

# ALL-in-one

## Integrated Solar Street Light

Perfect combination of practical technology and optical art

The Art of designing for lightThe All in One Solar Street Light series is currently the latest lighting system. The All in One Solar Street Light series combines cutting-edge technology with efficient photovoltaic modules.



### STRUCTURAL SUBJECT

The lamp body adopts integrated design

### OPTICAL ELEMENT

The light source adopts bat wing lens optical accessories

### ASSEMBLING METHOD

Sleeve angle adjustable installation mode

# ALL-in-one

## Integrated Solar Street Light

This is our latest lighting system, equipped with double-sided solar modules and powerful lighting, which can maximize the use of light energy. We combine cutting-edge technology with efficient photovoltaic modules, integrating powerful LiFePO4 batteries and intelligent controllers into a stylish and compact design. The sleeve is equipped with gears that can adjust the angle of the lamp body, achieving different lighting angles and improving product performance and efficiency. Meanwhile, integrated design simplifies installation and enhances user experience.



TX-30W

TX-60W

TX-80W



TX-100W

TX-120W

TX-150W

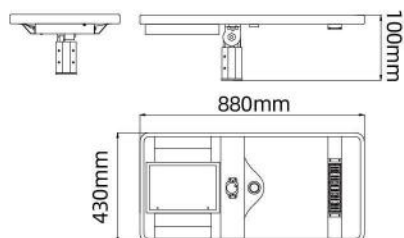


# TECHNICAL PARAMETER

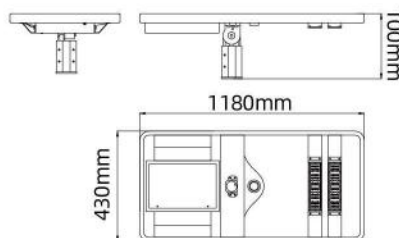
Model	TX-30W	TX-60W	TX-80W	TX-100W	TX-120W	TX-150W
Power	30W	60W	80W	100W	120W	150W
Input voltage	12V DC		12V DC			
Control Option	Photocell sensor, timing, dimming, intelligent power saving, microwave sensor or PIR sensor.					
Photometric Data						
LED Manufacturer	Philips					
LED model	3030 / Pcs	3030 / Pcs	3030 / Pcs	3030 / Pcs	5050 / Pcs	5050 / Pcs
Lens Material	Polycarbonate					
Efficacy (±3%, @5000K, >70Ra)	150lm/W	150lm/W	150lm/W	150lm/W	150lm/W	150lm/W
Luminous flux (±3%,@50D0K,>70Ra)	6600lm	13200lm	17600lm	22000lm	26400lm	33000lm
ULOR	= 0%, @ Luminaire inclination 0°					
CCT	3000K, 4000K, 5000K, 5700K, 6500K					
CRI	70Ra,80Ra, 90Ra optional					
Beam Angle	T2					
Mechanical Data						
IP Rating	IP66, according to standard EN 60529					
Housing Material	Heavy-duty die-cast aluminum (EN AC-46100)					
Surface Treatment	Anti-UV thermosetting polyester /epoxy primer+Anti-UV thermosetting polyester+Anodization					
Housing Color	Black, Custom request					
Mounting Bracket Options	Horizontal and vertical installation.0-20° Adjustable					
Solar Panel Data						
Photovoltaic panel	Double crystal photovoltaic panel					
Solar Panel-MPPT (Std. Dev. ±3%)	18V/60W	18V/80W	18V/100W	18V/120W	18V/150W	36V/160W
Lithium Ferro Phosphate Battery	230.4WH	384WH	537.6WH	691.2WH	768WH	921.6WH
	12.8V18AH	12.8V30AH	12.8V42AH	12.8V54AH	12.8V60AH	25.6V36AH
Charing Time	5-6 Hours					
Battery lifespan	>2000 times cycle					
Autonomy with dimming profile without run time extension (hrs)	18hrs	18hrs	18hrs	18hrs	18hrs	18hrs
Autonomy without dimming profile without run time extension (hrs)	5.2hrs	4.6hrs	5.1hrs	5.2hrs	5.6hrs	5.2hrs
Working time	12 Hours Per day,7-10 Rainy Days under intelligent model.					
Working Temperature	-25°C to 60°C					
Control system	MPPT IoT, AC/DC Hybrid solution, PWM optional					
Maximum Autonomy	Operate 1~2 rainy days under intelligent model					
Package Info						
Product Size	880*430*100mm	1180*430*100mm	1380*430*100mm	1610*430*100mm	1880*430*100mm	1880*430*100mm
Net Weight	11.5kg	14kg	17kg	20kg	24kg	26kg
Carton Size	910*500*110mm	1210*500*110mm	1410*500*110mm	1640*500*110mm	1910*500*110mm	1910*500*110mm
Gross Weight	12.2kg	14.8kg	18kg	21.5kg	25.5kg	28kg
Others						
Led Lifespan	100000 hrs,@Tq 25°C					
Warranty	3 years(Warranty extension up to 5 years on request)					
Certification	CE,ROHS,FCC,IK09,IP66,IEC,ISO9001,For other certificates please request					
Recommend Installation Height	4-6m	6-8m	7-8m	8-10m	10-12m	10-12m
Application Field	Urban and rural street,Highway,road					
SCx	Front:0.3465m²; Front-side:0.0535m² Side:0.0622m²;	Front:0.3465m²; Front-side:0.0535m² Side:0.0622m²;	Front-0.4143m² Front-side:0.0535m² Side -0.0069m²	Front-0.4831m² Front-side:0.0535m² Side-0.0706m²	Front-0.5537m² Front-side:0.0535m² Side-0.0743m²	Front-0.6215m² Front-side:0.0535m² Side-0.0790m²

## PRODUCT SIZE AND PACKAGING

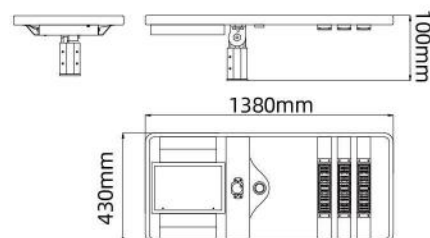
30W



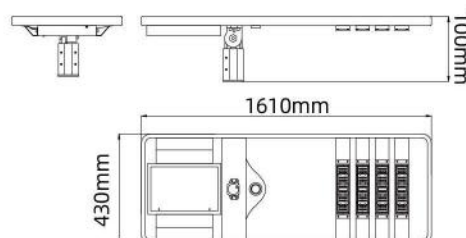
60W



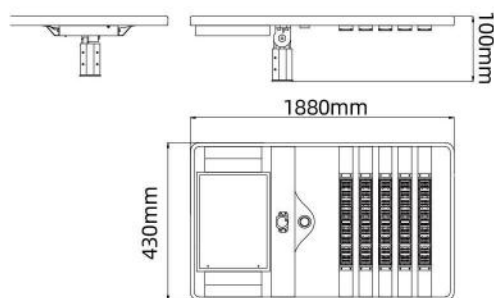
80W



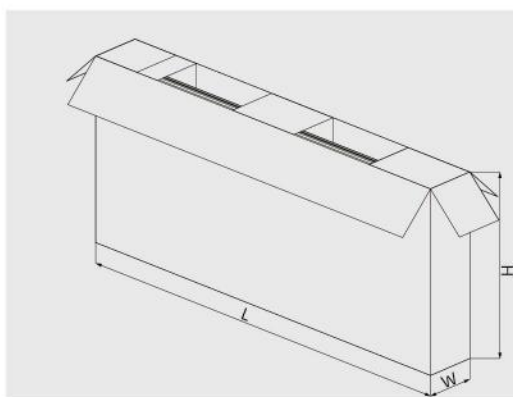
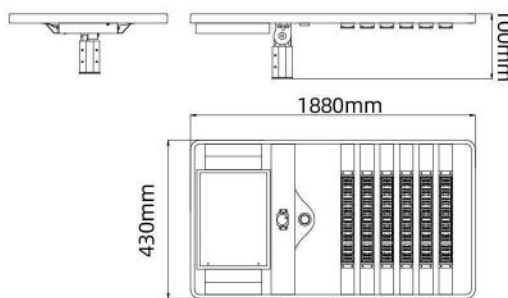
100W



120W



150W

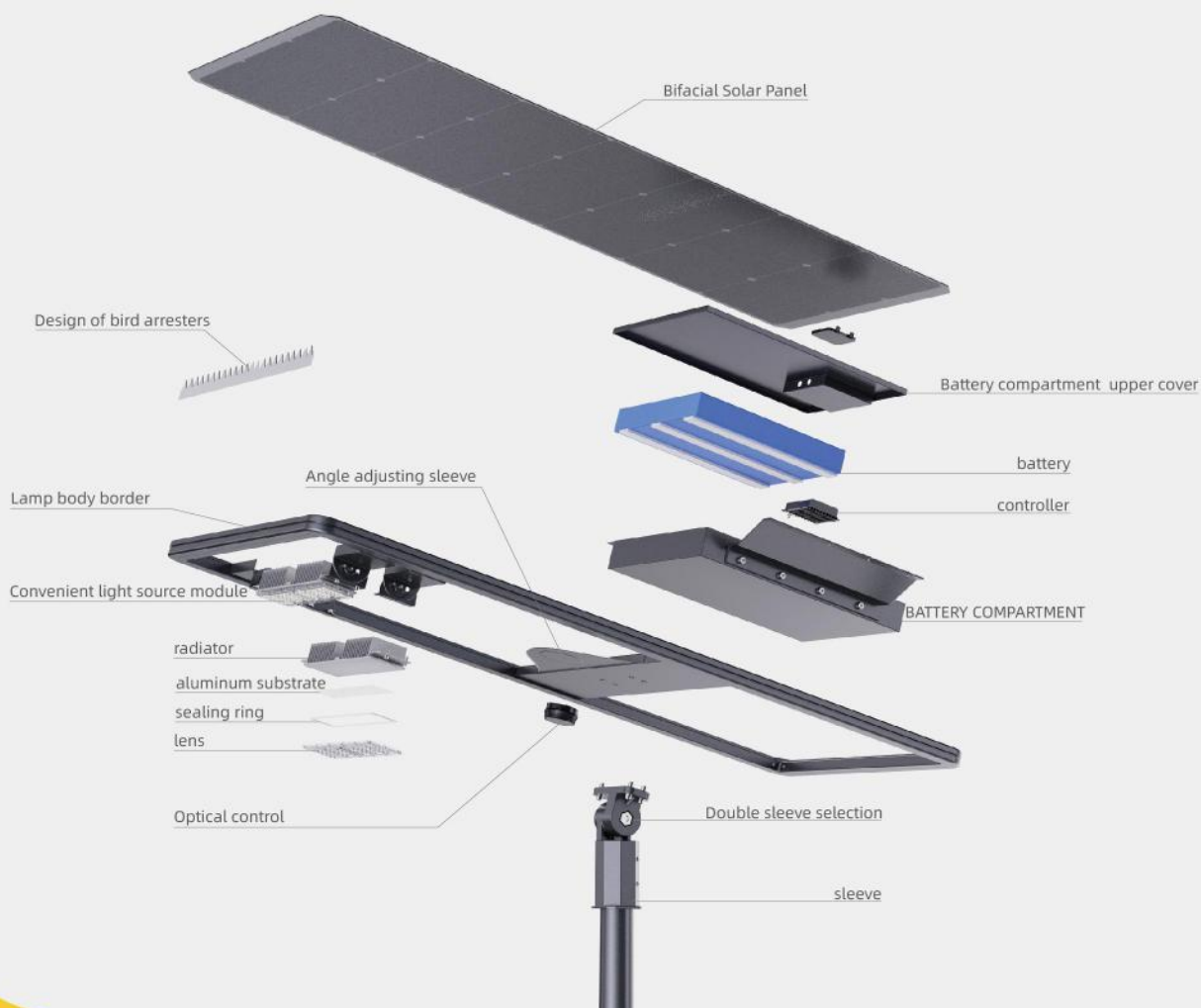


Power	Package size	Net Weight	Gross Weight
30W	910x500x110	11.5 KG	12.2KG
60W	1210x500x110	14 KG	14.8 KG
80W	1410x500x110	17 KG	18 KG
100W	1640x500x110	20KG	21.5 KG
120W	1910x500x110	24 KG	25.5 KG
150W	1910x500x110	26 KG	28 KG

## STRUCTURAL MECHANICS

The All in one solar street light series light source adopts modular design, corrosion-resistant aluminum alloy shell, and tempered stainless steel

The All in one solar street light series adopts IP65 and IK08 shell, which increases the strength. It is carefully designed and durable, and can be controlled no matter in rain, snow or storm.



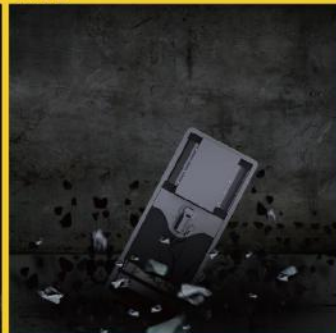
## PROTECTION GRADE

IP66: the dust density completely prevents the foreign matter invasion, and may completely prevent the dust invasion, prevents the spray water invasion, prevents from all directions by the nozzle spray water enters the lamps and lanterns to cause the damage; IK08:10J Impact Force (equivalent to the impact of a 5KG object falling from a height of 200mm on a surface) .

•IP66



•IK08

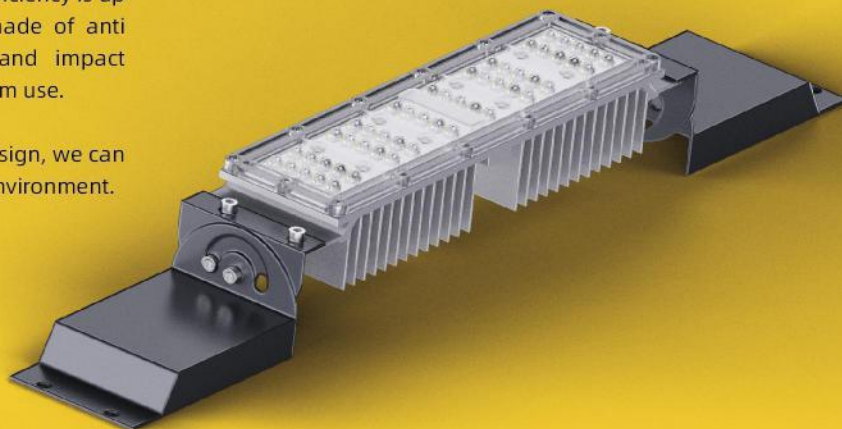




## HIGH EFFICIENCY LED

Using high-efficiency LED, the luminous efficiency is up to 180lm/W. The light sealing lens is made of anti ultraviolet PC, which has anti-aging and impact resistance performance, realizing long-term use.

Through the unique optical lens cut-off design, we can eliminate the pollution of lighting to the environment.



## ANGLE ADJUSTABLE DESIGN



The light source module adopts a new angle-adjustable fixed design, which is easy to install and can be repaired and replaced separately.

The adjustment range is  $+20^{\circ} \sim -20^{\circ}$ , which can be adjusted according to the needs of the environment to apply to various installation environments.

## ADJUSTABLE ANGLE OF LAMP BODY

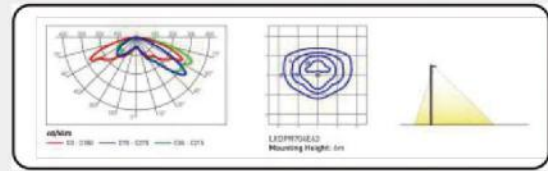
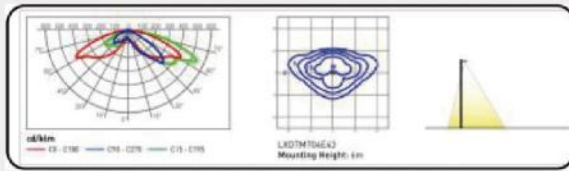


The integrated street lamp adopts a new angle adjustable fixed design, which is easy to install and maintain. The adjustment range is  $0^{\circ} \sim +60^{\circ}$ , which can be adjusted according to environmental needs and is suitable for various installation environments.

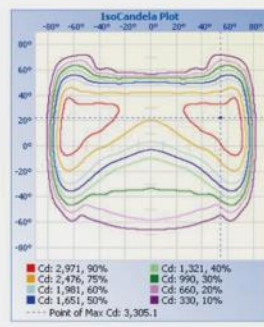
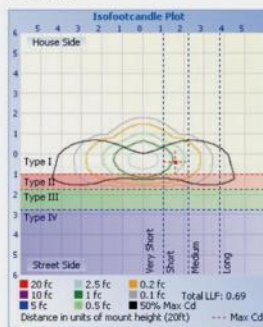
# PHOTOMETRICS

Type 2 for street lighting, cycle paths and footpaths

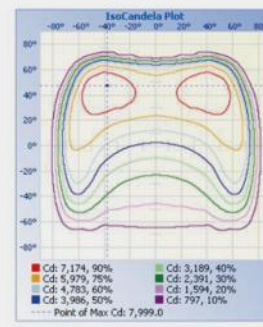
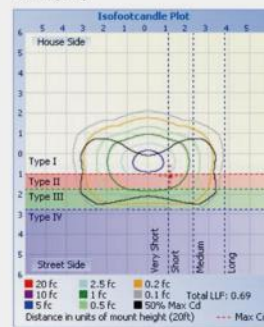
Type 3 for street light and car parks



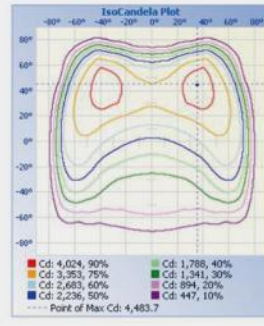
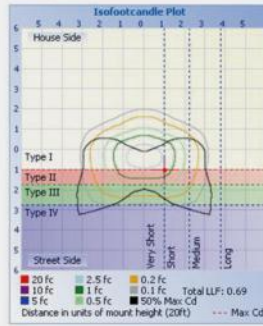
TYPE II (T203)



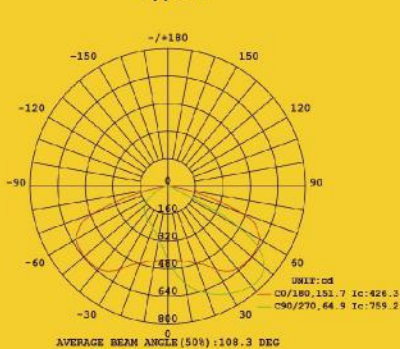
TYPE III (T304)



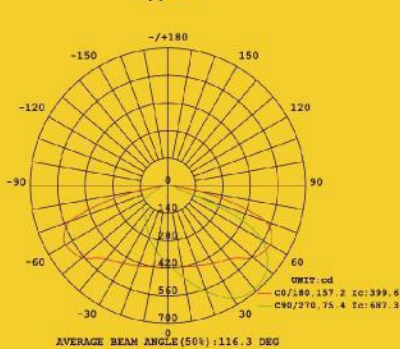
TYPE IV (T402)



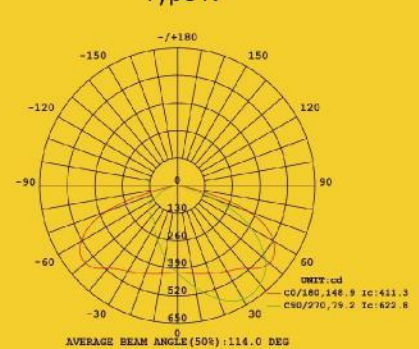
Type II



Type II



Type IV

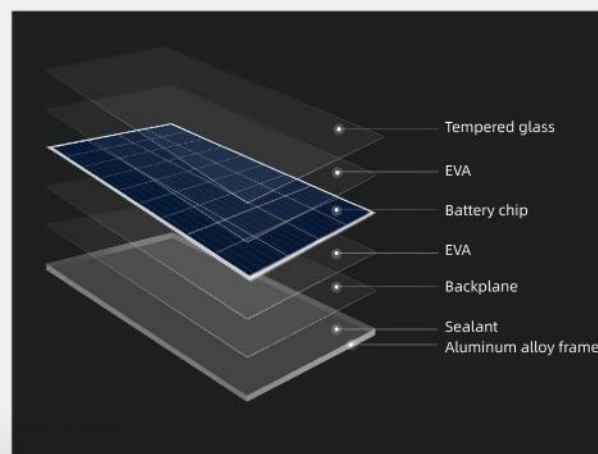




## EFFICIENT SOLAR PANELS

The material selection is strict. After many tests and classification, qualified battery chips are selected, and special lamination process is adopted to ensure the adhesion strength between Eva and tempered glass and back plate.

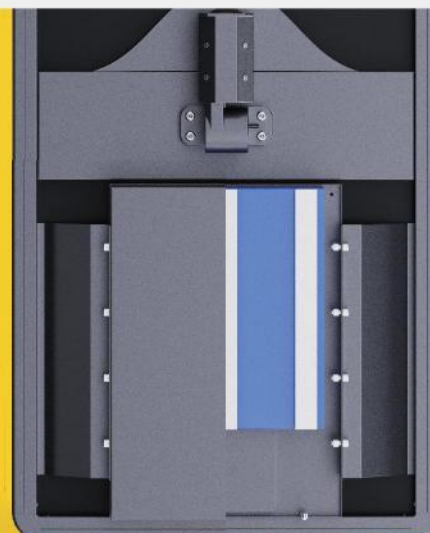
The utility model has the advantages of good performance, long service life and high power generation efficiency.



## LIFEPO4 BATTERY SYSTEM

Environment-friendly LiFePO4 batteries without metal components are used.

The cycle life is more than 1000 times, and it is safe to use without fire and explosion; High temperature resistance, large capacity, green environmental protection, non-toxic, pollution-free.



# CHARGE LIGHTING POWER SUPPLY CONTROL SYSTEM

The charge and discharge efficiency of photovoltaic MPPT power supply controller is improved by adopting the circuit design of high-speed MOSFET pre-drive.

Intelligent power regulation, automatic weather judgment, reasonable discharge planning embedded in the microcomputer control system, charge and discharge a variety of intelligent control methods, make the whole system more efficient and energy-saving.

## PRODUCT CHARACTERISTICS

1. Low-voltage self-activation of the battery to ensure that the battery-fed conditions of normal charging;
2. It can automatically adjust the output power according to the remaining capacity of the battery to extend the use time.
3. Constant voltage output to load can be set to normal/timing/optical control output mode;
4. With dormancy function, can effectively reduce their own losses;
5. Multi-protection function, timely and effective protection of products from damage, while the LED indicator to prompt;
6. Have real-time data, day data, historical data and other parameters to view;

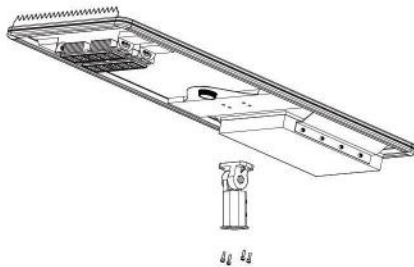


## INTELLIGENT POWER ADJUST

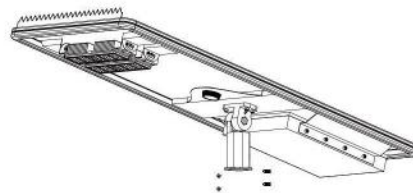
comes complete with built-in motion detection system that automatically regulate the light source from full bright to dim mode to increase battery autonomy.

# INSTALLATION DIAGRAM

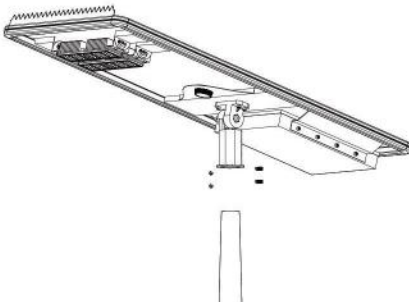
1. Open the package, remove the accessories, and loosen the socket screws



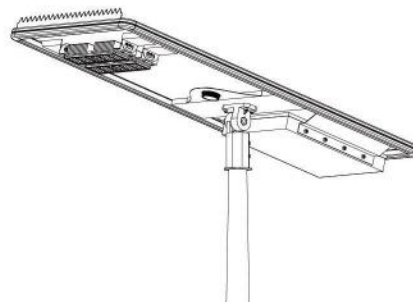
2. Fixed muffle



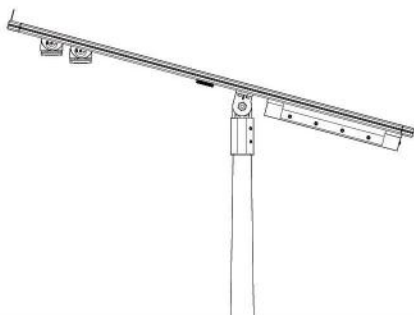
3. Loosen the screws of the lamp post



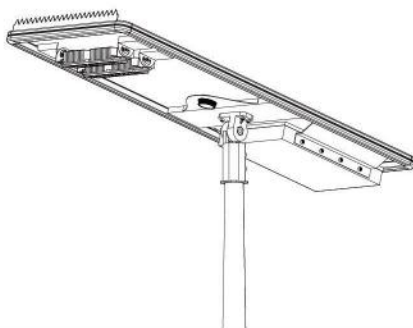
4. Insert the lamp post, tighten the lamp post screws, and adjust the angle of the lamp body



5. Adjust module angle



6. Complete installation



## Caution:

1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.











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