. Fast installation. No need training;
- Green light reduce fossil fuel consumption, eliminating pollution;
- Battery backup for cloudy and rainy days;
- IP65 design suitable for any place where is sufficient sunshine;

#### **Applications:**

Street, residential road, parking lot, pathway, ramp, farm & ranch lighting, wildlife area, dock& pier, military, personal garden, plaza, highways.....any exterior area wherever there is sufficient sunlight.

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### HT-SS-A110 All-in-one Solar LED Light Specifications:

Parame	ter	Value
Solar panel (Monocrystalline)	Max power	10W
	Life time	25 years
Battery	Туре	3.2V 20AH or 12.8V 5AH LiFePO <sub>4</sub> battery (adjustable)
	Life time	>2,000 Circles ( more than 5 years)
	Max power	30W(drive to be 10W to 20w)
	LED chip	Cree 3030 (30pcs or 40pcs per module)
LED Lamp	Lumen (LM)	1,000-2,000lm
	Life time	50,000hours
	Viewing Angle	90° or 150°/75°
Charging time	by sun(strong)	6~7hours
	Full power	>10hours
Discharging time	Dimming mode	2 to 3 days
Working temperature	Range( ℃ )	-20℃~+65℃
Color temperature	Range(k)	6000k~6500k(optional)
Mounting height	Range (m)	2.5m-4m(suggested) PIR sensor/Time control<8m; Time control>8m;
Space between light	Range (m)	5m-8m(suggested)
Housing material	Aluminum alloy	
Certificate	CE/ROHS/IP65	
	Product size	564*215*143mm
	NW.(one unit)	6kgs
Packing & Weight	Carton size	660*310*240 mm
	Q'ty/ctn	1sets/ctn
	GW.per carton	7kgs
Container load	20GP	≤513pcs
	40GP	≤1026pcs







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<sup>\*</sup> Contents are subject to change without prior notice.



## HT-SS-A120 All-in-one Solar LED Light Specifications:

Parame	ter	Value
Solar panel (Monocrystalline)	Max power	20W
	Life time	25 years
Battery	Туре	3.2V 20AH or 12.8V 5AH LiFePO₄ battery (adjustable)
	Life time	>2,000 Circles ( more than 5 years)
	Max power	60W(drive to be 20W to 30w)
	LED chip	Cree 3030 (30pcs or 40pcs per module)
LED Lamp	Lumen (LM)	2,000-3,000lm
	Life time	50,000hours
	Viewing Angle	90° or 150°/75°
Charging time	by sun(strong)	6~7hours
	Full power	>10hours
Discharging time	Dimming mode	2 to 3 days
Working temperature	Range( ℃ )	-20℃~+65℃
Color temperature	Range(k)	6000k~6500k(optional)
Mounting height	Range (m)	3m-5m(suggested) PIR sensor/Time control<8m; Time control>8m;
Space between light	Range (m)	8m-15m(suggested)
Housing material	Aluminum alloy	
Certificate	CE/ROHS/IP65	
Packing & Weight	Product size	834*215*143mm
	NW.(one unit)	10kgs
	Carton size	935*310*240 mm
	Q'ty/ctn	1sets/ctn
	GW.per carton	12kgs
Container load	20GP	≤378pcs
	40GP	≤765pcs







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### HT-SS-A130 All-in-one Solar LED Light Specifications:

Parameter		Value
Solar panel (Monocrystalline)	Max power	30W
	Life time	25 years
Battery	Туре	3.2V 36AH or 12.8V 9AH LiFePO <sub>4</sub> battery (adjustable)
	Life time	>2,000 Circles ( more than 5 years)
	Max power	90W(drive to be 30W to 40w)
	LED chip	Cree 3030 (30pcs or 40pcs per module)
LED Lamp	Lumen (LM)	3,000-4,000lm
	Life time	50,000hours
	Viewing Angle	90° or 150°/75°
Charging time	by sun(strong)	6~7hours
<u></u>	Full power	>10hours
Discharging time	Dimming mode	2 to 3 days
Working temperature	Range( °C )	-20℃~+65℃
Color temperature	Range(k)	6000k~6500k(optional)
Mounting height	Range (m)	3m-6m(suggested) PIR sensor/Time control<8m; Time control>8m;
Space between light	Range (m)	10m-15m(suggested)
Housing material	Aluminum alloy	
Certificate	CE/ROHS/IP65	
	Product size	1164*215*143mm
	NW.(one unit)	13kgs
Packing & Weight	Carton size	1265*310*240 mm
	Q'ty/ctn	1sets/ctn
	GW.per carton	15kgs
Container load	20GP	≤270pcs
	40GP	≤576pcs





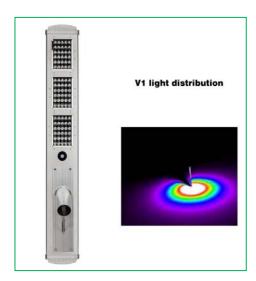


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## HT-SS-A140 All-in-one Solar LED Light Specifications:

Parameter		Value
Solar panel (Monocrystalline)	Max power	40W
	Life time	25 years
Battery	Туре	6.4V 36AH or 12.8V 18AH LiFePO <sub>4</sub> battery (adjustable)
	Life time	>2,000 Circles ( more than 5 years)
	Max power	90W(drive to be 30W to 40w)
	LED chip	Cree 3030 (30pcs or 40pcs per module)
LED Lamp	Lumen (LM)	3,000-4,500lm
	Life time	50,000hours
	Viewing Angle	90° or 150°/75°
Charging time	by sun(strong)	6~7hours
D. 1	Full power	>10hours
Discharging time	Dimming mode	2 to 3 days
Working temperature	Range( °C )	-20℃~+65℃
Color temperature	Range(k)	6000k~6500k(optional)
Mounting height	Range (m)	4m-7m(suggested) PIR sensor/Time control<8m; Time control>8m;
Space between light	Range (m)	10m-20m(suggested)
Housing material	Aluminum alloy	
Certificate	CE/ROHS/IP65	
	Product size	1587*215*60mm
Packing & Weight	NW.(one unit)	15kgs
	Carton size	1680*310*160 mm
	Q'ty/ctn	1sets/ctn
	GW.per carton	17kgs
Container load	20GP	≤270pcs
	40GP	≤576pcs







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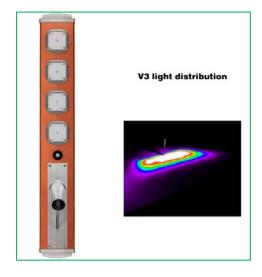


### HT-SS-A150 All-in-one Solar LED Light Specifications:

Parameter		Value
Solar panel (Monocrystalline)	Max power	50W
	Life time	25 years
Battery	Туре	6.4V 42AH or 12.8V 21AH LiFePO <sub>4</sub> battery (adjustable)
	Life time	>2,000 Circles ( more than 5 years)
LED Lamp	Max power	120W(drive to be 40W to 50w)
	LED chip	Cree 3030 (30pcs or 40pcs per module)
	Lumen (LM)	4,000-5,000lm
	Life time	50,000hours
	Viewing Angle	90° or 150°/75°
Charging time	by sun(strong)	6~7hours
B. 1	Full power	>10hours
Discharging time	Dimming mode	2 to 3 days
Working temperature	Range( °C )	-20℃~+65℃
Color temperature	Range(k)	6000k~6500k(optional)
Mounting height	Range (m)	4m-7m(suggested) PIR sensor/Time control<8m; Time control>8m;
Space between light	Range (m)	10m-20m(suggested)
Housing material	Aluminum alloy	
Certificate	CE / ROHS / IP65	
Packing & Weight	Product size	1887*215*60mm
	NW.(one unit)	17kgs
	Carton size	1980*310*160 mm
	Q'ty/ctn	1sets/ctn
	GW.per carton	19kgs
Container load	20GP	≤216pcs
	40GP	≤432pcs



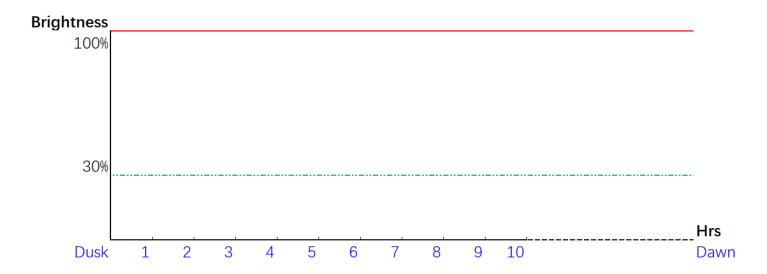




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#### **Lighting Mode:**



#### **Causions:**

- Integrated solar led street light cannot work without sunshine charging, please select the suitable product model according to the local sunshine radiation and the annual total radiation.
- Integrated solar led street light adopts the long life Lithium battery for storing energy, charging temperature at day time is between: 0°C~+65°C, when temperature goes lower than 0°C, the control system will stop automatically to protect the battery, and it will revive to charge the battery while temperature goes higher than 0°C. Discharging temperature at night is between: -20°C~+65°C, any ambient beyond will bring damage to the battery. Please confirm your local extreme temperature is suitable for above while selecting the street light.
- Battery of the "integrated solar led street light" can be stored for 4 to 6 months long after full charged, and please examine, charge it periodically after long time transportation to prevent damage.
- While installed in Northern Hemisphere, please make sure the surface of the solar panel to be facing the South to collect maximum sunshine radiation, while installed in Southern Hemisphere, please make sure the surface of the solar panel to be facing the North to collect maximum sunshine radiation. At the same tie please keep it away from any shadow of house, trees etc.
- Keep cleaning the surface of the integrated solar led street light with normal detergent to get maximum power generation, clean the dust or tree leaves or any grease.
- Please avoid installing under the shadow of trees, building and/or other blocks.