

Inbrit[®]



COSMO

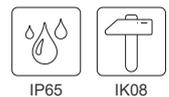
ALL IN TWO SOLAR STREET LIGHT



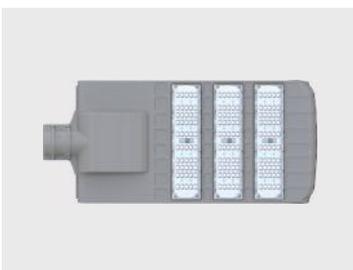
COSMO

10W/12W/15W/20W/27W/30W

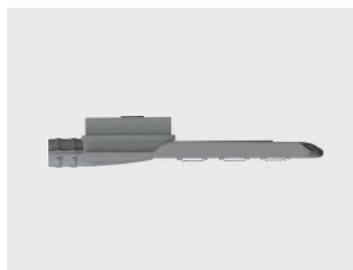
ALL IN TWO SOLAR STREET LIGHT



High quality LED light beads, daylight level new brightness.
 The large lamp beads with lenses have better light gathering effect,
 higher brightness and wider irradiation range.
 Wide illumination range by irradiating from different directions.
 High photoelectric conversion efficiency, can be charged even in rainy days.
 Style, height, all can be customized.



Front view



Side view



Top view



MAIN BODY OF A STRUCTURE

The lamp body is made of die cast aluminum

OPTICAL ELEMENT

The light source adopts bat wing lens optical accessories

INNOVATIVE LED MODULES

Adjustable LED bead module Different angles for more scenes

HIGH EFFICIENCY HEAT SINK

Large heat dissipation area, efficient cooling, long-lasting lights



Model No.	COSMO-DC-11	COSMO-DC-12	COSMO-DC-13	COSMO-DC-14	COSMO-DC-15	COSMO-DC-16	COSMO-DC-17	COSMO-DC-18
Rated Power	12W	15W	20W	20W	27W	10W	20W	30W
System Voltage	DC3.2V					DC12.8V		
LiFePO4 Battery	40AH3.2V	50AH3.2V	60AH3.2V	72AH3.2V	84AH3.2V	12AH12.8V	24AH12.8V	36AH12.8V
Controller	15A30W					10A30W		
Light Source	3030							
Light Distribution	Bat-Wing light distribution (150°×75°)							
Light Efficiency	150-160LM/W							
Color Temperature	3000K-6000K							
CRI	≥Ra70							
IP Rating	IP65							
Working Temperature	-10°C -+60°C							
LED Lifespan	50000H-100000H							
Mount Diameter	Φ60MM							
Lamp Dimension	420×263×75MM							
Lamp Weight	2.42KG	2.46KG	2.6KG	2.85KG	3.2KG	2.53KG	3.52KG	4.5KG
Total Case Weight	5.14KG (2pcs/CTN)	5.22KG (2pcs/CTN)	5.5KG (2pcs/CTN)	6.0KG (2pcs/CTN)	6.5KG (2pcs/CTN)	5.36KG (2pcs/CTN)	7.34KG (2pcs/CTN)	9.3KG (2pcs/CTN)
Package Dimension	440×280×115MM							
Suggested Mount Height	4-6M							6-8M
Warranty	3 Years							

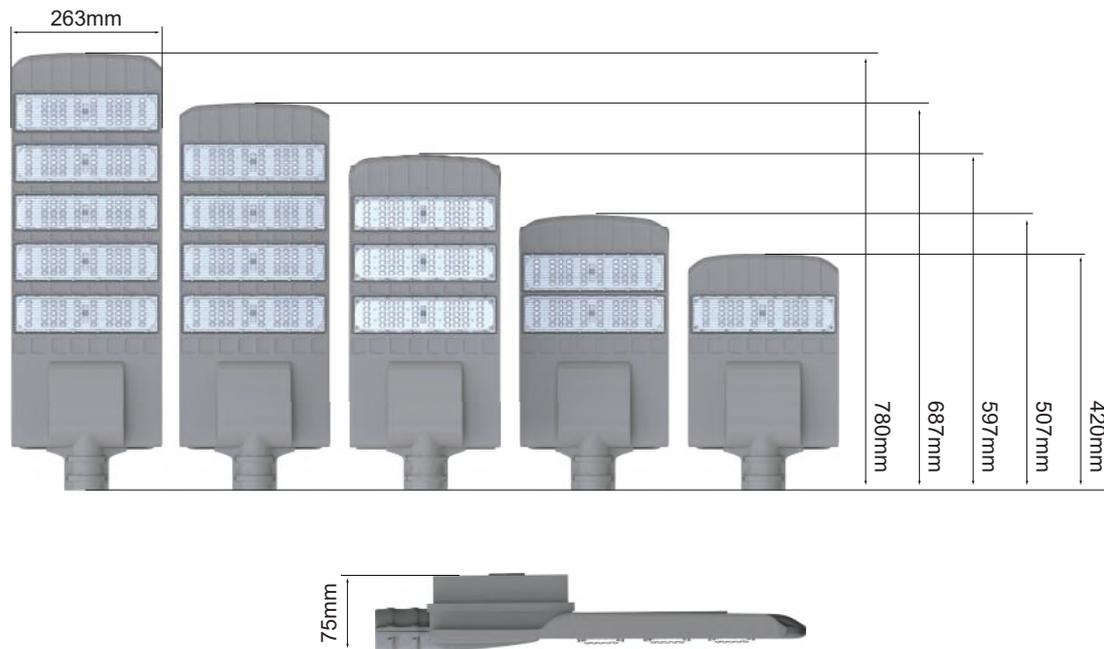
Model No.	COSMO-DC-21	COSMO-DC-22	COSMO-DC-23	COSMO-DC-24	COSMO-DC-25	COSMO-DC-26	COSMO-DC-27	COSMO-DC-28
Rated Power	12W	15W	20W	20W	27W	10W	20W	30W
System Voltage	DC3.2V					DC12.8V		
LiFePO4 Battery	40AH3.2V	50AH3.2V	60AH3.2V	72AH3.2V	84AH3.2V	12AH12.8V	24AH12.8V	36AH12.8V
Controller	15A30W					10A30W		
Light Source	3030							
Light Distribution	Bat-Wing light distribution (150°×75°)							
Light Efficiency	150-160LM/W							
Color Temperature	3000K-6000K							
CRI	≥Ra70							
IP Rating	IP65							
Working Temperature	-10°C -+60°C							
LED Lifespan	50000H-100000H							
Mount Diameter	Φ60MM							
Lamp Dimension	507×263×75MM							
Lamp Weight	2.63KG	2.67KG	2.8KG	3.05KG	3.4KG	2.74KG	3.73KG	4.72KG
Total Case Weight	5.58KG (2pcs/CTN)	5.66KG (2pcs/CTN)	6.0KG (2pcs/CTN)	6.42KG (2pcs/CTN)	6.9KG (2pcs/CTN)	5.8KG (2pcs/CTN)	7.78KG (2pcs/CTN)	9.76KG (2pcs/CTN)
Package Dimension	525×275×115MM							
Suggested Mount Height	4-6M							6-8M
Warranty	3 Years							

Model No.	COSMO-DC-31	COSMO-DC-32	COSMO-DC-33	COSMO-DC-34	COSMO-DC-35	COSMO-DC-36	COSMO-DC-37	COSMO-DC-38
Rated Power	12W	15W	20W	20W	27W	10W	20W	30W
System Voltage	DC3.2V					DC12.8V		
LiFePO4 Battery	40AH3.2V	50AH3.2V	60AH3.2V	72AH3.2V	84AH3.2V	12AH12.8V	24AH12.8V	36AH12.8V
Controller	15A30W					10A30W		
Light Source	3030							
Light Distribution	Bat-Wing light distribution (150°×75°)							
Light Efficiency	150-160LM/W							
Color Temperature	3000K-6000K							
CRI	≥Ra70							
IP Rating	IP65							
Working Temperature	-10°C -+60°C							
LED Lifespan	50000H-100000H							
Mount Diameter	Φ60MM							
Lamp Dimension	597×263×75MM							
Lamp Weight	3.14KG	3.18KG	3.32KG	3.57KG	3.8KG	3.15KG	4.14KG	5.13KG
Total Case Weight	6.63KG (2pcs/CTN)	6.71KG (2pcs/CTN)	6.99KG (2pcs/CTN)	7.49KG (2pcs/CTN)	7.95KG (2pcs/CTN)	6.65KG (2pcs/CTN)	8.63KG (2pcs/CTN)	10.61KG (2pcs/CTN)
Package Dimension	615×275×115MM							
Suggested Mount Height	4-6M							6-8M
Warranty	3 Years							

Model No.	COSMO-DC-41	COSMO-DC-42	COSMO-DC-43	COSMO-DC-44	COSMO-DC-45	COSMO-DC-46	COSMO-DC-47	COSMO-DC-48
Rated Power	12W	15W	20W	20W	27W	10W	20W	30W
System Voltage	DC3.2V					DC12.8V		
LiFePO4 Battery	40AH3.2V	50AH3.2V	60AH3.2V	72AH3.2V	84AH3.2V	12AH12.8V	24AH12.8V	36AH12.8V
Controller	15A30W					10A30W		
Light Source	3030							
Light Distribution	Bat-Wing light distribution (150°×75°)							
Light Efficiency	150-160LM/W							
Color Temperature	3000K-6000K							
CRI	≥Ra70							
IP Rating	IP65							
Working Temperature	-10°C -+60°C							
LED Lifespan	50000H-100000H							
Mount Diameter	Φ60MM							
Lamp Dimension	687×263×75MM							
Lamp Weight	3.48KG	3.52KG	3.66KG	3.91KG	4.15KG	3.5KG	4.48KG	5.47KG
Total Case Weight	6.9KG (2pcs/CTN)	7.2KG (2pcs/CTN)	7.6KG (2pcs/CTN)	8KG (2pcs/CTN)	8.7KG (2pcs/CTN)	7.4KG (2pcs/CTN)	9.36KG (2pcs/CTN)	11.34KG (2pcs/CTN)
Package Dimension	705×275×115MM							
Suggested Mount Height	4-6M							6-8M
Warranty	3 Years							

Model No.	COSMO-DC-51	COSMO-DC-52	COSMO-DC-53	COSMO-DC-54	COSMO-DC-55	COSMO-DC-56	COSMO-DC-57	COSMO-DC-58
Rated Power	12W	15W	20W	20W	27W	10W	20W	30W
System Voltage	DC3.2V					DC12.8V		
LiFePO4 Battery	40AH3.2V	50AH3.2V	60AH3.2V	72AH3.2V	84AH3.2V	12AH12.8V	24AH12.8V	36AH12.8V
Controller	15A30W					10A30W		
Light Source	3030							
Light Distribution	Bat-Wing light distribution (150°×75°)							
Light Efficiency	150-160LM/W							
Color Temperature	3000K-6000K							
CRI	≥Ra70							
IP Rating	IP65							
Working Temperature	-10°C -+60°C							
LED Lifespan	50000H-100000H							
Mount Diameter	Φ60MM							
Lamp Dimension	780×263×75MM							
Lamp Weight	3.83KG	3.88KG	4.01KG	4.26KG	4.51KG	3.85KG	4.84KG	5.82KG
Total Case Weight	8.11KG (2pcs/CTN)	8.21KG (2pcs/CTN)	8.47KG (2pcs/CTN)	8.97KG (2pcs/CTN)	9.47KG (2pcs/CTN)	8.15KG (2pcs/CTN)	10.13KG (2pcs/CTN)	12.1KG (2pcs/CTN)
Package Dimension	790×275×115MM							
Suggested Mount Height	4-6M							6-8M
Warranty	3 Years							

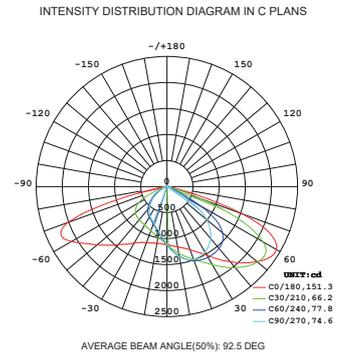
LAMP DIMENSION



LIGHT DISTRIBUTION CURVE

STREETLIGHT PHOTOMETRIC TEST REPORT (30W)

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 162.57lm/W
MODEL	XK-30W	I _{max} (cd)	2627	η street_up (%)	0.2	
NOMINAL POWER (W)	30	LOR (%)	100.0	η street_down (%)	64.5	
RATED VOLTAGE (V)	30	TOTAL FLUX (lm)	4877	η house_up (%)	0.3	
NOMINAL FLUX (lm)	4877.03	MAXIMUM @(C, Y)	165, 64.0	η house_down (%)	35.1	
LAMPS INSIDE	1	η up (%)	0.4	76 FLASHAREA (m ²)	0.00100	
TEST VOLTAGE (V)	29.2	η down (%)	99.6	SLI	17.469	



MONOCRYSTALLINE SOLAR MODULE



High-Quality Guarantee
EL TEST twice 100% for semi-finished and finished products to eliminate defectives.



Efficiency Under Dim
Using advanced glass and textures. Superior low irradiance performance.



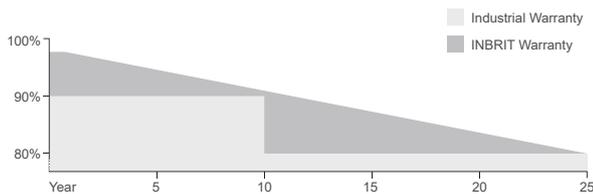
Afford Any Bad Weather
Certificated 2400-Pascal wind and snow load.



Higher Efficiency
High efficiency of conversion by using the new manufacturing technique and A-class cell.

INBRIT photovoltaic(PV) modules are assembled by high-performance A-class cells and encapsulated by a durable back sheet, are capable of converting energy from incident lights on the diffuse light, as well as reflected and scattered light on rear sides, which make them better reliable, superior low irradiance performance, and excellent generation performance.

Linear graph of performance warranty



Comprehensive certificates

- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems



PRODUCT DETAIL



Aluminum Alloy Frame

Anodized aluminum frame for high corrosion resistance
Up to 25 years of service life
Improved load resistance capabilities for heavy wind loads



Protect Corner

Protect the solar panel frame during transportation
Do not deform under the action of external force
Protect the safety of the installer during the installation process



High Transmission Low Iron Tempered Glass

3.2mm thickness
>91% higher light transmittance
Work normally under 5400Pa snow load
High mechanical strength



EVA

>91% higher light transmittance
Higher gel content to provide good encapsulation
And protect cells from vibration with longer durability

INTEGRATED LITHIUM BATTERY AND CONTROLLER

Battery cell dimensions(mm)



Recycle responsibly

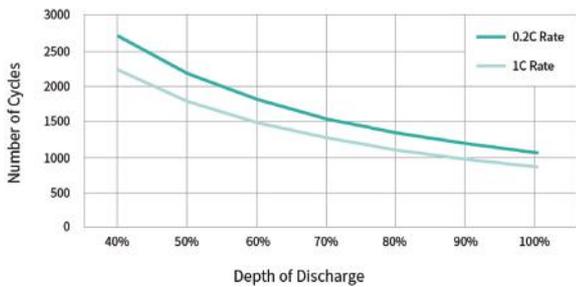
Do not mix with Lead Acid Batteries when Recycling.

Features

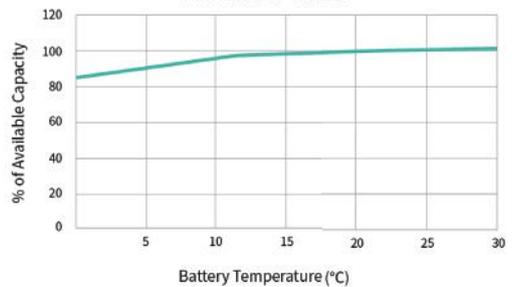
Humidity	60±10R.H.
Operating temperature	0-60°C
Storage and charging	Battery may be stored up to 3 months then a freshening charge is required
Self-discharge	At 25°C, the monthly power consumption is less than or equal to 0.9%, which is between 0.5% and 0.9%

Noted: Better not to use the battery under extremely cold weather, otherwise the lifespan will be affected.

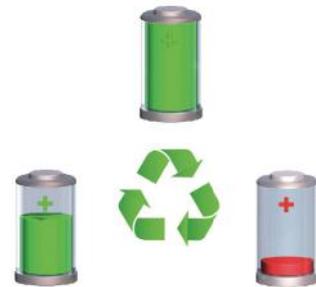
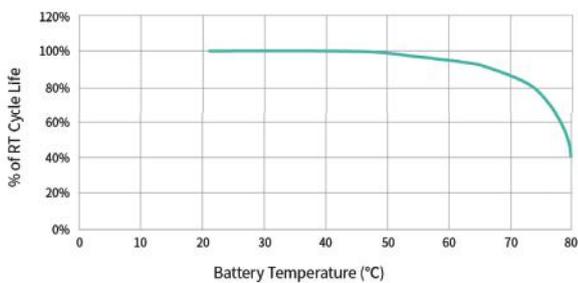
CYCLE LIFE



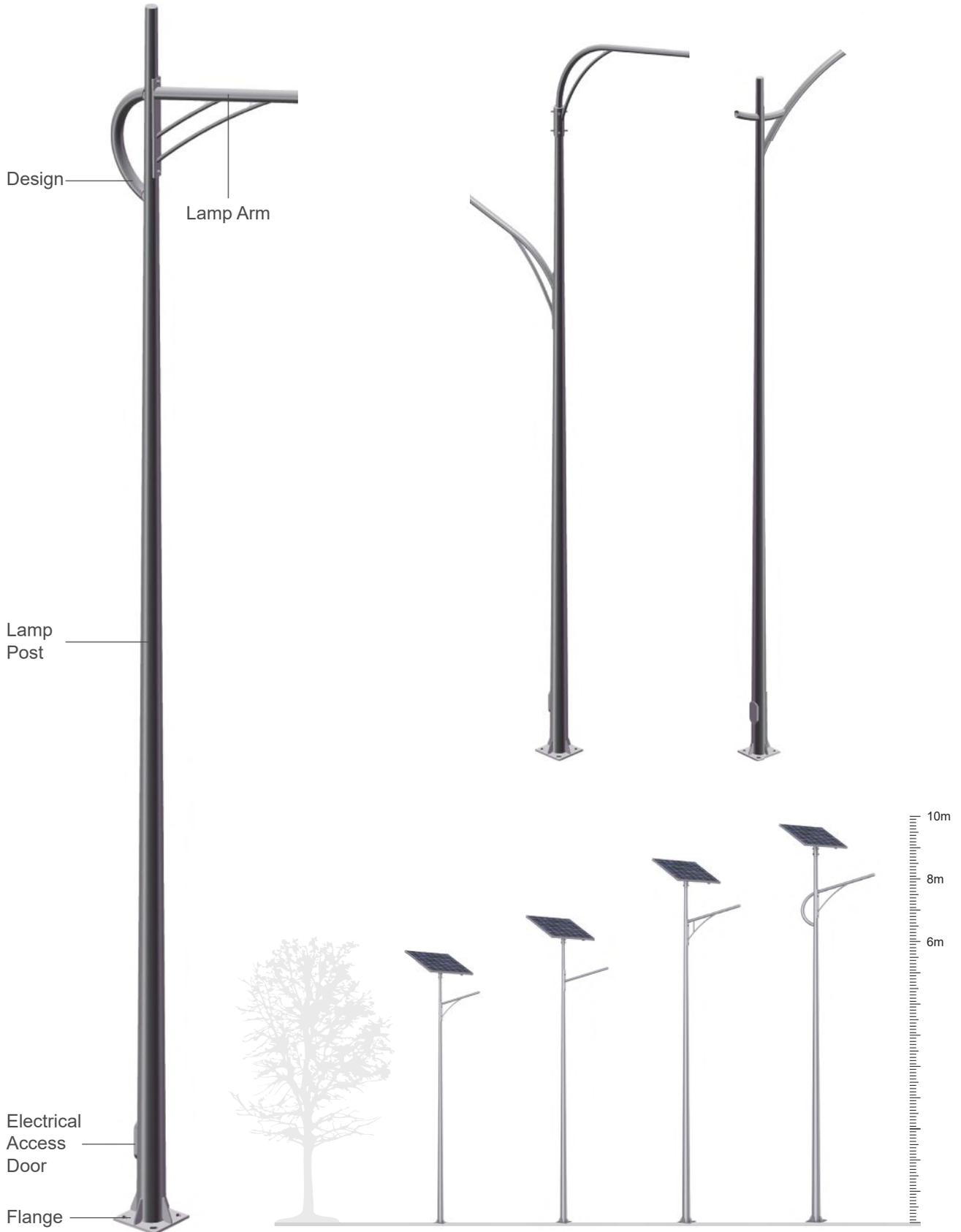
AVAILABLE CAPACITY PERCENT OF RATED



CYCLE LIFE VS. TEMPERATURE

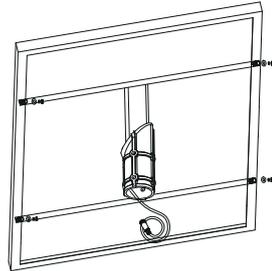


LIGHT POLE



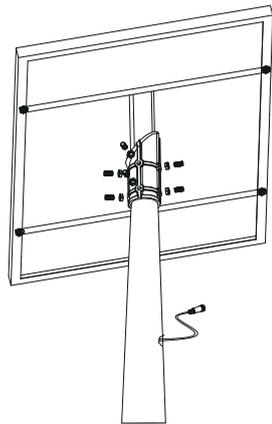
LAMP INSTALLATION

①



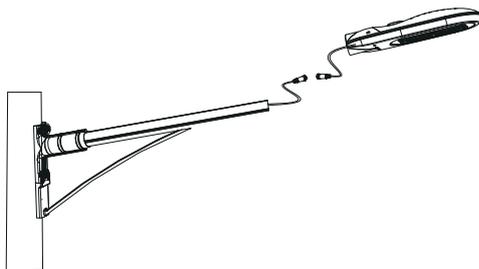
Secure the solar panel to the bracket with screws, threading the panel cable through the head.

②



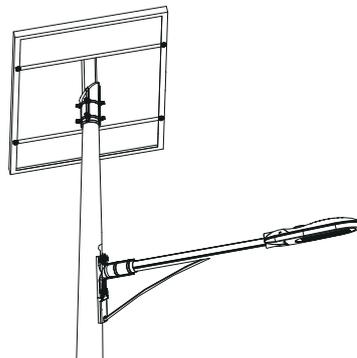
Pass the panel's cable through the wiring hole in the lamp post, insert the head into the post, adjust the panel's angle for optimal sunlight exposure, and tighten the screws symmetrically.

③



Thread the panel cable through the lamp support arm and connect it to the lamp's waterproof connector. After activating the light source board, cover the photovoltaic panel to block light, causing the lamp to illuminate.

④



Once the lamp lights up, remove the cover from the panel and allow it to enter charging mode. In charging mode, the lamp will turn off, indicating the system is ready for installation. After testing, secure the lamp and arm screws, adjust the angle, raise the pole, and complete the installation.



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Version No: 2025



One-Stop LED Outdoor Lighting Manufacturer