PV5 SERIES
LED SOLAR STREET LIGHT

ZGSM
SAVE ENERGY FOR TOMORROW

ALL-IN-ONE SMART DESIGN

Quick to install
Saves on shipping
Easy for maintenance

AREAS OF APPLICATION

- Village Roads
- Public Areas
- Courtyards
- Parking Lots

Version 3.0 | 23th.Apr.2024

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Key Features

- AC/DC Hybrid Function is optional.
- Multiple installation modes are supported.
- 10-period programmable load power/time control.
- High-efficiency monocrystalline silicon solar panels with a conversion efficiency of 23%.
- Intelligent battery management, prolong the service life of lithium battery.
- Adopting MPPT intelligent controller, the charging efficiency is up to 96%.
- Microwave and human body induction control, realize intelligent power saving mode.
- Intelligent power mode, power adjustable automatically according to the battery level.
- Extensible to IoT remote communication monitoring function.

Horizontal Installation

Vertical Installation

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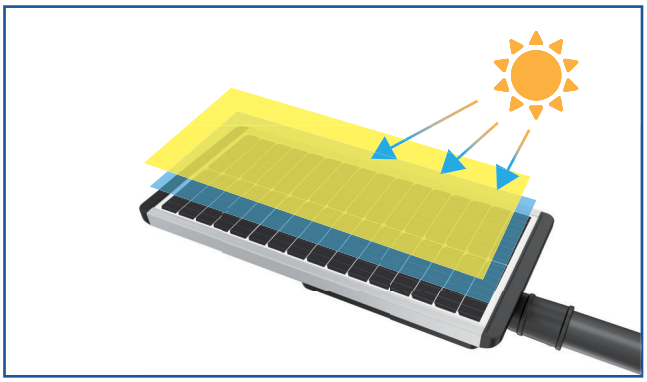
High Efficiency

Using high-efficiency LED Chips, the whole light efficiency is up to 220LM/W.

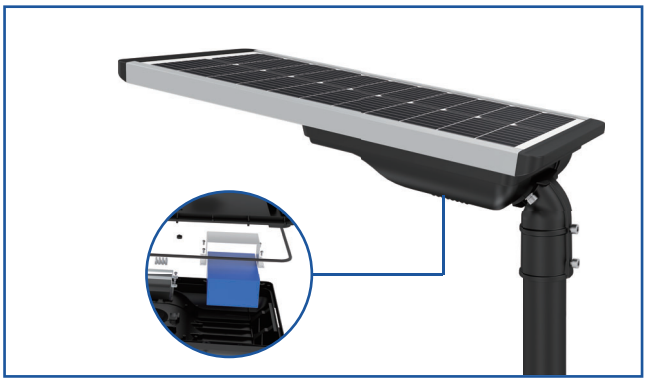
Mono Solar Panel

23% photoelectric conversion efficiency.



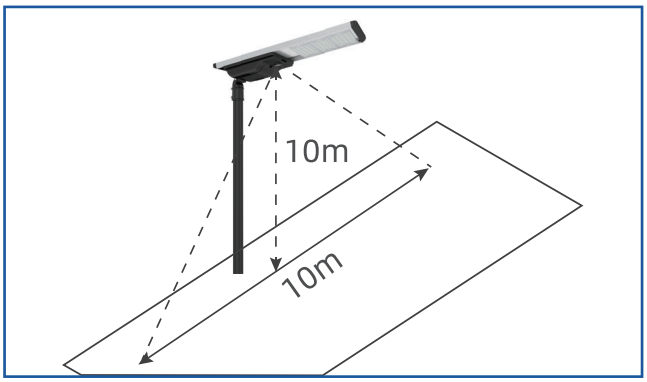
LiFePo4 Battery

It adopts 100% new battery cell packaging and is supported by high-quality and stable protection boards to ensure the long life of the battery pack.



Sensor

With microwave inductive sensor, Up to 10m sensing distance and 10m sensing height.

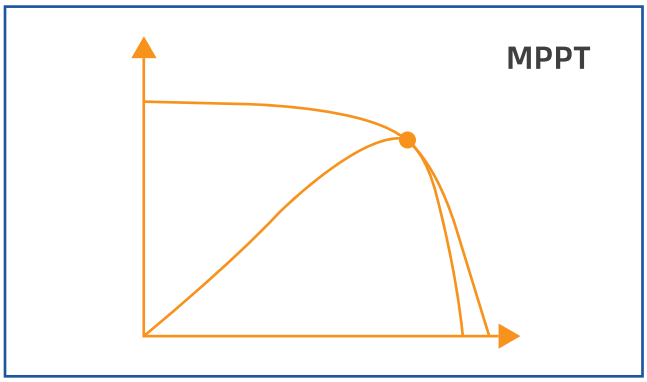


Remote Control

2.4G wireless communication, allowing for the setting, reading of parameters, and checking the status of lighting fixtures.

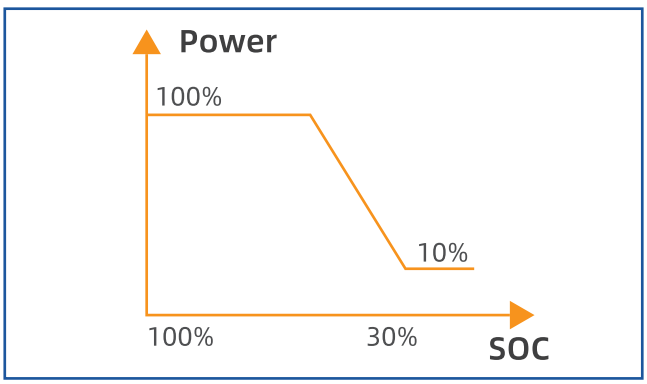
MPPT Controller

Maximum power tracking technology, tracking efficiency up to 99.5%, charging conversion efficiency up to 96%.



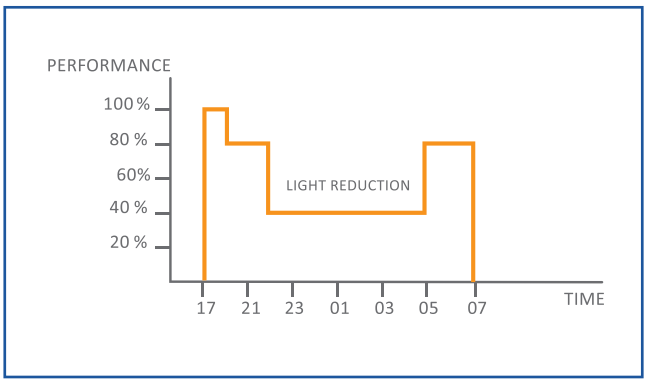
Intelligent

A variety of intelligent power modes are available for choice, with load power adjustable automatically according to the battery level.



Timer Dimming

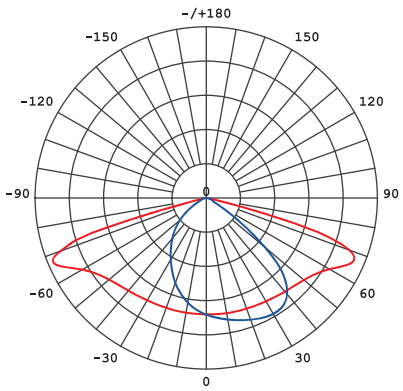
Supports up to 10-period programmable load power/time control.



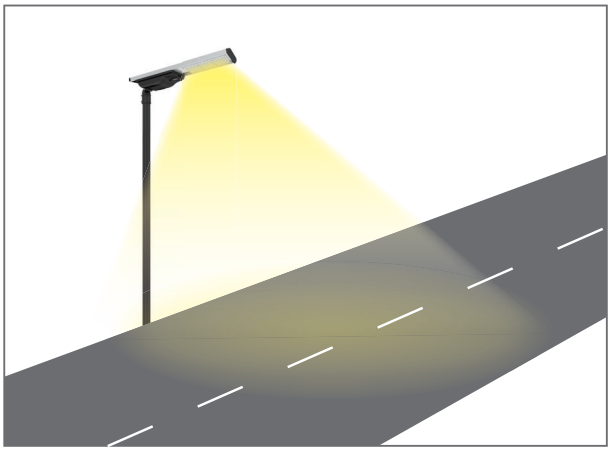
Product Information

Model No	ZGSM-PV5-U2	ZGSM-PV5-U2	ZGSM-PV5-U3	ZGSM-PV5-U4	ZGSM-PV5-U5	ZGSM-PV5-U6
Power	40W	50W	60W	80W	100W	120W
Efficiency	220LM /W	220LM /W	220LM /W	220LM /W	220LM /W	220LM /W
Lumen	8800LM	11000LM	13200LM	17600LM	22000LM	26400LM
PV module	Monocrystalline 65W	Monocrystalline 70W	Monocrystalline 70W	Monocrystalline 100W	Monocrystalline 120W	Monocrystalline 120W
LiFePo4 Battery	18AH /12.8V (230WH)	24AH /12.8V (307WH)	30AH /12.8V (384WH)	36AH /12.8V (461WH)	48AH /12.8V (614WH)	54AH /12.8V (691WH)
Charge Time	4.2hours	4.8hours	5.9hours	5.1hours	5.6hours	6.3hours
Installation Height	6-7m	6-8m	6-8m	8-9m	8-10m	9-11m
Installation Distance	20-28m	20-32m	20-32m	25-35m	30-40m	35-45m
LED	SMD 5050					
CCT	3000-6500K (can be customized)					
Life Span	L70>100, 000 hours					
Working Time	8-40 hours /5-7 days					
Working Mode	Motion /PIR Sensor /Timer					
Charging Mode	MPPT					
Light Distributions	Type II					
Working Temperature	-15°C to +70°C					
Pole diameter	70-76mm (suggestion)					
IP Rating	IP66					
Warranty	3 Years					

Photometry



Type II Medium



PV5 | DIMENSION FIGURE

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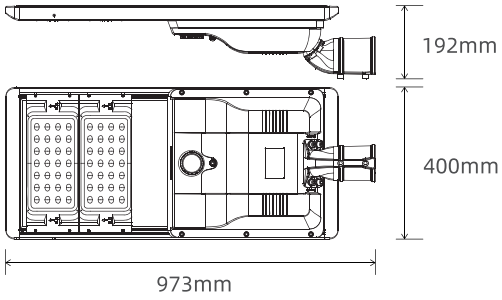
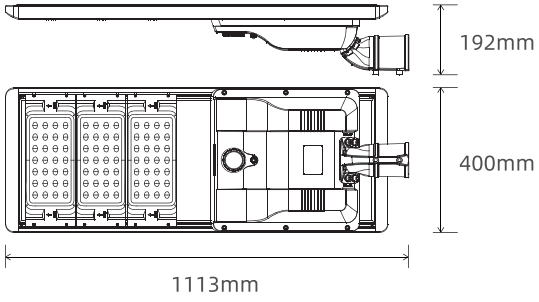
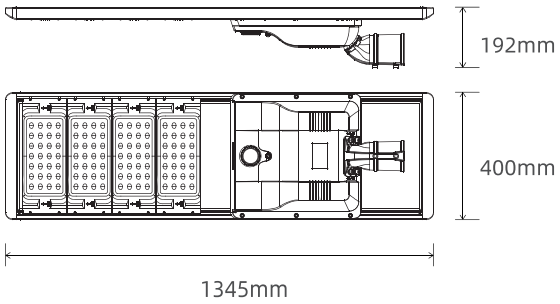
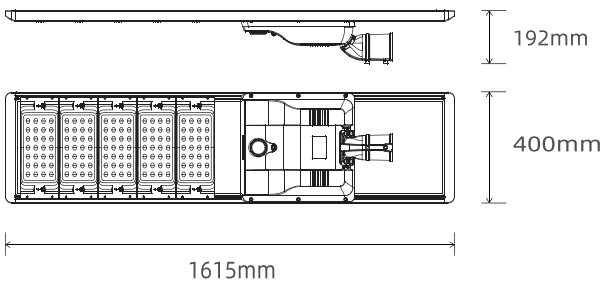
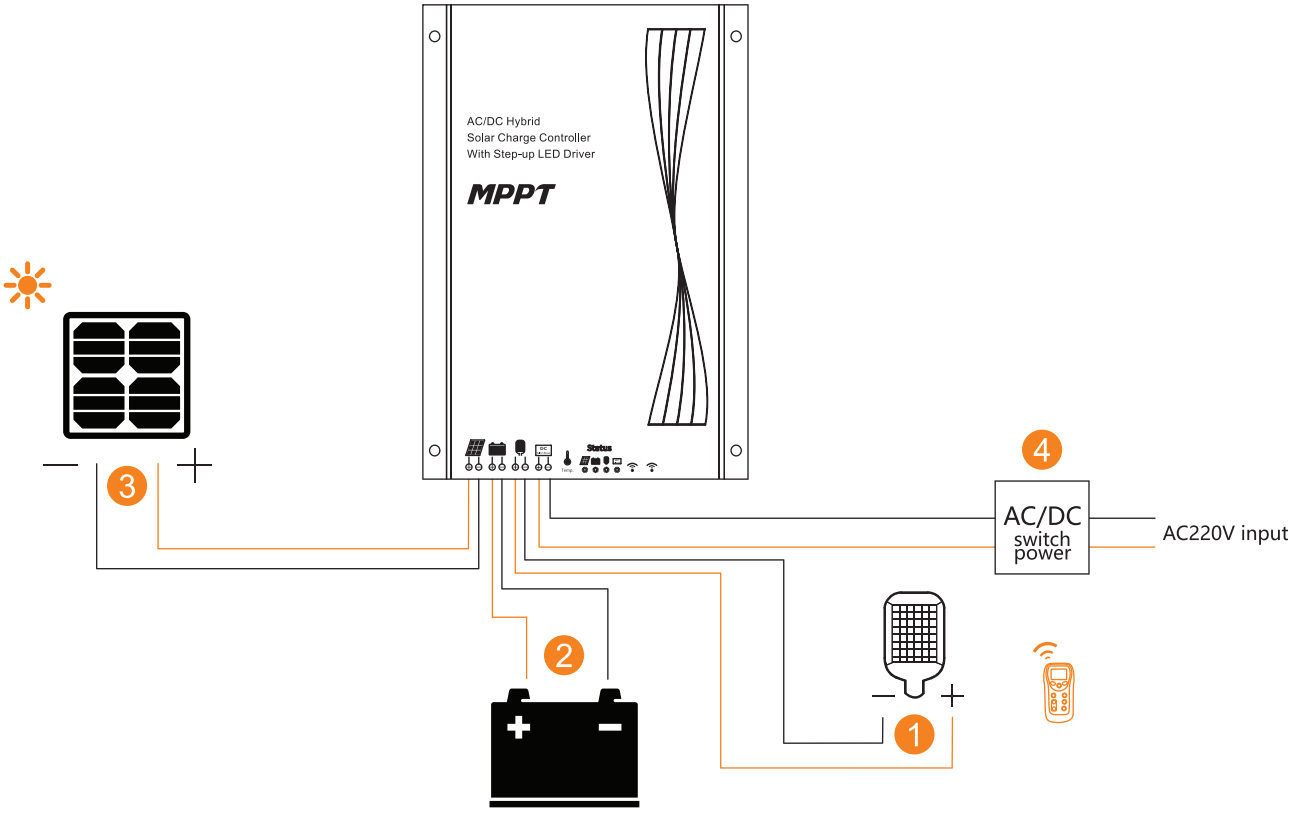
Model	Power	
ZGSM-PV5-U1	40W	 
ZGSM-PV5-U2 ZGSM-PV5-U3	50W 60W	 
ZGSM-PV5-U4	80W	 
ZGSM-PV5-U5 ZGSM-PV5-U6	100W 120W	 

AC/DC Hybrid Function Diagram



In areas with insufficient solar energy, a AC/DC Hybrid Solution is available. When the battery level is low, the system automatically switches to AC power supply, and when the battery is sufficiently charged, it switches back to battery operation. Please confirm with the ZGSM sales team if you have similar requirements before making a purchase.

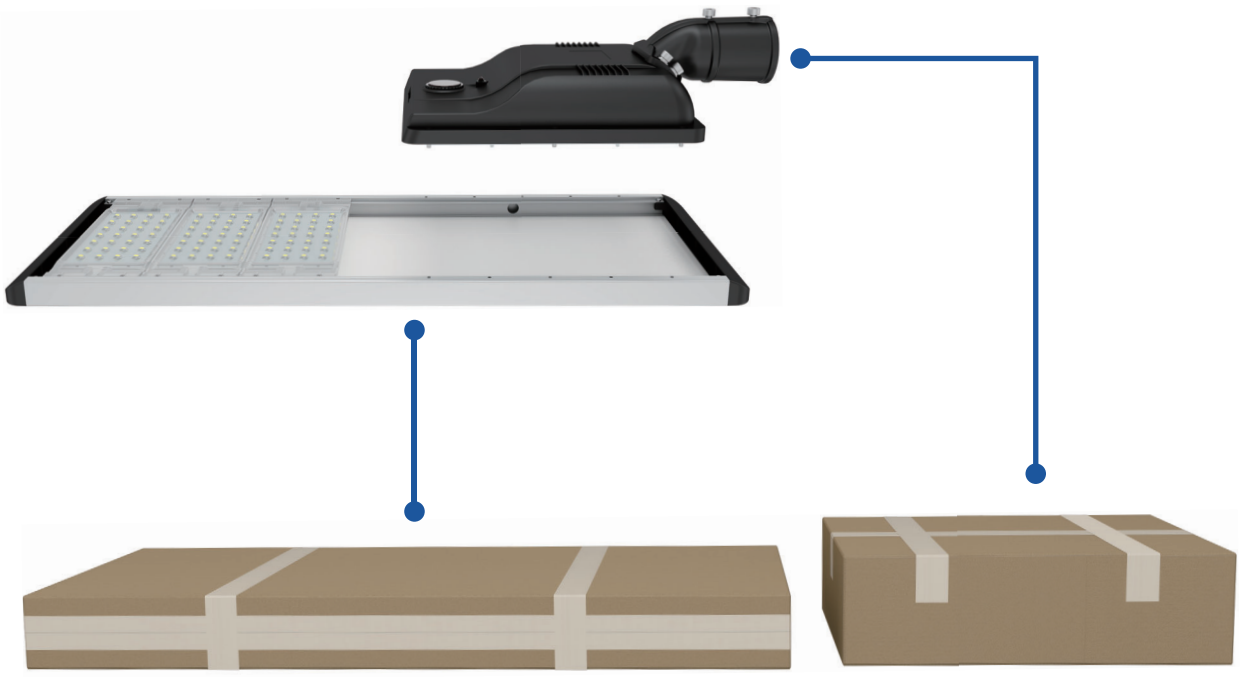
Here have two modes for choosing, Battery priority and AC priority.

Battery Priority

When the battery voltage is higher than the [switching voltage], the battery power should be used preferentially; when the battery voltage is lower than the power supply and [switching voltage] is set lower than the battery voltage, the battery is in the preferential mode.

AC Priority

In case of municipal power access, municipal power shall be supplied to the load preferentially. Whenthere is no municipal power or the municipal power voltage is incorrect, it shall switch to battery for power supply. When [switching voltage] is set higher than the maximum voltage of the battery, the commercial power is in the preferential mode.



2 packages: 1pc lamp body per carton + 1pc battery box per carton

Packing information

Model No	ZGSM-PV5-U1	ZGSM-PV5-U2	ZGSM-PV5-U3	ZGSM-PV5-U4	ZGSM-PV5-U5	ZGSM-PV5-U6
Power	40W	50W	60W	80W	100W	120W
Fixture Dimension(mm)	973 x400 x192	1113 x400 x192	1113 x400 x192	1345 x400 x192	1615 x400 x192	1615 x400 x192
Fixture Weight (Kgs)	12.1	13.4	14.3	16.6	19.3	19.9
Packing Type	Two-Part Packing	Two-Part Packing	Two-Part Packing	Two-Part Packing	Two-Part Packing	Two-Part Packing
Lamp Body Carton Size (mm)	950 x110 x475	1130 x110 x475	1130 x110 x475	1420 x110 x475	1690 x110 x475	1690 x110 x475
Battery Box Carton Size (mm)	560 x440 x165	560 x440 x165	560 x440 x165	560 x440 x165	560 x440 x165	560 x440 x165
Lamp Body Carton Weight (kgs)	6.4	7.7	7.7	9.7	10	10
Battery Box Carton Weight (Kgs)	8.1	8.7	9.3	9.9	11.1	11.7

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1 Solar Panel

2 LED Module

3 Sensor

4 Smart Controller

5 LiFePo4 Battery

6 Mounting Brackets

Factory Default Setting:

With sufficient natural light, the light keeps charging.

The light keeps 100% brightness when presence is detected, and the induction delay is about 15S.

The light keeps 20% brightness when no presence is detected.