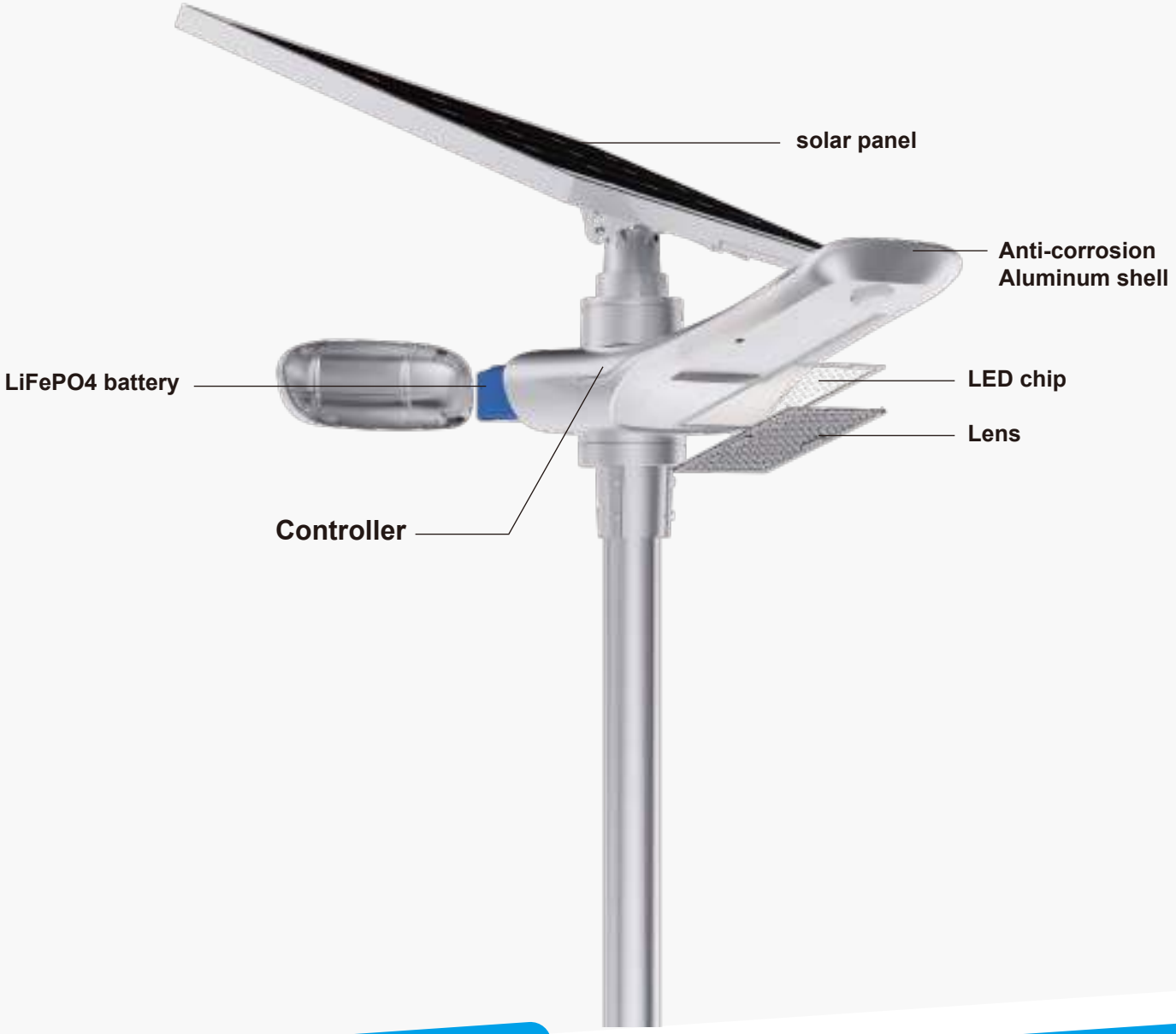
Road Smart

Solar Flyhorse Light

- POWER: 100W to 150W
- LiFePO4 Battery 640WH



www.roadsmartsolar.com

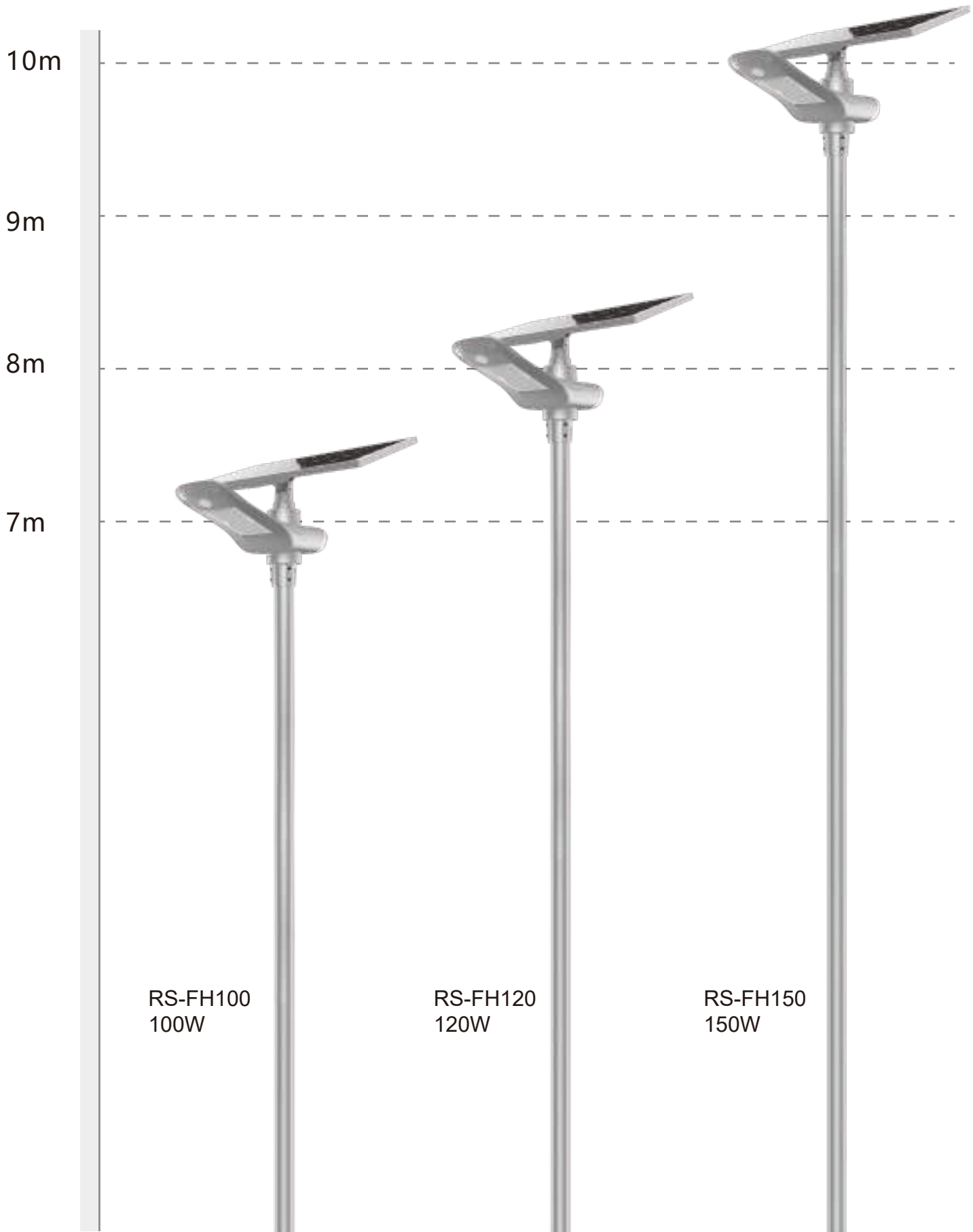


Unique Structure Design



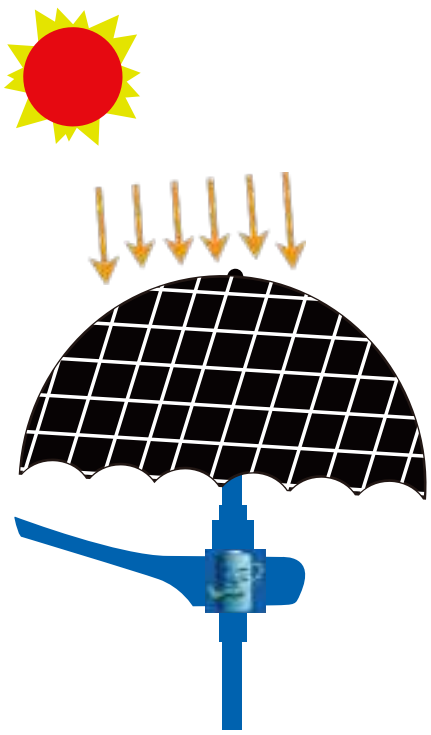


Lamp post installation height recommendation diagram

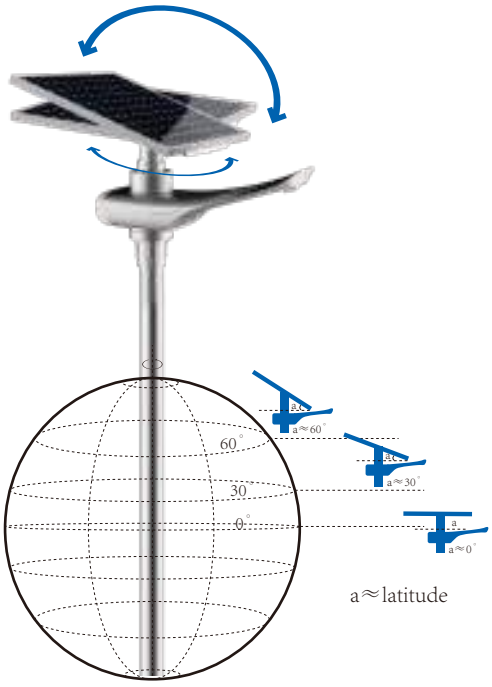


Unique Structure Design

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.



Core Technologies

Unique Integration Design
Easy to transport, install and maintain

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.

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.

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.

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.

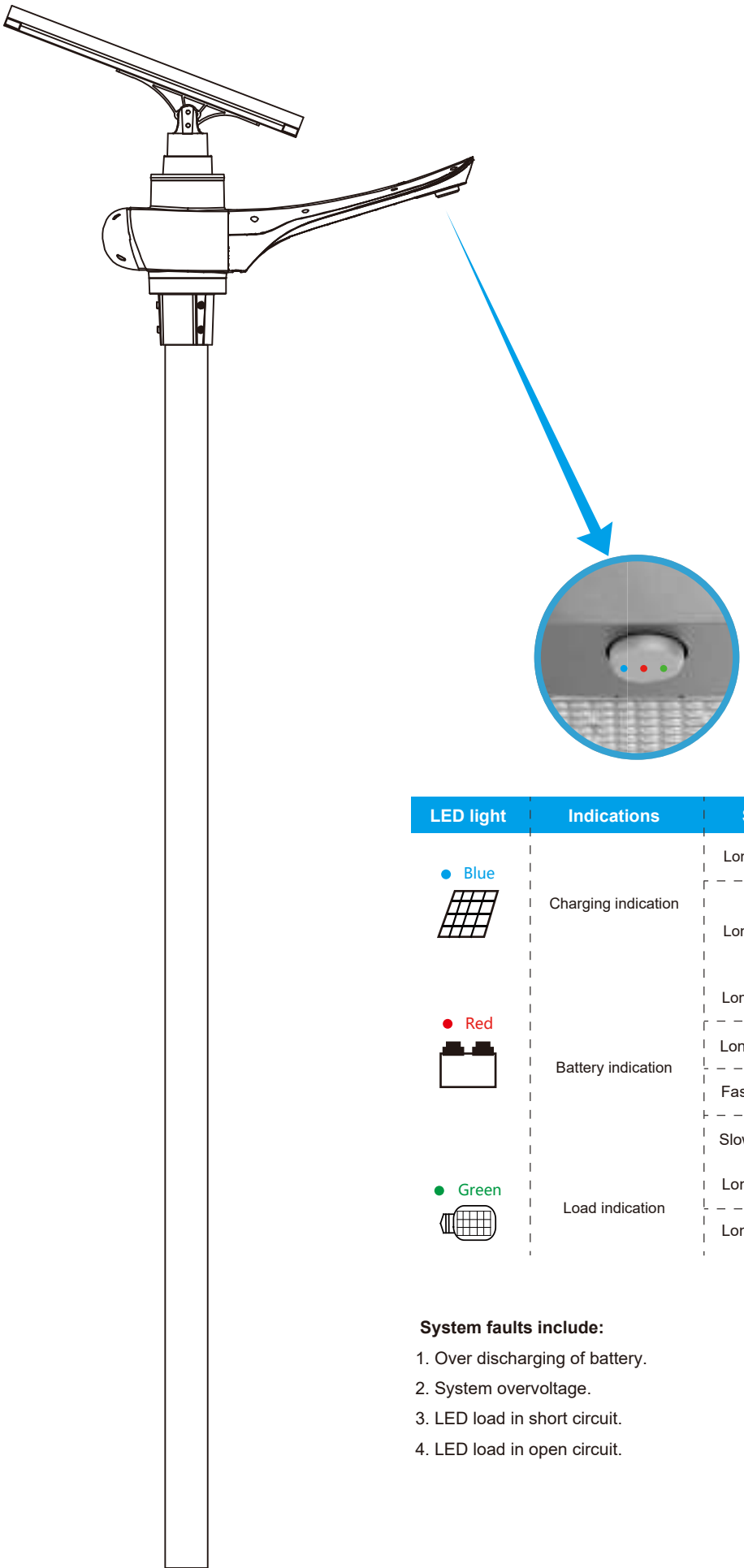
IPC 5.0 Technology
Through 10years' experience, RoadSmart upgraded highly precise 5.0 version IPC technology (intelligent power control 5.0). It will intelligently detect recent weather conditions, reasonably plan the discharge power to achieve more rainy days.

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.

Patent Bat-wing Lens
Lighting area much wider, the maximum of using the lighting all light the road,increase the installation distance to 50m.

Remote Control

Indicator light status instructions

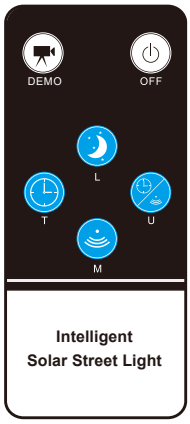


LED light	Indications	Status	Functions
Blue	Charging indication	Long-term on	Be charging
		Long-term off	Solar panel voltage is lower than battery voltage/Battery full charged
Red	Battery indication	Long-term On	Battery works normally
		Long-term Off	Battery is not connected/No power
		Fast twinkling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

System faults include:

1. Over discharging of battery.
2. System overvoltage.
3. LED load in short circuit.
4. LED load in open circuit.

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, 70%-2hrs, 30%-dawn.

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

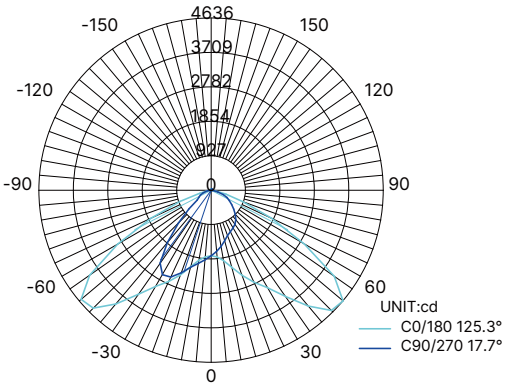
M: At night, 50%-1hr, 100%-3hrs, 30%-dawn.

U: At night, 100%-1hr, 70%-3hrs, then sensor working, 50% if people come, 20% stand-by.

Note: Default is L mode, once a certain mode was set successfully, it will be reserved until you change other modes with remote control.

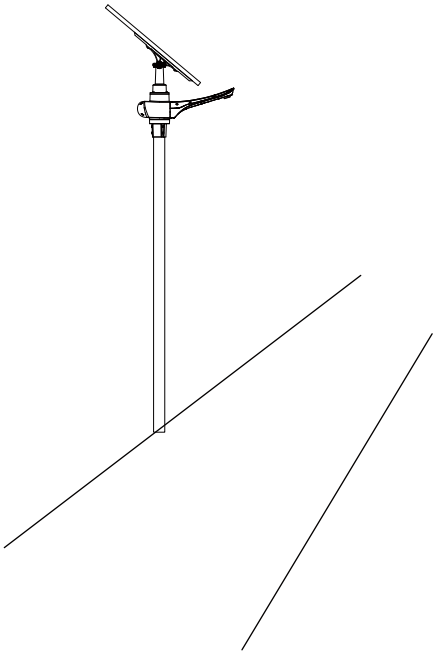
Light Distribution

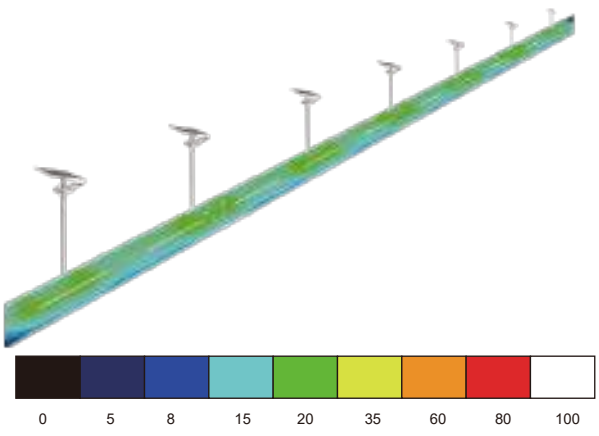
Luminous intensity distribution curves



AVERAGE BEAM ANGLE(50%):71.5 DEG

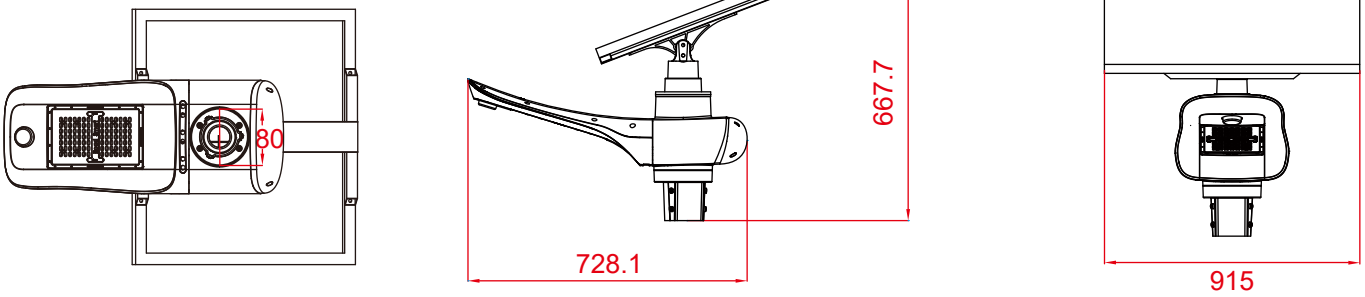
Bat wing lens with polarized light



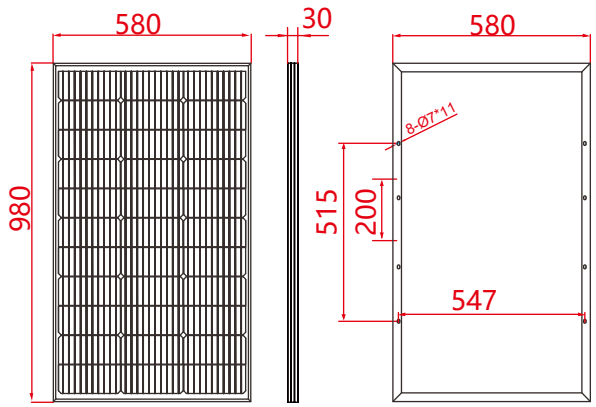


Dimension

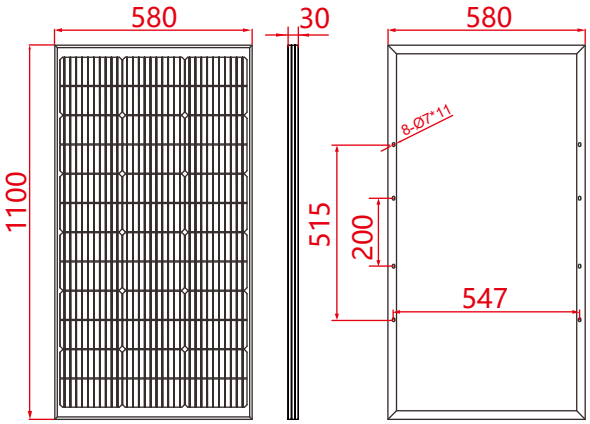
Lamp holder



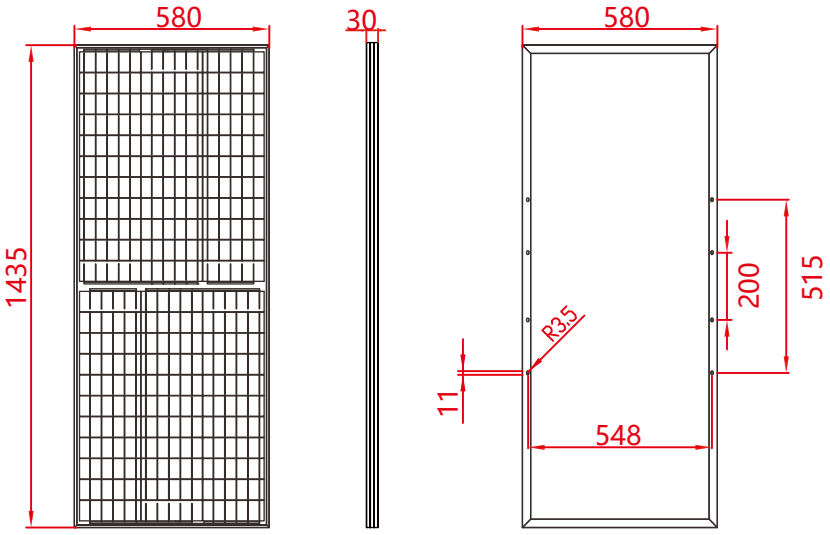
Solar panels



100W



120W



150W

Parameter

Type	RS-FH100	RS-FH120	RS-FH150
Panel			
Power	100W/18V	120W/18V	150W/18V
Material	Mono crystalline silicon		
Solar cell efficiency	19-20%		
Lithium battery			
Capacity	400WH	480WH	640WH
Charge cycle times	2000 times		
Lamp head			
Luminous flux	5800-6100lm	7500-7700m	9100-9300lm
Light output	30W	40W	50W
LED qty	150pcs		
LED chip	Bridgelux		
Color temperature	3000-6000K		
CRI	≥70Ra		
Material of lamp head	Aluminum alloy		
Elevation angle	17° (attention to Dialux use)		
Lifespan	50000hrs		
System			
Light control voltage	5V		
Light distribution	Batwing lens with polarized light		
Beam angle	X-axis: 155° Y-axis: 50°		
Lighting time(full charged)	5-7 rainy days		
Operation temperature	-20℃~60℃		
Installation			
Top diameter of pole	76mm		
Mounting height	7-8m	7-8m	8-10m
Installation spacing	20-40m		

Application

Highway

Pathway

Village road

School

Parking lots

Factory

Resort



