



## SSD Solar Street Light

- LiFePO4 Battery 640WH  
140 lamp beads with high efficiency
- MPPT smart control system
- 100% Brightness the whole night available



CE FC

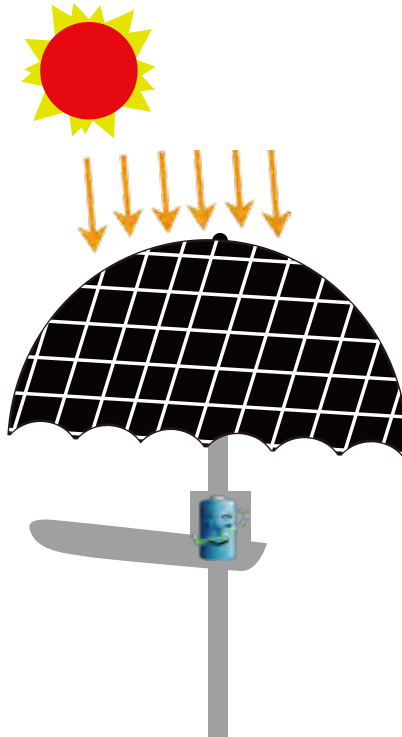
# Unique Structure Design

Integrate the solar panel, led body, battery and controller into whole system. Easy to transport, install and maintain.

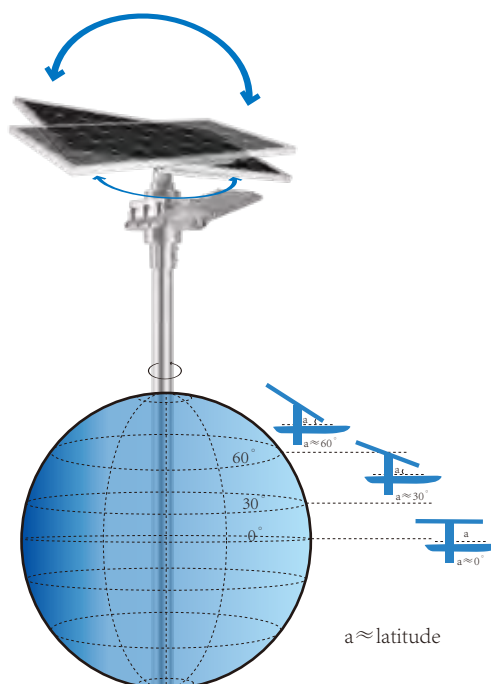


# Unique Structure Design

Solar panel looks like an umbrella to protect battery from high temperature and extend the lifetime. Perfectly solve heat dissipation.

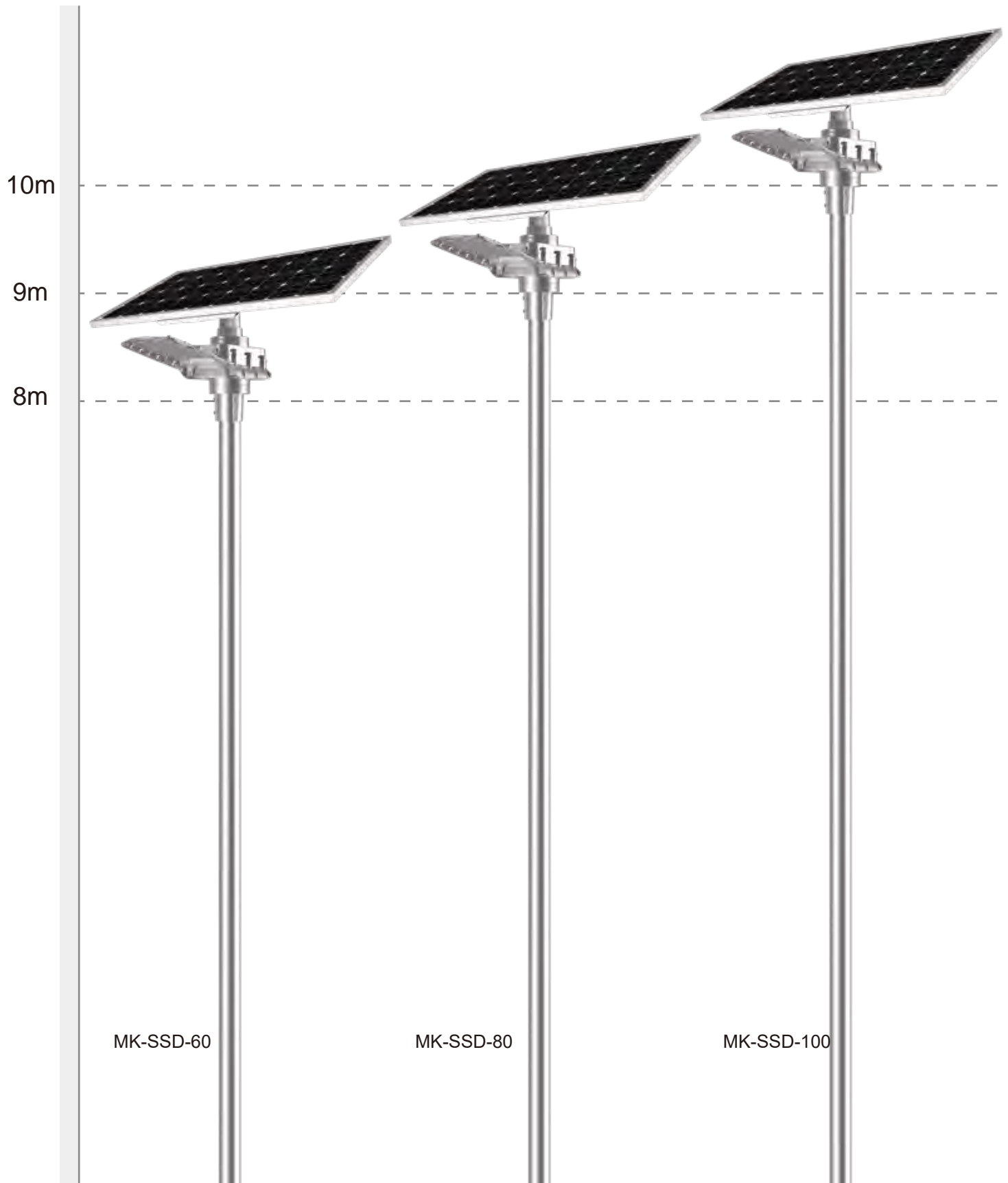


Solar panel can be adjustable manually in vertical and horizontal direction, ensure the maximum efficiency of solar energy.



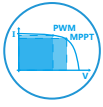
# Unique Structure Design

## Light Post Installation Height Recommendation Diagram



# Core Technologies

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## MPPT Technology

MPPT is an advanced charge mode whose full name is Maximum Power Point Tracking function which can increase the energy utilization rate by 15% to 20% than the PWM controller.



## Multi-Peak MPPT

Road Smart new patent solar controller adopts multi-peak MPPT technology, which can timely track the maximum power point and improve the conversion efficiency of solar panels.



## IPC 5.0 Technology

Through 10years' experience, Road Smart upgraded highly precise 5.0 version IPC technology (intelligent power control 5.0). It will intelligently detect recent weather conditions, reasonably plan the discharge power to achieve more rainy days.



## Dual Low-power Consumption

4pins plug technology to enables transportation power consumption less than 0.05mA, and circuit protection technology to enables the sleep power consumption in long-term transportation of storage will be at uA level, realizing worry-free storage for two years.



## ICD Technology (Intelligent Charge and Discharge)

Using Grade A LiFePO4 battery with excellent safety performance. Road Smart's unique current equalization and dual protection (software and hardware) enable the battery's capacity remains at 90% after 2000 cycles. Lifetime is 4 times longer than that of lead-acid batteries.

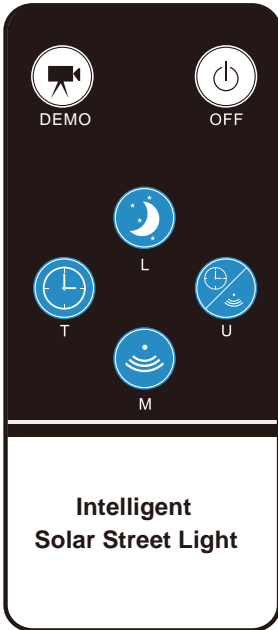








## High Efficiency LED Chips

Using high efficiency 140pcs of 5050 LED chips, optimized brightness, single lumen value>190lm/w, with the aluminum chip base makes excellent heat dissipation.

# Remote Control

6 working modes

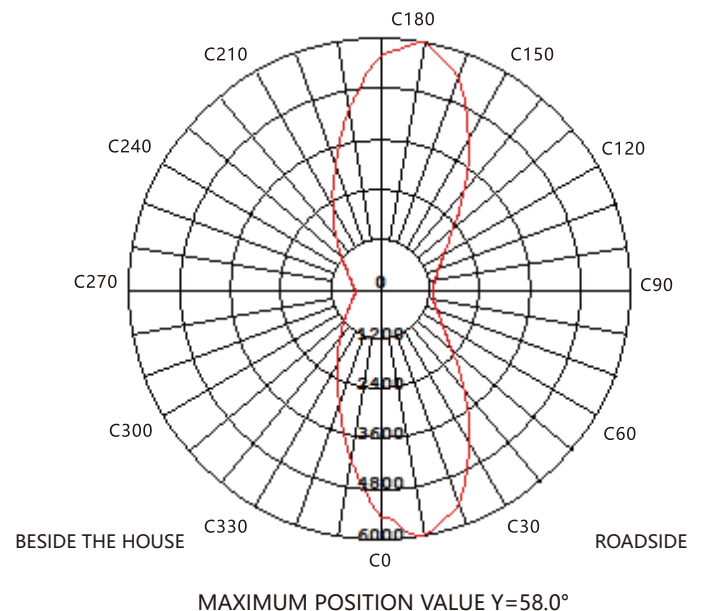
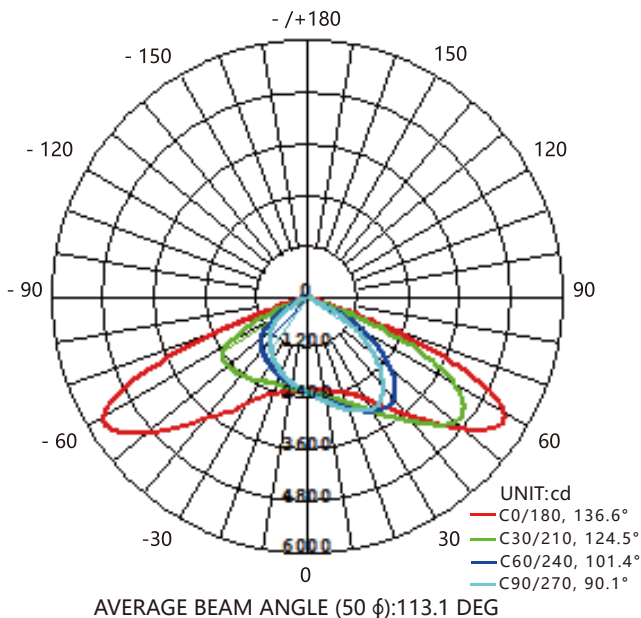


-  **DEMO:** No matter day or night, light "on" for 1 minute. Only for test use
-  **OFF:** Light "off", no matter day or night
-  **L:** At night, 100%-2hrs, 60%-3hrs, 20%-dawn
-  **T:** At night, 100%-3hrs, 50%-3hrs, 30%-2hrs:
-  **M:** At night, 100%-3hrs, 50%-3hrs
-  **U:** At night, 100%-3hrs, 50%-3hrs(Highlight mode)

- Note:
1. Default is L mode, can choose best mode according to different sunshine condition.
  2. The three LED indicator lights will twinkle if modes changing successfully.
  3. Once a certain mode was set successfully, it will be reserved until you change other modes with remote control.
  4. U Highlight mode: Increase 30% on the original basis, mean 3H-130%, 3H-80%.

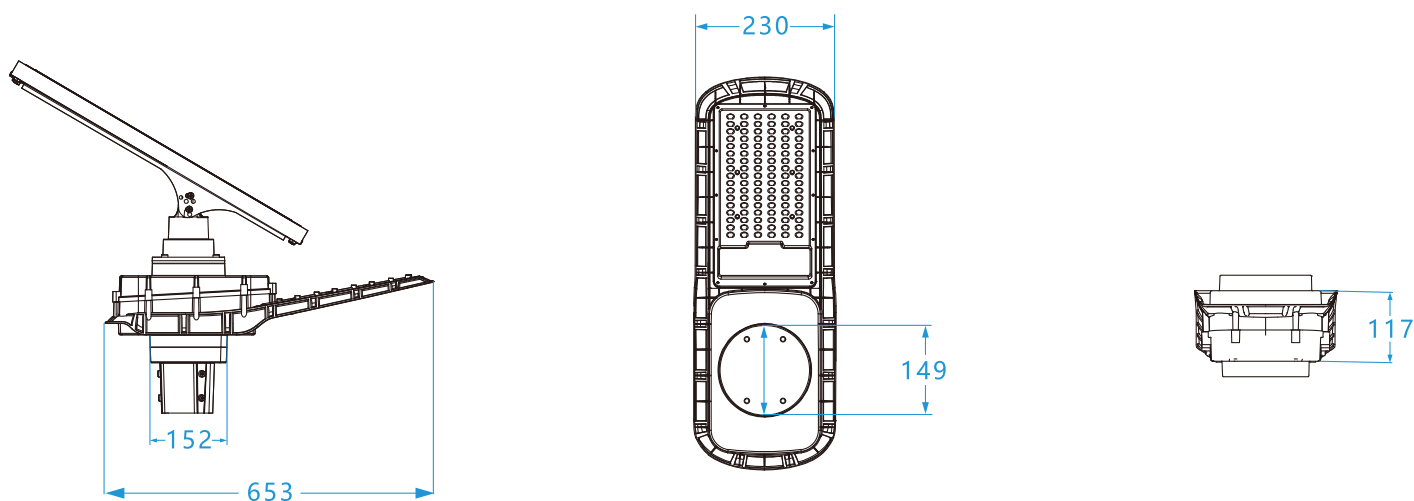
# Light Distribution

Luminous intensity distribution curves

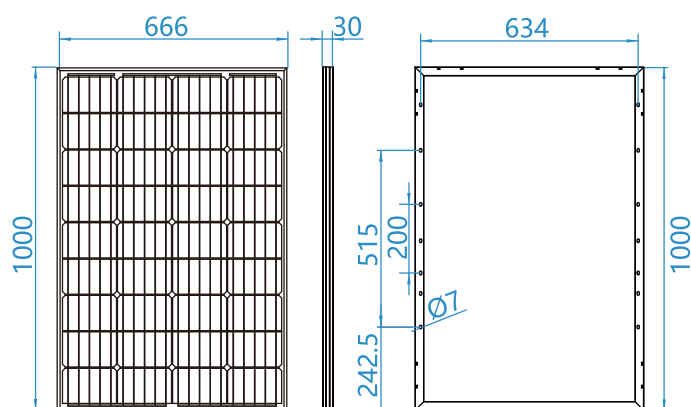


# Product Dimension

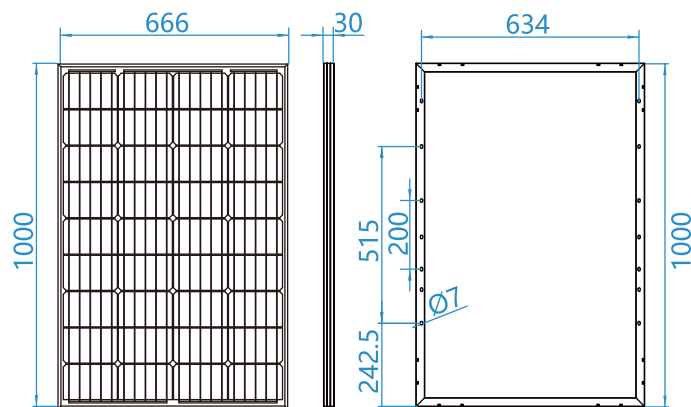
## Lamp Holder Size



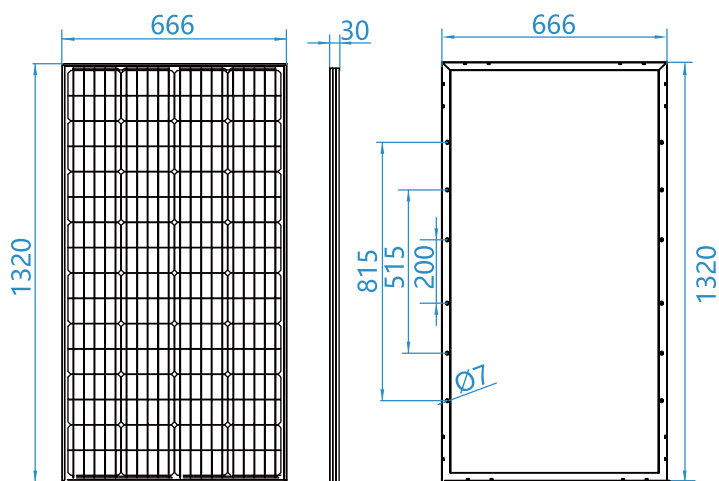
## Solar panels



100W



120W



150W

# Parameter

## Technical parameter

Type	MK-SSD-60	MK-SSD-80	MK-SSD-100	
<b>Lamp head</b>	Light output	60W	80W	100W
	LED chip	140pcs	140pcs	140pcs
	Luminous flux	9500lm-10000lm	11900lm-12600lm	13600lm-14400lm
	Beam angle	160°*45°		
	Lifespan	50000hrs		
	IP Rating	IP65		
	Working temperature	-20°C~60°C (Charge above 0°C)		
	Color temperature	3000-7500K		
	CRI	Ra≥70		
<b>SOLAR PANEL</b>	Power	100W/18V	120W/18V	150W/18V
	Voltage	18V		
	Solar cell efficiency	19%-22%		
	Material	Monocrystalline silicon		
<b>BATTERY</b>	Capacity	384WH	512WH	640WH
	Lighting time(full charged)	5-7 rainy days		
	Lithium battery	LiFePO4		
<b>INSTALLATION</b>	Top diameter of pole	76 mm		
	Mounting height	8-10M		
	Installation spacing	30-40M		



# Product Installation



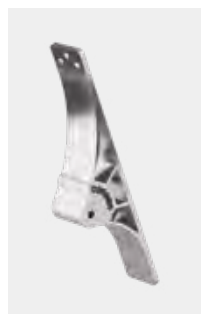
Solar panel



lamp holder



Solar panel adapter



Solar panel bracket



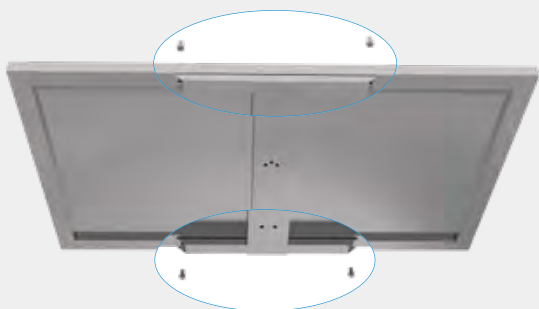
Sleeve



Bracket

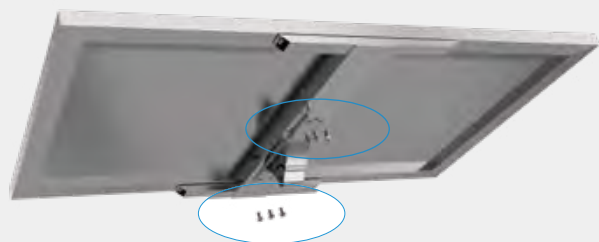
## Integrated Design Concept

①



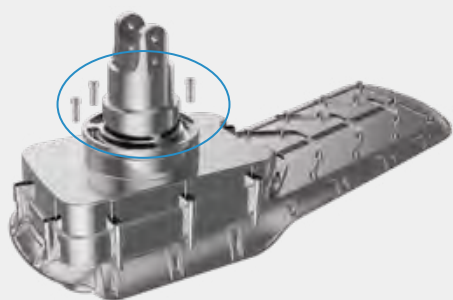
1. Fix Solar panel adapter on the panel.

②



2. Fix the panel on solar panel bracket.

③



3. Connect the locked bracket to light body.

④



4. Connect the locked panel to light body.

⑤



5. Fix the lamp body and the sleeve with 6 screws.

⑥



6. Fix the lamp body and the lamp pole with 6 screws.

# Packing

Type	Qty/ctn	Box Size(L*W*H)	Gross Weight
MK-SSD-80	Lamp body	1pc/ctn	720*310*280mm
	120W Panel	2pcs/ctn	1090*755*115mm
MK-SSD-100	Lamp body	1pc/ctn	720*310*280mm
	150W Panel	1pc/ctn	1410*755*65mm

The packaging as shown below is for reference only, the actual packaging is subject to the specific product.



Lamp body pack



Solar panel packing

# Application





# Application

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