

# SOLAR STREET LIGHT HS

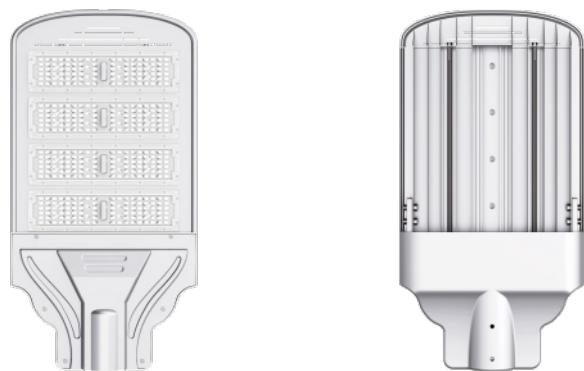
- ▶ POWER: 100W to 130W
- ▶ LiFePO4 Battery 1920WH
- ▶ MPPT smart control system





Three lamp heads to choose from

HS-A



HS-B

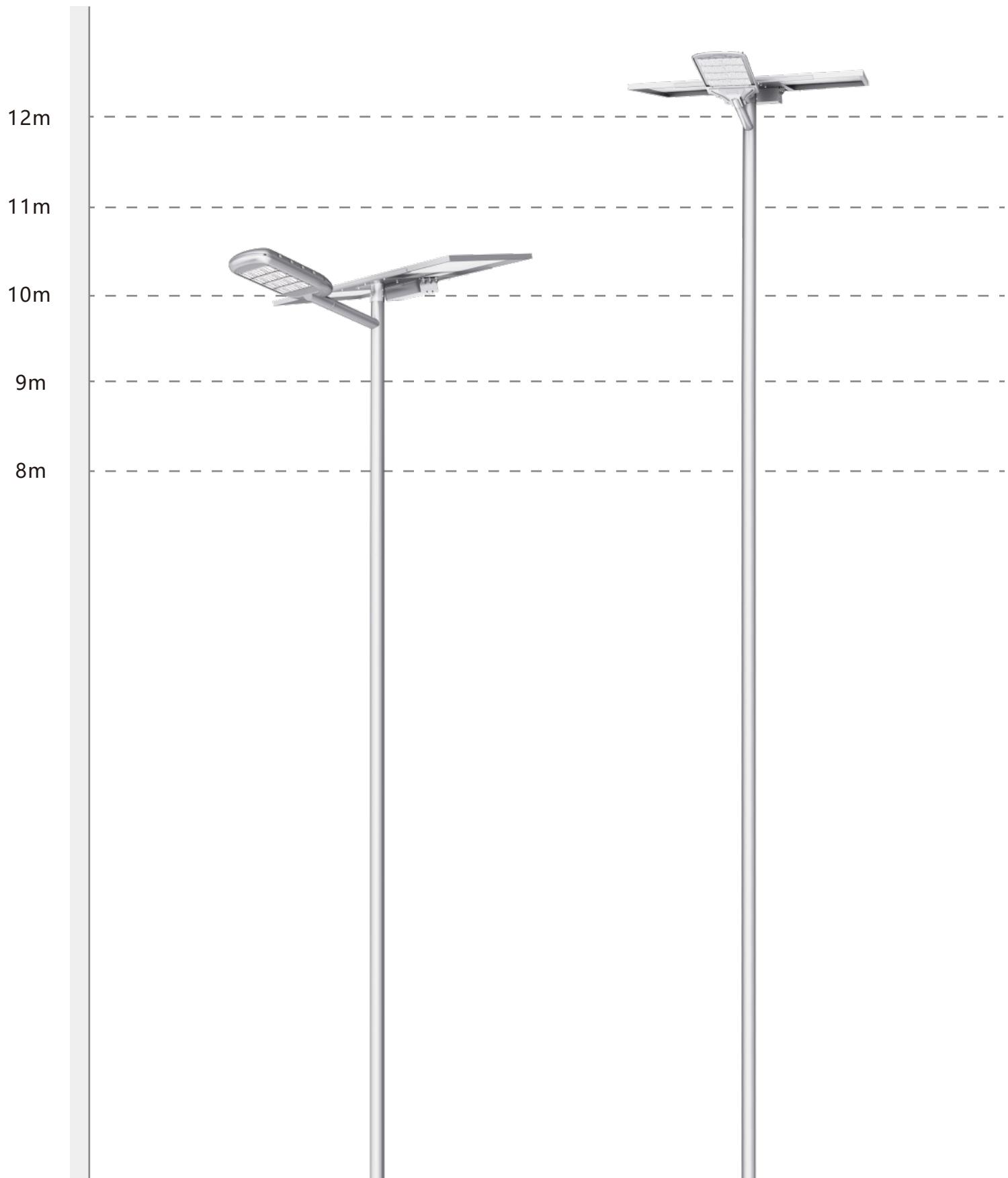


YH

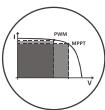


## Unique Structure Design

Lamp post installation height recommendation diagram

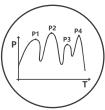


# Advantages of Road Smart Controller



## 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

RoadSmart 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.



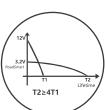
## IPC 5.0 Technology

Through 10years' experience, RoadSmart 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.



## ICD Technology (Intelligent Charge and Discharge)

Using Grade A LiFePO4 battery with excellent safety performance. RoadSmart'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.



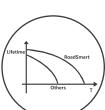
## 3.2V MPPT Technology

The single-string 3.2V MPPT technology reduces the probability of battery problems by 75% than that of multi-string 12V technology, effectively improved the overall product stability and extended lifetime over 3 times.



## Dual-core CPU Management

RoadSmart integrate two cores CPU into one processor to improve the operational speed of solar controller and reduce half probability of damage by data backup function, improve output power double than others.



## HPCV Technology

RoadSmart self-developed patent solar controller adopts LPCV technology (High-precision Constant Voltage Management) brings lower ripple, improves circuit efficiency, and extend lifetime of circuit and battery.



## 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.



## ITC Technology (Intelligent Temperature Control)

Automatically Switch off function by software at temperature limit to protect battery from long time high temperature working. Heating up function to protect battery at Low temperature atmosphere. Extend longer lifetime of the whole system.



## Mode Memory Management

RoadSmart system have mode memory storage function to realize one-time operation and permanent preservation.

## working modes

 DEMO: No matter day or night, light "on" for 1 minute; Only for test use.

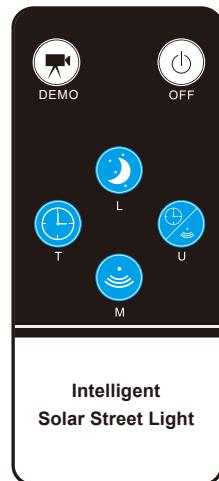
 OFF: Light "off", no matter day or night.

 L: At night, 100%-2hr, 70%-2hrs, 30%-dawn.

 T: At night, 100%-1hr, 70%-2hrs, 40%-3hrs.

 M: At night, 50%-1hr, 100%-3hrs, 30%-dawn.

 U: At night, 100%-1hr, 70%-3hrs, 20%-dawn.

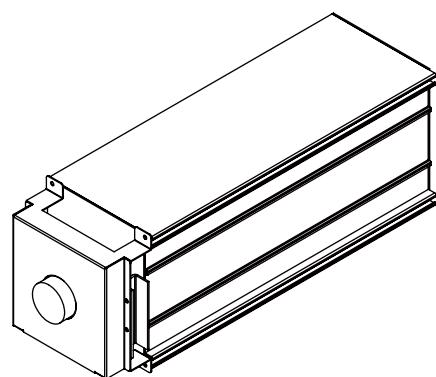
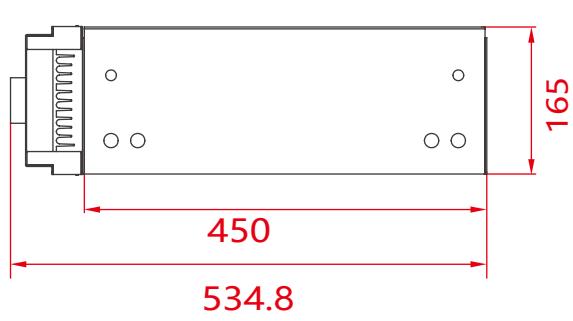


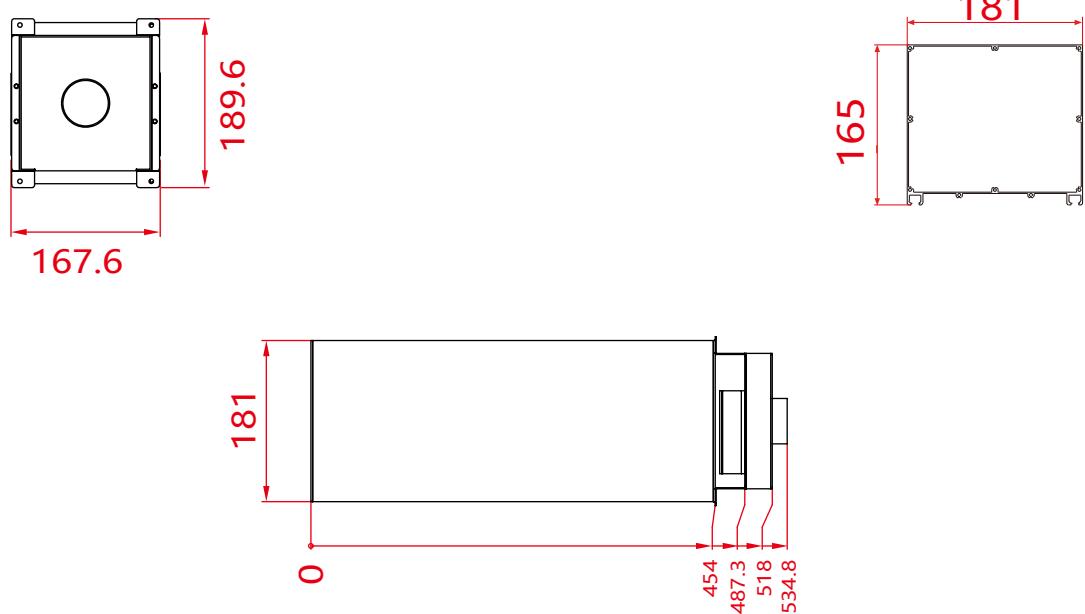
## Indicator light status instructions

LED	Indications	Status	Functions
 ● Blue	Charging indication	Long-term on	Be Charging
		Long-term off	Solar panel voltage is lower than battery voltage Battery full charged
 ● Red	Battery indication	Long-term on	Battery works normally
		Long-term off	Battery is not connected/No power
		Fast twinkling	Battery is over discharged
		Slow twinkling	Battery full charged
 ● Green	Load indication	Long-term on	Load is on
		Long-term off	Load is off

## Product Dimension

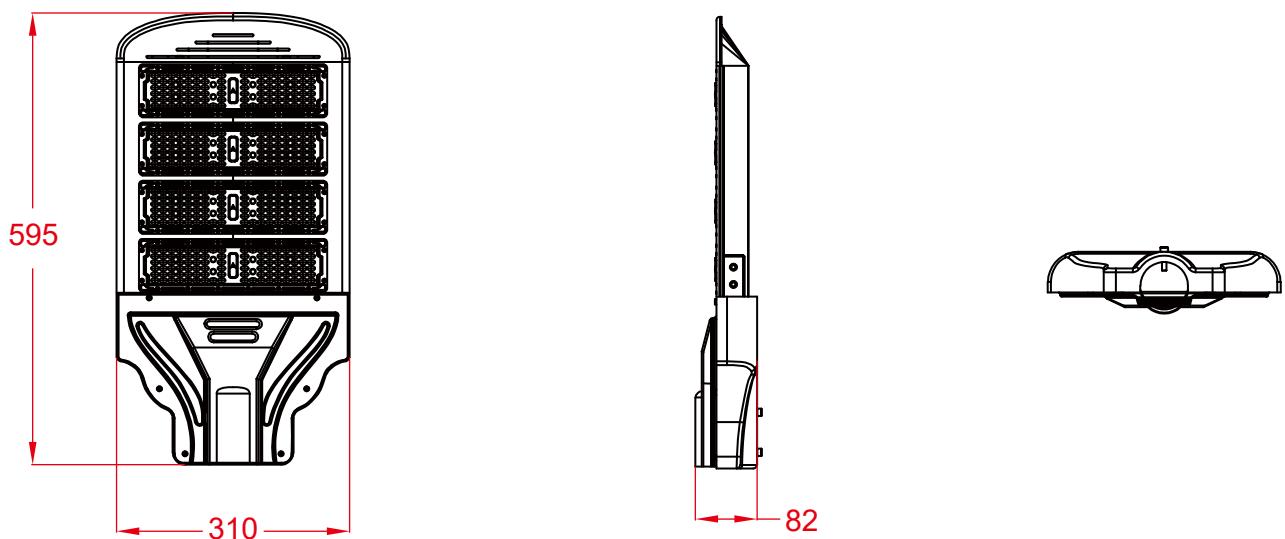
### Battery Box Size and it's Hole Site Diagram



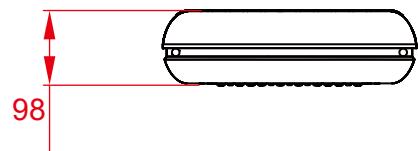
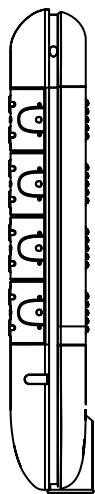
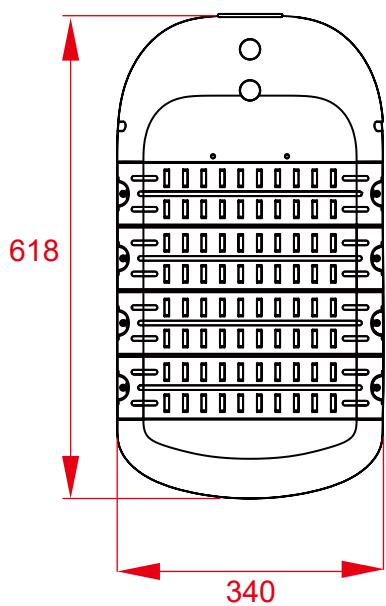


## Lamp Holder Size

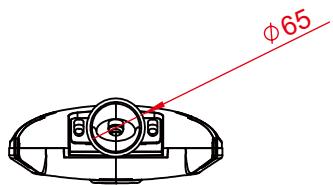
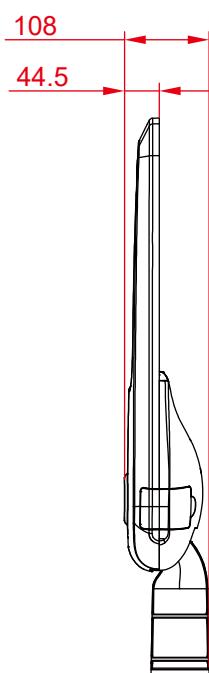
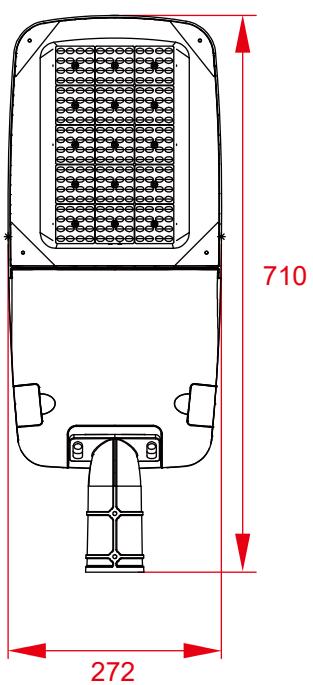
HS-A



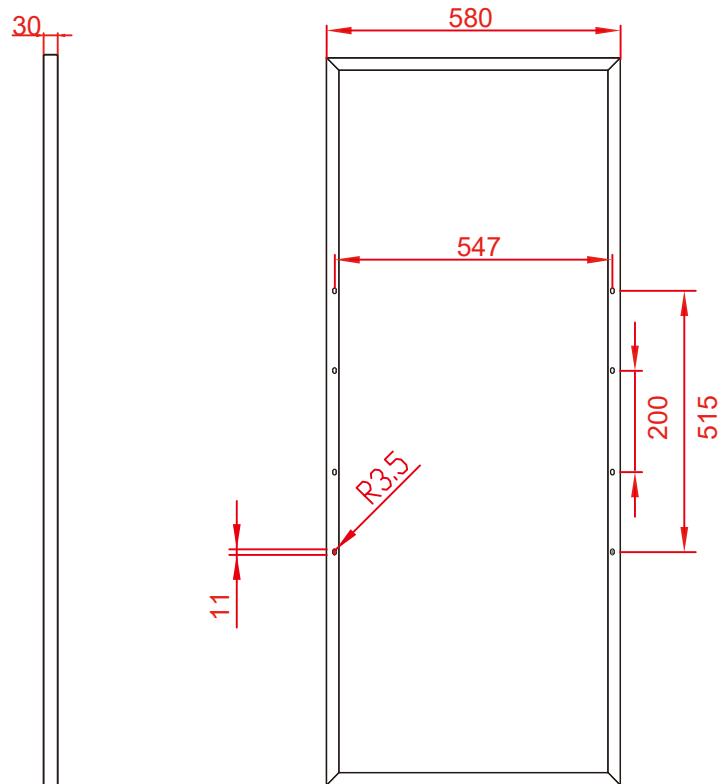
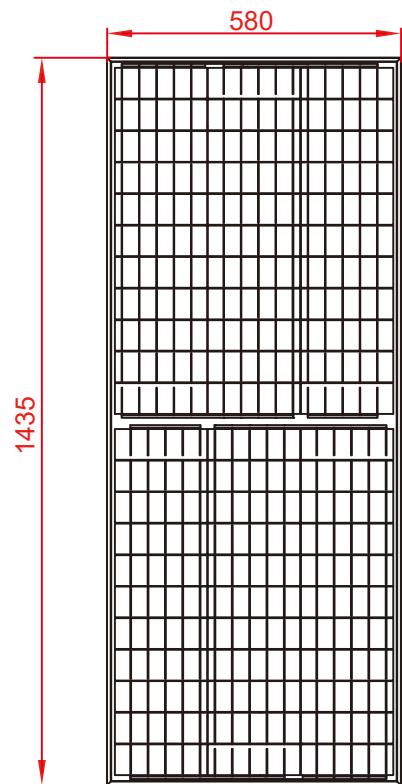
HS-B



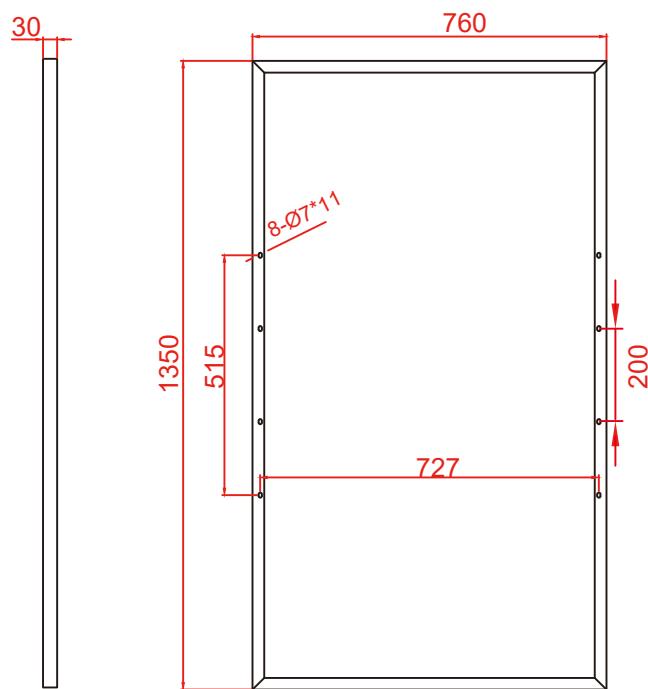
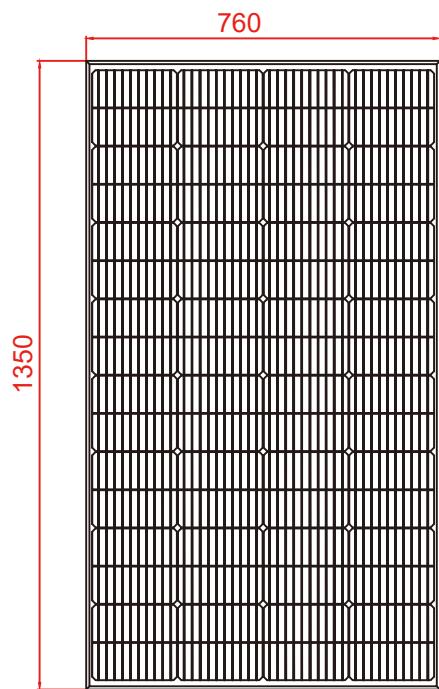
YH



## Solar panel



2\*150W



2\*200W

## Parameter

Type	RS-HS300	RS-HS400
<b>Light</b>		
Power	100W	130W
Light efficiency	200lm/w	
LED chip	SMD3030/400pcs	
Luminous flux	16000lm	20800lm
Beam angle	60°*140°	
Lifespan	50000hrs	
IP Rating	IP65	
Working temperature	-20°C~ 60°C(Charge above 0°C)	
Color temperature	6000-6500K	
CRI	Ra≥70	
Working mode	100%-2hrs, 70%-2hrs, 30%-dawn	
<b>Solar Panel</b>		
Power	2*150 W	2*200W
Voltage	18V	
Type	Monocrystalline silicon	
Efficiency	19%-22%	
<b>Battery</b>		
Power	1536WH	1920WH
Lighting time	5-7days	
Lithium battery	LiFePO4	
Number of Battery	2	
<b>Installation</b>		
Top diameter	60mm	
Height	8-12M	10-12M
Spacing	25-35M	

PS: 1.The actual size of battery box is subject to the specific product.

2.The YH model replacement lamp holder is equipped with 200 lamp beads.

## Application

