

SPECIFICATION DETAILS

Details			Picture
Power	Specifications		
120W	Solar panel	Max Power	30V/130W (High-efficiency monocrystalline solar panel)
		Lifespan	25 years
	Battery	Model	LiFePO4 battery 25.6V 30AH
		Lifespan	10-12years
	LED Chip	Power	192pcs (Philips chip ,Aluminum PCB plate)
		Chip brand	Philips SMD3030
		Lumen	150-180lm/W
		Lifespan	50000 hours
	Install distance	Install height: :7-9M Install horizontal spacing :25-30M	
	Install position	Light pole branch diameter: 60-100mm	
	Light body material	Aluminium alloy	
	Charging time	6 hours of effectively sun light	
	Working time	Light 12 hours every day and 2-3 rainy day	
	Working mode:	MPPT controller with time control + light sensor control+Microwave sensor +AC/DC controller	
	Certification	CE、ROHS IS09001	
Size	Product size:L1400*540*H140mm Packing Size:145*58*18.5cm 1 pcs /carton		
Weight	Net weight:24KG	Gross weight:25KG	
Warranty	5 years warranty		



Specification of MPPT controller .

Main features

1. Features true MPPT functions, applicable to monocrystalline, polycrystalline and amorphous silicon solar panels serially connected in various numbers, significantly improving the solar panels' energy utilization ratio.
2. MPPT solar charging technology , the maximum solar input voltage $V_{oc} \leq 60V$.
3. The load is stepping up and constant current output which can support maximum 18pcs of LED beads connected in series .
4. Adopts an improved charging algorithm that supports 12 V and 24 V lead-acid batteries and lithium batteries, and the user can set the operating modes for lead-acid batteries or lithium batteries accordingly.
5. Boasts a load triple-stage brightness adjustment and morning on design, with an operating duration adjustable from 0 to 15 hours and a power settable from 0 to 100%.
6. Features a system status log function, able to record a maximum of 7 days of system status, comprehensively and effectively monitoring the system's conditions.
7. Data communication adopts a multi-time two-way handshake protocol and a data compression algorithm, realizing precise and fast data transmission.
8. Features an intelligent power mode which can extend the battery life to its top limit by adjusting the load power automatically according to the remaining battery capacity.
9. True constant current rather than current-limiting control ensures smooth and stable output current, effectively reducing LED light attenuation and extending LED service life.
10. With an infrared remote control function, operations including setting parameters, reading status and viewing historical data can be conducted.
11. A metal case and an IP68 waterproof level enable the device to operate in various kinds of tough conditions.
12. An overheat protection function enables the device to scale down the load or shut off the load completely when its temperature exceeds a certain point.
13. A range of protection measures such as battery reverse-connection protection, LED short-circuit and open-circuit protection, etc., put the system under comprehensive and constant guard.

The following are functions of "-U" series

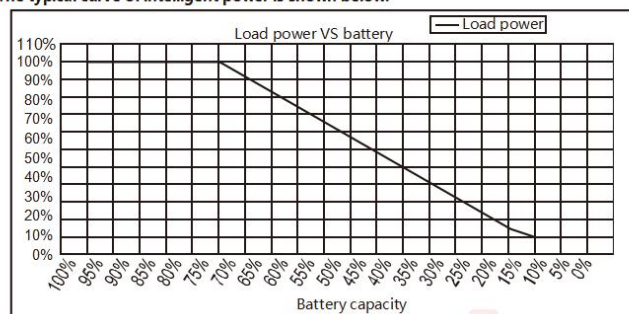
14. Boasts a wireless Internet communication function, able to conduct remote monitoring and real-time management on street lights via the solar power street light management system.
15. Supports remote light on/off switching and dimming, as well as modification of battery and load parameters.
16. Monitors solar panel voltage, current and power, battery charging and discharging current and voltage, load operating status, controller operating status and other data, and automatically triggers alarms when failures are detected.

Intelligent LED Power Control

When the controller's "intelligent power" mode is activated by the user, the LED load's power can be automatically adjusted according to the battery capacity. While the operating duration and load power set by the user are still valid, the system will choose the smaller one from between the automatically adjusted power and the power set by the user as the load output power.

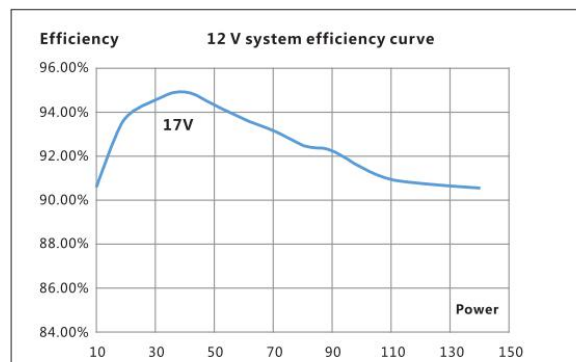
For example: when the remaining battery capacity is 50% and the load power calculated in the intelligent power mode is 60%, and if the load power set by the user is 100%, then the final load power is 60%; however, if the load power set by the user is 20% instead, the final load power will also become 20% accordingly.

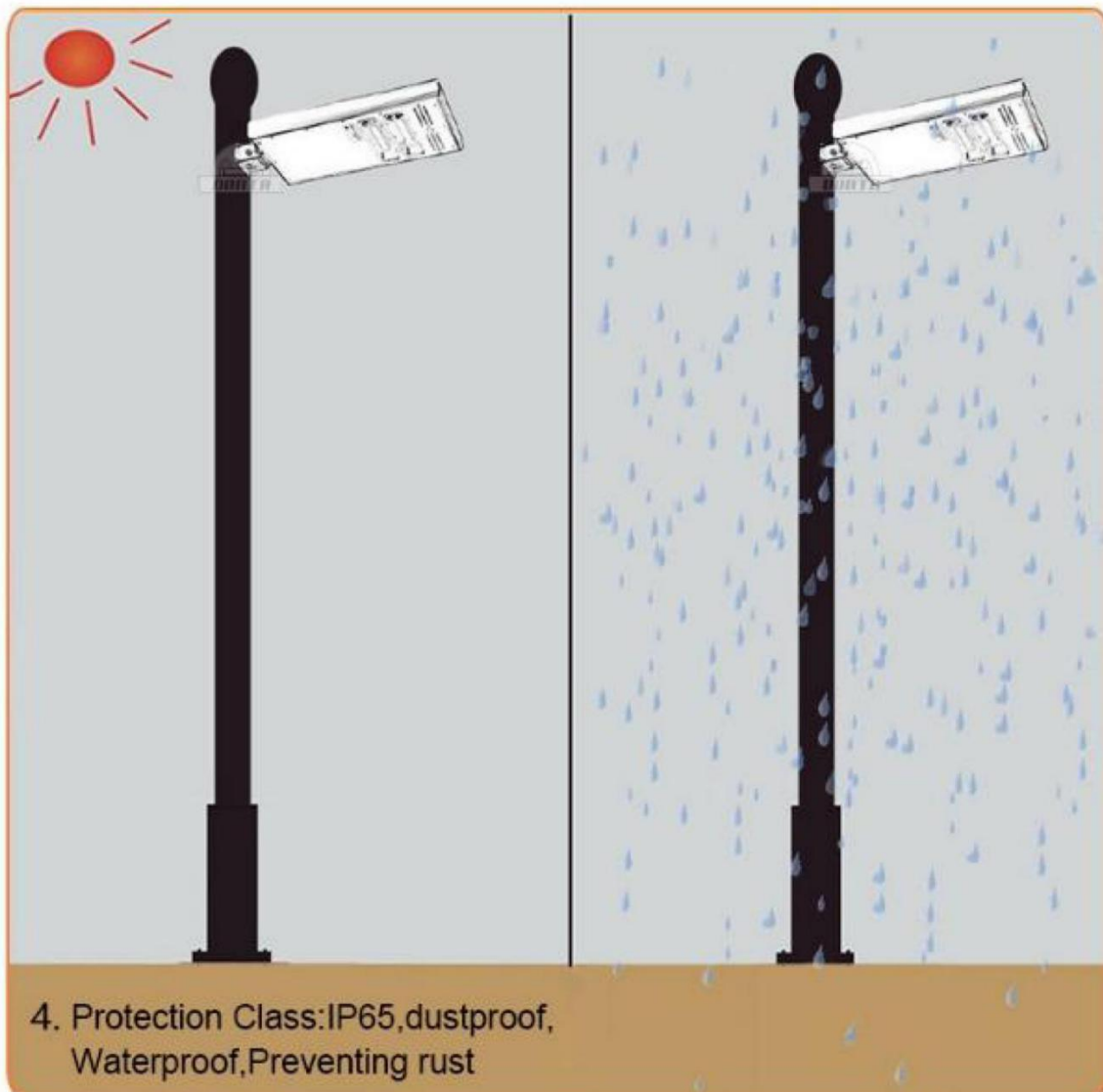
The typical curve of intelligent power is shown below:



Charging conversion efficiency curve

1. 12V system





PRODUCT PACKAGING

