

# All In Two(AIT) Solar LED Street Light

15W | 20W | 30W | 40W | 50W | 60W With Separate Solar PV



MC4 male & female plugs directly to 18V solar panel. quick and easy for connection. 25mm² power cord for less voltage drop.

### **COMPACT SYSTEM**

Battery and solar controller, sensor are built-inside of light, only need to be connected to 18V system, NO more other operation, easy ,simple and quick installation.





Sensor



MC4 Plugs Connection



Lithium Battery



12 Hrs/Day 130 LM/W

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### **Applications:**

- \* Street lighting
- \* Car Park & Perimiter Lighting
- \* Villa path Lighting
- \* Express way lighting
- \* Construction Sites
- \* Rural & Remote Area Lighting
- \* Outdoor Shopping Lighting











### **Model Selection:**

Model No.	SN-U15W	SN-U20W	SN-U30W	SN-U40W	SN-U50W	SN-U60W			
Fixture IP	IP67								
LED Power Ma	15W	20W	30W	40W	50W	60W			
Luminous Flux	>2,200lm	>2,800lm	>3,600lm	>5,200lm	>6,200lm	>7,200lm			
Beam angle		140*70 Degrees							
Color Temp.		2700K ~ 6500K Optional							
CRI		>83							
LED Brand	Philips SMD3030								
LED Qty	48Pcs 72Pcs		90Pcs						
Battery Capacity	7 195WH 12V	293WH 12V	391WH 12V	488WH 12V	548WH 12V	635WH 12V			
Charge Time	6 Hours								
Max Discharge Time	>48 Hours								
Controller Type	PWM type with sensor MPPT type with sensor								
Solar Panel(Poly)	40W 18V	50W 18V	60W 18V	80W 18V	100W 18V	120W 18V			
V.mp. of PV	18V	18V	18V	18V	18V	18V			
I.mp. of PV	2.22A	2.78A	3.33A	4.45A	5.56A	6.67A			
PV Size(mm)	670*390*25	620*535*30	670*560*25	760*670*30	1000*680*30	1050*670*30			
Flexible PV Option	Thin Film 40W Semi Flex 40W	Thin Film 52W Semi Flex 50W	Thin Film 65W Semi Flex 60W	Thin Film 79W Semi Flex 80W	Thin Film 105W Semi Flex 100W	Thin Film 144W Semi Flex 120W			
Working Temp.		-20 ° C ~ +65 ° C							
Lighting Modes	Remote Control Unit								
Pole Height	3~4 M	3~5M	3~6M	4~6M	5~8M	6~12M			
Packing	2PCS/CTN, CTN SIZE: 65*32*36CM, QTY/20GP: 720PCS, QTY/40HQ: 1500PCS								









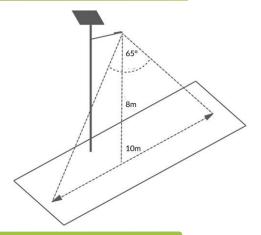






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# **Induction Sensor**



Microwave (Radar) sensor is adopted in this light in order to save more energy. Energy saving mode is adjustable by the remote control easily. Radar sensor is more sensitive than PIR sensor in much wider angle and longer distance, and it can be trigered easily with slight movements. The best sensitive distance from people / object to light sensor should be within 12 meters.

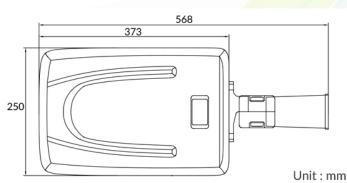
PIR sensor is optional

### **Inner Structure**



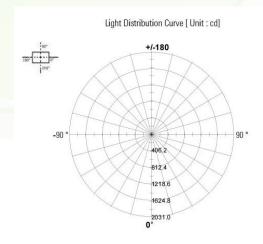
Notice: Solar led flood light has same inernal structure as solar led street light

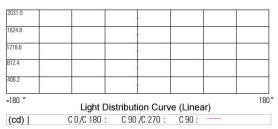
# Dimension 82

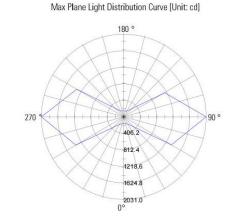


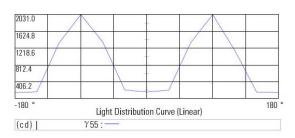
# **SINOLTECH®**

# IES DATA

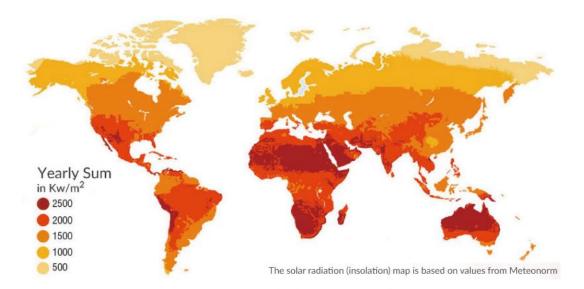








# Solar Radiation



### Proportion Between LED Light and Solar Panel. (For reference only.)

REGION	LIGHTING MODES	LED POWER	SOLAR PANEL	CHARGE TIME
2500	6H 100% + 6H 50%	10W	>20W	5 Hours
2000	6H 100% + 6H 50%	10W	>25W	5 Hours
<b>1500</b>	6H 100% + 6H 50%	10W	>30W	5 Hours
<u> </u>	6H 100% + 6H 50%	10W	>40W	5 Hours
<b>500</b>	6H 100% + 6H 50%	10W	>50W	5 Hours

# SOLAR BATTEN LIGHTS

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# **Working Mode**



This remote controller is mainly used to change the operating power of the lamp, working !me, the remote control can also change the delay of the lamp to open, or adjust the output power according to the battery power. However, if you are not a very professional engineer or are not very familiar with this remote control, we strongly recommend that you only make simple settings such as adjus!ng the power and adjus!ng the working hours. Otherwise, the lamp may not work properly.

In simple terms, this controller (in the street light) divides the night's working !me into three segments. You can set different power and working hours for each segment individually. The working time of each segment can be set to a maximum of 14 hours. Of course, in this case, the settings for the other 2 segments have become invalid. Why, because if you set the first period of time to 12 hours and the power is 80%, but the night !me is only 11 hours, the lights will go off in the morning and the other two time periods will be set. Activated.

We recommend that you only adjust the power and working hours of the lamps, for example in the table below. Please mainly look at the settings from B to J. These are 3 time periods. Other settings can be ignored. Please do not change them at random so as to avoid problems.

Please note that each time you press "send" to send a signal, please align the position of the lamp's sensor head. (If there is no sensor head, please aim at the LED light area) and send it successfully. You will hear a "bee" once. If it is unsuccessful, you will hear "bee" twice. If unsuccessful, please reset the control. In the mode, press the "-" and "light" keys simultaneously for three seconds to select the mode of the controller. For lamps with sensors and power greater than 20W, we use the MPPT controller, please select "MES/SES", 10W and 20W, please select "DH/Li/DL/WH"

### If you want

### The setting should be:

b: 4H

c: 100% d: 100% e: 5H

f: 100% g: 50% h: 4H

i: 30% j: 30%

3 hours 70% with sensor 100% + 6 hours 50% without sensor + 4 hours 30% with sensor 50%

### The setting should be:

b: 4H

If you want

c: 100% d: 70%

e: 6H

f: 50% g: 50%

h: 4H

i: 50%

j: 30%

If you want

6 hours 100% without sensor + 8 hours 50% without sensor

### The setting should be:

b: 6H

c: 100%

d: 100%

e: 6H

f: 50% g: 50%

h: 0H

i: 0%

j: 0%

### If you want

6 hours 50% with sensor 100% ( light only work half night time.)

### The setting should be:

b: 6H

c: 100%

d: 50% e: 0H

f: 0%

g: 0%

h: 0H

i: 0%

j: 0%

### If you want

12 hours 30% with sensor 100% only for all night time

### The setting should be:

b: 12H

c: 100% d: 30%

e: 0H

f: 0%

g: 0% h: 0H

i: 0%

j: 0%

item	Name	Data scope	Discription	Step-length	Unit
a	Bat Type	Li12,Li24	Battery type choosing	1	Volt
b	S-Time-1	0 ~ 15H	The first Sensitive time	1H	Hour
С	S-C-Pow1	0 ~ 100%	The first Sensitive power(when people coming)	10%	Power (percentage)
d	S-L-Pow1	0 ~ 100%	The first Sensitive power(after people Leave)	10%	Power (percentage)
е	S-Time-2	0 ~ 15H	The second Sensitive time	10%	Hour
f	S-C-Pow2	0 ~ 100%	The second Sensitive power(when people	10%	Power (percentage)
g	S-L-Pow2	0 ~ 100%	The second Sensitive power(after people Leave)	10%	Power (percentage)
h	S-Time-3	0 ~ 15H	The third Sensitive time	1H	Hour
i	S-C-Pow3	0 ~ 100%	The third Sensitive power(when people coming)	10%	Power (percentage)
j	S-L-Pow3	0 ~ 100%	The third Sensitive power(after people Leave)	10%	Power (percentage)
k	S-D-Time	0 ~ 250S	Sensitive delay time	105	Seconds
1	L-Con-V	5 ~ 11V	Light control voltage	1V	Volt
m	L-Con-DT	1 ~ 50Mins	Light control delay time	5M	Mins
n	L-Current	0.15~ 3.42A	LED load current	0.03A	Α
0	Smart Pow	0 ~ 1	Smart power control	1	Yes: On No: Off
р	0°C-Chg-P	Yes/no	0°C charging protection	1	Yes: On No: Off
1	Chg-Mode	PWM/DC	Charging mode control	1	PWM: PWM Charging DC: Direct Chging
r	Over-DV	7.5~17v	over-discharging protected voltage	0.1V	Volt
S	Over-DRV	7.5~17v	over-discharging recover voltage	0.1V	Volt
t	Over-CV	7.5~17v	Over-charging voltage	0.1V	Volt
u	Over-CRV	7.5~17v	over-charging recover voltage	0.1V	Volt
CO	Re-Def	Yes/No	Restore factory default values	1	Yes: On No: Off

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# **Detailed View**



Lithium Battery Pack High temperature resistant, up to 2000 cycles lifetime. (DOD 70%) Smart BMS protection.



Philips SMD LED Source
More LEDs is used, drived with lower current, achieving more than 150lm/w.
High efficiency than normal solar lights.



MPPT Solar Controller
Higher chagring efficiency than PWM conctrollers, Ensuring enough power generated for every night,



Switch Button
Aluminium material, anti-UV & Oxidation
High performance.



Adjustable brackets
Marked with digitals, esay to adjust up/down when installation. Rexible for different projects condition



Microwave (Radar) Sensor

More sensititve performace than normal
FIR sensor, longer distance and detective
angle. IP65 waterproof







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### **Materials**



All in Two Solar LED Street Light is adopting big brand Philips SMD3030 1W as light source. What's more, more than doubled LED is used but LEDs are driven by lower current input. It achieves a super high lumens, up to 150lm/W practically. AIT 20W is equal to same lighting performance as ALL IN ONE 30W, The LED of All In One solar led street light is always used high power 1W with Epistar or Bridgelux LED. All in Two 30W is saying the total led consumption is 30W. All in One 30W is always saying the total quantity of led 1W is 30Pcs. the real power is always much less than power as declared. That is why all in two solar street light is much brighter than all in one type.



The solar panel of AIT street light is separated from light head. It makes so convenient for customer to choose the right panel according to sunshine radiation of local environments. This is quite necessary especially customers requires 100% power for whole night. For example, AIT 20W can come with 40W solar panel if does not need long and brightness for whole light, and also AIT 20W can come with 100W solar panel for the area where is lack of sunshine very much, like North of Canada.

AIT solar street light always come with a motion sensor, and only work with 30%+100% for whole 12 hours. never support 6 hours 100% brightness+6 hours 100% which is the most requirements for big projects.

Thanks to separated solar panel, Customer can adjust the position of solar panel in horizontal and vertical position freely and easily. This allows solar panel can be used with the highest efficiency as possible in the best position. Customer can purchase solar panel from Auroras, or buy from their ready supplier, or use solar panel in stock. More flexible for business. What's more, Solar panel and solar light head are connected by MC4 which is the universal connector for solar panel. Distance from solar panel to light is max 40M. Lights can be installed far away from solar panel. Lighting will be anywhere, anytime.

# **PV** Option



**LED Street Light** with Normal PV

**Mounting Bracket-Optional** 



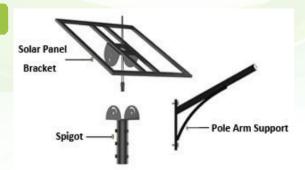






LED Street Light with Flexible PV

LED Street Light with Semi Flex PV



# SINOLTECH ENERGY LIMITED SHANDONG SINOLTECH INTERNATIONAL CO., LTD



# **INTEGRITY. HIGH BRIGHTNESS. EASY-INSTALL**

**One-Stop Solar Energy Solution Provider** 

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