

# PV2-SERIES



# ZGSM

SAVE TODAY'S ENERGY FOR TOMORROW



ISO9001  
ISO14001



**3** YEAR  
WARRANTY

## LED SOLAR STREET LIGHTS



### Overview

The solar street light is integrated with solar panel, led light, lithium battery, controller, constant current driver and luminaire housing. It is combined with multiple practical control technology including photoelectric effect, constant current control, microcontroller, human infrared induction. It can be used in the area without power grid.

### LED LUMINOUS SOURCE

Greater than 150lm/W high efficacy, illumination grade LED light source.



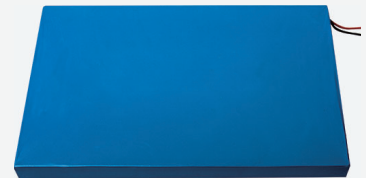
### SOLAR PANEL

Solar panel absorbs sunlight and convert it into electricity. Efficiency more than 17%.

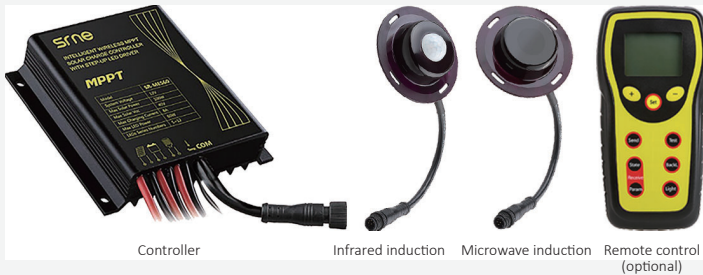


### LITHIUM BATTERY

Lithium battery improves the reliability of the luminaire. Low temperature charging protection, which effectively protects the battery.

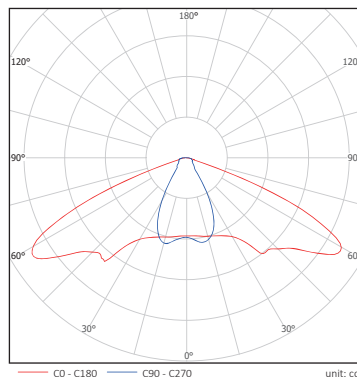
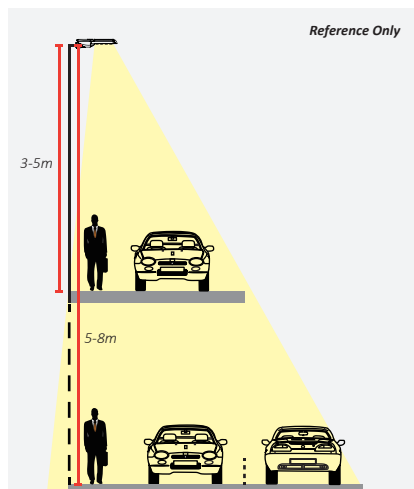


### INDUCTION CONTROLLER /REMOTE CONTROL



#### Main Features

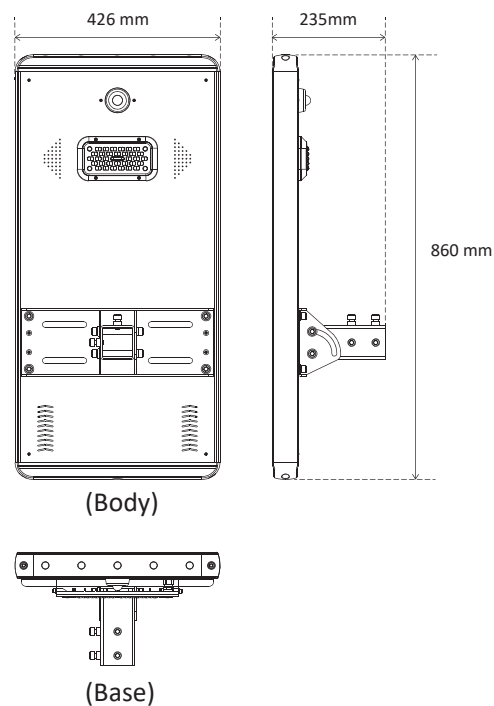
- Adopts MPPT charging method, which increases the utilization of solar panel.
- Lithium battery low temperature charging protection, which effectively protects the battery.
- Three induction stages design. Working time can be set from 0h to 15hours, power range from 0~100%
- Human infrared induction or microwave induction function for optional, Factory default is infrared induction.
- Sensitive time delay can be set from 0s~250s.
- Record system status, can record 7days and monitor the whole system.
- Overheat protection function, when the controller reaches a certain temperature, it will decrease or close the load.
- Working status indication, easy to maintain.



Lens code: 1S

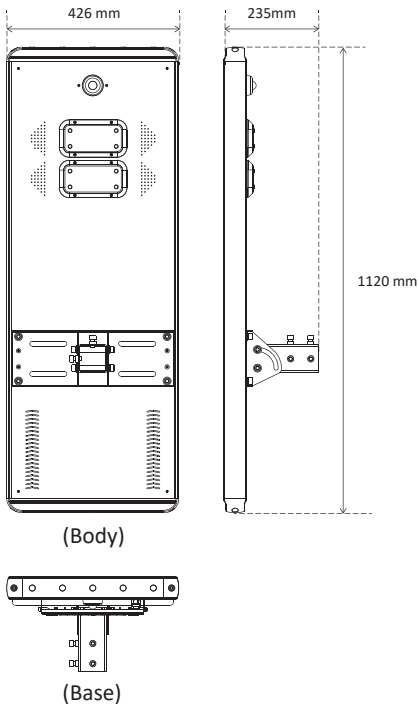
### Application (Driverway width=3.5M):

Garden, Residence, Courtyard  
Pedestrian and Branch Road  
Mine and Parking Lot  
Areas with no electrical supply



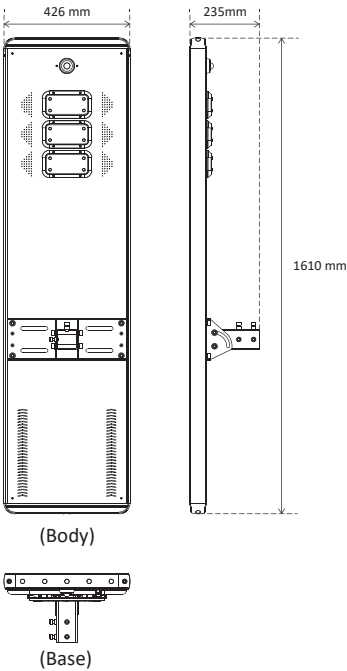
### Electrical & Photometric

Solar Panel Spec.	Model	Power	Modules Qty	Luminaire efficacy (+/- 5%)	Lumen Output (+/- 5%)	Battery Spec. (Lithium)	Constant worktime at 100% power	Constant worktime at 30% power (Energy save mode)	Charge Time (low battery voltage)	Installation Height	Pole Distance
50W Monocrystal	ZGSM-PV501010	10W	1 (30 LEDs)	145 lm/ w	1450 lm	10AH /12.8V	10 Hours	>34 Hours	2.5 Hours	3~4m	9~14m
	ZGSM-PV501510	15W	1 (30 LEDs)	140 lm/ w	2100 lm	10AH /12.8V	6.5 Hours	>22.5 Hours	2.5 Hours	3~5m	9~17m
	ZGSM-PV502010	20W	1 (30 LEDs)	130 lm/ w	2600 lm	10AH /12.8V	5 Hours	>17 Hours	2.5 Hours	4~5m	12~17m
	ZGSM-PV502020	20W	1 (30 LEDs)	130 lm/ w	2600 lm	20AH /12.8V	10 Hours	>34 Hours	5 Hours	4~5m	12~17m
	ZGSM-PV503020	30W	2 (60 LEDs)	140 lm/ w	4200 lm	20AH /12.8V	6.5 Hours	>22.5 Hours	5 Hours	4~6m	12~21m
	ZGSM-PV504020	40W	2 (60 LEDs)	130 lm/ w	5200 lm	20AH /12.8V	5 Hours	>17 Hours	5 Hours	5~6m	15~21m
	ZGSM-PV504030	40W	2 (60 LEDs)	130 lm/ w	5200 lm	30AH /12.8V	7.5 Hours	>25.5 Hours	7.5 Hours	5~6m	15~21m
	ZGSM-PV505030	50W	2 (60 LEDs)	125 lm/ w	6250 lm	30AH /12.8V	6 Hours	>20 Hours	7.5 Hours	5~7m	15~25m



Electriccal & Photometric

Solar Panel Spec.	Model	Power	Modules Qty	Luminaire effcacy (+/- 5%)	Lumen Output (+/- 5%)	Battery Spec. (Lithium)	Constant worktime at 100% power	Constant worktime at 30% power (Energy save mode)	Charge Time (low battery voltage)	Installation Height	Pole Distance
70W Monocrystal	ZGSM-PV702020	20W	2 (60 LEDs)	145 lm/ w	2900 lm	20AH /12.8V	10 Hours	>34 Hours	4 Hours	4~5m	12~17m
	ZGSM-PV703020	30W	2 (60 LEDs)	140 lm/ w	4200 lm	20AH /12.8V	6.5 Hours	>22.5 Hours	4 Hours	4~6m	12~21m
	ZGSM-PV703030	30W	2 (60 LEDs)	140 lm/ w	4200 lm	30AH /12.8V	10 Hours	>34 Hours	5.5 Hours	4~6m	12~21m
	ZGSM-PV704020	40W	2 (60 LEDs)	130 lm/ w	5200 lm	20AH /12.8V	5 Hours	>17 Hours	4 Hours	5~6m	15~21m
	ZGSM-PV704030	40W	2 (60 LEDs)	130 lm/ w	5200 lm	30AH /12.8V	7.5 Hours	>25.5 Hours	5.5 Hours	5~6m	15~21m
	ZGSM-PV704040	40W	2 (60 LEDs)	130 lm/ w	5200 lm	40AH /12.8V	10 Hours	>34 Hours	7.5 Hours	5~6m	15~21m
	ZGSM-PV705030	50W	3 (90 LEDs)	135 lm/ w	6750 lm	30AH /12.8V	6 Hours	>20 Hours	5.5 Hours	5~7m	15~25m
	ZGSM-PV705040	50W	3 (90 LEDs)	135 lm/ w	6750 lm	40AH /12.8V	8 Hours	>27 Hours	7.5 Hours	5~7m	15~25m
	ZGSM-PV706030	60W	3 (90 LEDs)	130 lm/ w	7800 lm	30AH /12.8V	5 Hours	>17 Hours	5.5 Hours	6~8m	18~35m
	ZGSM-PV706040	60W	3 (90 LEDs)	130 lm/ w	7800 lm	40AH /12.8V	6.5 Hours	>22.5 Hours	7.5 Hours	6~8m	18~35m



Electrical & Photometric

Solar Panel Spec.	Model	Power	Modules Qty	Luminaire efficacy (+/- 5%)	Lumen Output (+/- 5%)	Battery Spec. (Lithium)	Constant worktime at 100% power	Constant worktime at 30% power (Energy save mode)	Charge Time (low battery voltage)	Installation Height	Pole Distance
100W Monocrystal	ZGSM-PV1003020	30W	3 (90 LEDs)	145 lm/ w	4350 lm	20AH /12.8V	6.5 Hours	>22.5 Hours	2.5 Hours	4~6m	12~21m
	ZGSM-PV1003030	30W	3 (90 LEDs)	145 lm/ w	4350 lm	30AH /12.8V	10 Hours	>34 Hours	4 Hours	4~6m	12~21m
	ZGSM-PV1004020	40W	3 (90 LEDs)	140 lm/ w	5600 lm	20AH /12.8V	5 Hours	>17 Hours	2.5 Hours	5~6m	15~21m
	ZGSM-PV1004030	40W	3 (90 LEDs)	140 lm/ w	5600 lm	30AH /12.8V	7.5 Hours	>25.5 Hours	4 Hours	5~6m	15~21m
	ZGSM-PV1004040	40W	3 (90 LEDs)	140 lm/ w	5600 lm	40AH /12.8V	10 Hours	>34 Hours	5 Hours	5~6m	15~21m
	ZGSM-PV1005030	50W	3 (90 LEDs)	135 lm/ w	6750 lm	30AH /12.8V	6 Hours	>20 Hours	4 Hours	5~7m	15~25m
	ZGSM-PV1005040	50W	3 (90 LEDs)	135 lm/ w	6750 lm	40AH /12.8V	8 Hours	>27 Hours	5 Hours	5~7m	15~25m
	ZGSM-PV1005045	50W	3 (90 LEDs)	135 lm/ w	6750 lm	45AH /12.8V	9 Hours	>30.5 Hours	6 Hours	5~7m	15~25m
	ZGSM-PV1006030	60W	3 (90 LEDs)	130 lm/ w	7800 lm	30AH /12.8V	5 Hours	>17 Hours	4 Hours	6~8m	18~35m
	ZGSM-PV1006040	60W	3 (90 LEDs)	130 lm/ w	7800 lm	40AH /12.8V	6.5 Hours	>22.5 Hours	5 Hours	6~8m	18~35m
	ZGSM-PV1006045	60W	3 (90 LEDs)	130 lm/ w	7800 lm	45AH /12.8V	7.5 Hours	>25.5 Hours	6 Hours	6~8m	18~35m

### Working Environment & Packing

Solar Panel	Model	Working Temperature	CRI	CCT	Optic	Rating	Induction Type	Pole Aperture	Body/ Base Carton Size (mm)	N.W (kg)	Body/ Base G.W (kg)
Monocrystal 50W	ZGSM-PV501010 ZGSM-PV501510 ZGSM-PV502010	-20 °C ~ +60 °C	>70	3000* 4000 5000 5700	1S	IP65 IK10	Human infrared induction or microwave induction function for optional, Factory default is infrared induction.	Round pole: Φ60mm; Square pole: 60 x60mm	915*485*140/ 410*160*205	13.8	11.9/ 4.2
	ZGSM-PV502020									14.9	13.0/ 4.2
	ZGSM-PV503020 ZGSM-PV504020									15.3	13.4/ 4.2
	ZGSM-PV504030 ZGSM-PV505030									16.5	14.6/ 4.2
Monocrystal 70W	ZGSM-PV702020 ZGSM-PV703020 ZGSM-PV704020								1175*485*140/ 410*160*205	16.8	15.3/ 4.2
	ZGSM-PV703030 ZGSM-PV704030									18.0	16.4/ 4.2
	ZGSM-PV704040									19.0	17.4/ 4.2
	ZGSM-PV705030 ZGSM-PV706030									18.4	16.8/ 4.2
	ZGSM-PV705040 ZGSM-PV706040									19.4	17.8/ 4.2
Monocrystal 100W	ZGSM-PV1003020 ZGSM-PV1004020								1665*485*140/ 410*160*205	22.8	22.1/ 4.2
	ZGSM-PV1003030 ZGSM-PV1004030 ZGSM-PV1005030 ZGSM-PV1006030										
	ZGSM-PV1004040 ZGSM-PV1005040 ZGSM-PV1006040									23.8	23.1/ 4.2
	ZGSM-PV1005045 ZGSM-PV1006045	25.0	24.3/ 4.2								

Note: Above data of weight are all typical values.

### Certification

Manufacturer
ISO9001, ISO14001
PV2 Series [ All the models ]
CE, ROHS, LM80

Convenient maintenance :

- + Drawer design makes the battery, led modules, sensor and controller easier to maintain.
- + Male /Female IP68 cable connector makes the luminaire waterproof and easy to replace.

