



Solar Street Light HS

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



Unique Structure Design



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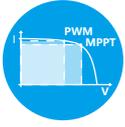
Lamp post installation height recommendation diagram



RS-HS300

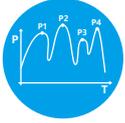
RS-HS400

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

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.



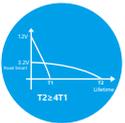
IPC 5.0 Technology

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.



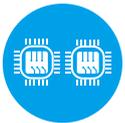
ICD Technology (Intelligent Charge and Discharge)

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.



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

Road Smart 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

Road Smart 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.

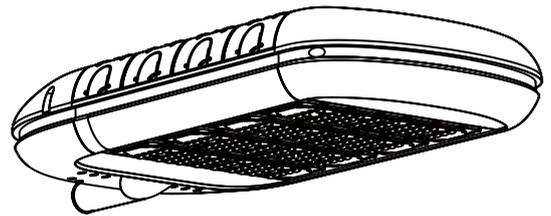
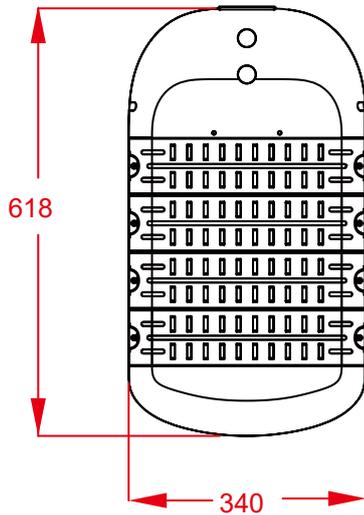


Mode Memory Management

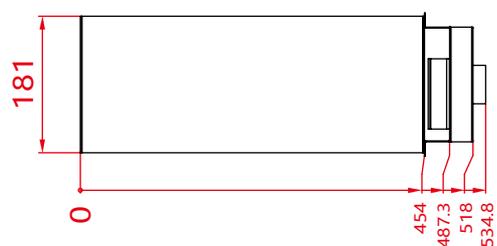
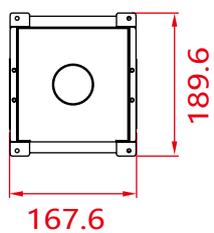
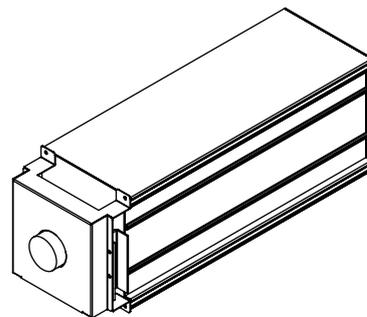
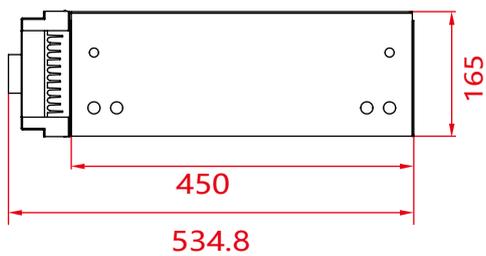
Road Smart system have mode memory storage function to realize one-time operation and permanent preservation.

Product Dimension

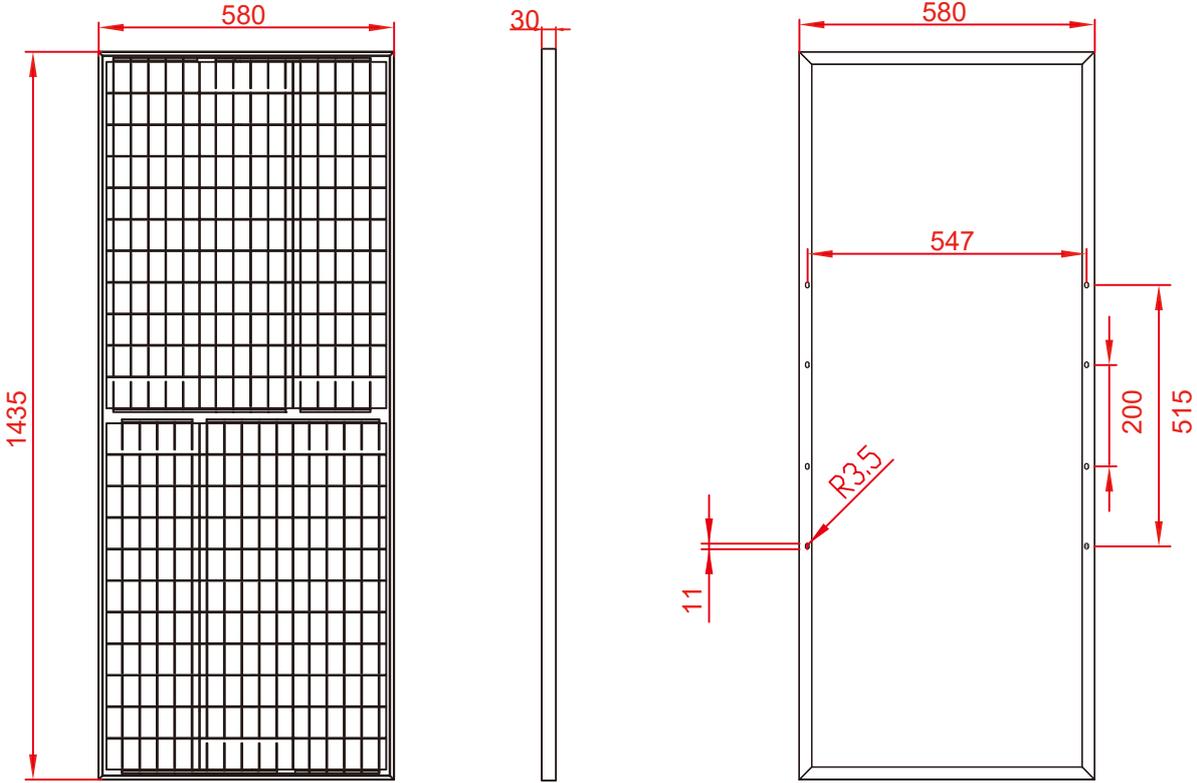
Lamp Holder Size



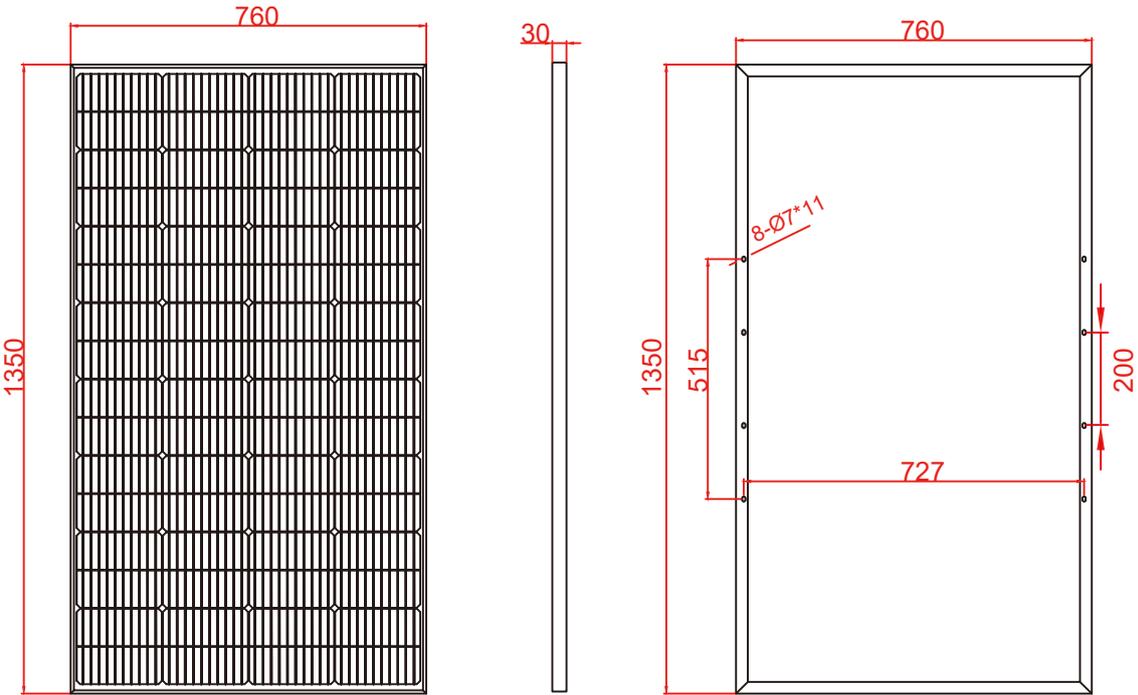
Battery Box Size and Its Hole Site Diagram



Solar panel



2*150W



2*200W

Parameter

Type		RS-HS300	RS-HS400
LIGHT	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		
SOLAR PANEL	Power	2*150 W	2*200W
	Voltage	18V	
	Type	Monocrystalline silicon	
	Efficiency	19%-22%	
BATTERY	Power	1536WH	1920WH
	Lighting time	5-7days	
	Lithium battery	LiFePO4	
	Number of Battery	2	2
INSTALLATION	Top diameter	60mm	
	Height	8-12M	10-12M
	Spacing	25-35M	

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

Application

