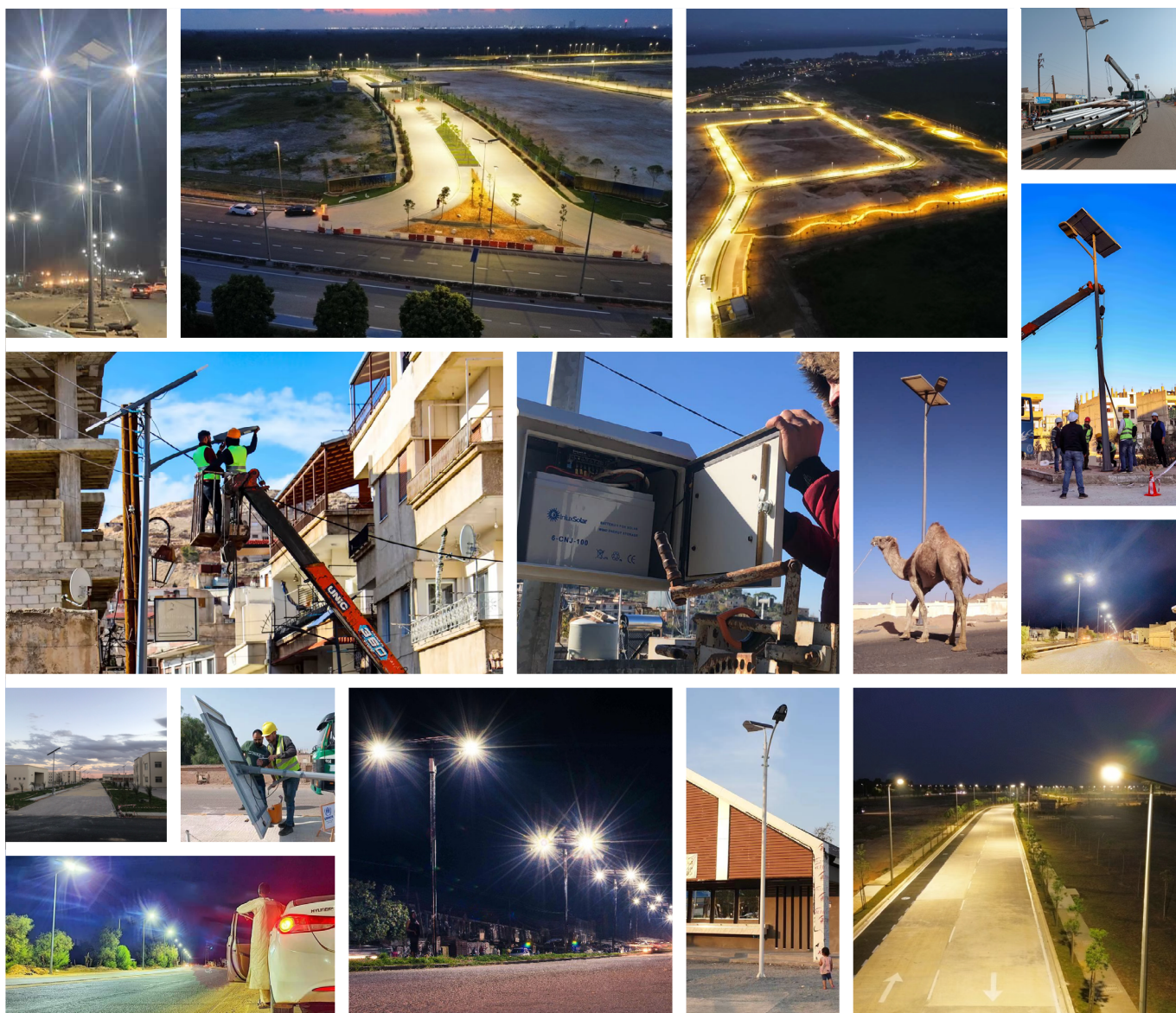




PRODUCT CATALOGUE

Solar Street Lights



About Inlux Solar

04~05

All-In-Two Solar Street Light

06~09

The Lithium battery and solar controller are integrated inside the light housing, and solar panel mounted externally.

JAGUAR INL-AIT5 | FALCON INL-AIT6 | BISON INL-AIT7

All-In-One Solar Street Light

10~17

All components are integrated together as one unit.

SIRIUS INL-AIO9 | GALAXY INL-AIO6

Solar High Mast Light

18~21

An integration of powerful solar flood lighting system and mast pole system.

SOLAR MAST LIGHT

Decorative Solar Street Light

22~23

Stylish solar street light that enhances outdoor aesthetics while providing efficient illumination.

HERA | AKSO | ATHENA

Vertical Solar Pole Light

24~25

The polygonal solar panel unit is placed vertically around the lighting pole.

INL-SPL01 | INL-SPL02 | INL-SPL03

Split Type Solar Street Light

26~30

The components are separately mounted.

APOLLO Lithium Battery | MARS Gel Battery

Specific Solar Street Light

31~33

Reliable and durable solar lighting solutions with hybrid and explosion-proof options for all environments.

Advanced Technologies & Quality Components

34~41

IoT system enabling real-time smart monitoring and remote control.

Abundant Project Experience

42~47

Extensive global project experience with successful installations in over 100 countries.

CATALOG

The World's Leading Solar Street Light Manufacturer

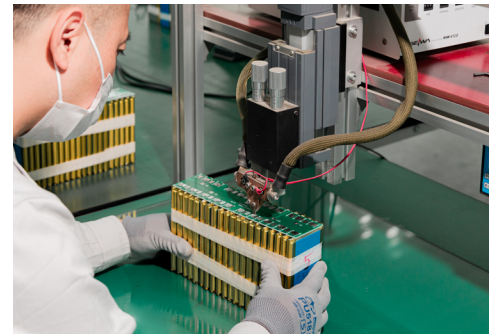
PARTNER WITH Inlux Solar

1000+
UN, NGO and
Municipal Projects

102+
Lighting up
Countries

300000+
Solar Street Lights in
Operation

99.95%
Accuracy Rate



The World's Leading Solar Street Light Manufacturer Your Best Supplier for Commercial & Municipal Projects

As the world's leading solar street light manufacturer, Inlux Solar has built a strong reputation for developing and producing high-quality solar street lighting products, occupying a total space of 28,000 m² workshops, managing more than 200 workers and 32 engineers. Our facilities are certified with ISO 9001, ISO 14001, OHSAS 18001, SGS, TÜV, and our products comply with CE, RoHS, IEC, CB, EN, and UN38.3 standards. Our solar street lights are renowned for their high brightness, reliability, durability, and cost-effectiveness. We have successfully supplied more than 300,000 sets of solar street lights across 101 countries and have supported thousands of customers in commercial and municipal tender projects with our high expertise, professional technical support, excellent product performance, competitive pricing, fast delivery, and reliable after-sales service.

As a National High-Tech Enterprise acknowledged by the Chinese government, Inlux Solar is a pioneer in industry innovation, constantly advancing our products and technologies. Our dedication has led to more than 60 patents and over 300 product certifications. We provide a comprehensive range of solar street lights, including All-in-One Solar Street Lights, All-in-Two Solar Street Lights, Solar Pole Lights, Split-Type Solar Street Lights, Solar Mast Lights, and more, covering all application scenarios for public solar lighting projects.



28000m²
Workshops



200+
Working Staffs



30+
Engineers



60+
Patents



300+
Product certifications



101
Countries applied with our
solar street lights



300K+
Solar street lights
applied worldwide

Certifications



LM79



LM80



سابر
saber



SN



IP66



IK10
Impact Protection



UN38.3

Global Clients



All-In-Two Solar Street Light

All-In-Two Solar Street Light features an integrated lamp head combining LED module, lithium battery, and smart controller in one compact fixture, with a separate solar panel for flexible installation. This design boosts charging efficiency, supports higher-power LEDs, and deters theft—making it widely applicable for urban roads, highways, industrial areas, rural streets, and community lighting projects.

Key Features

-  Separate solar panel design ensures optimal angle of solar panel, thus the highest charging efficiency.
-  Lighting source, lithium battery and controller are integrated into a single unit.
-  Service life of LiFePO4 lithium battery is more than 10 years, which is over 5000 deep cycles.
-  Extremely bright 5050 LED chips are adopted, delivering an efficiency exceeding 250 lm/W.
-  Easy installation by Plug & Play.

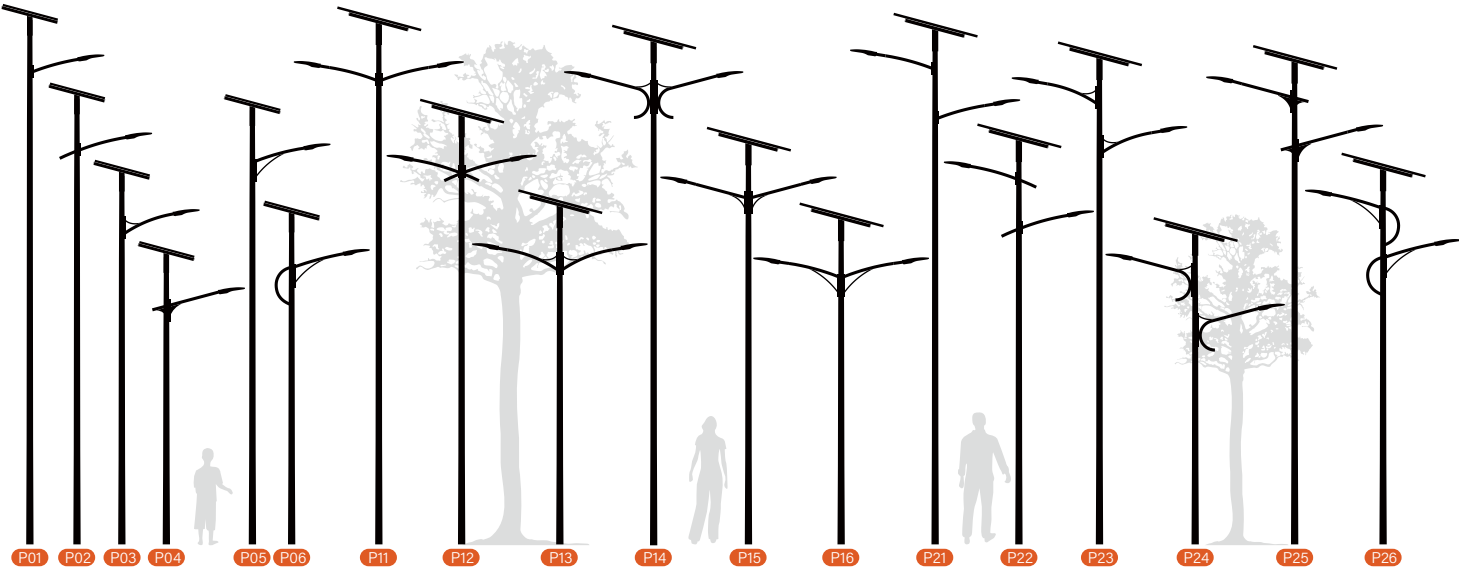
Optional Functions

-  Adjustable Solar Panel Bracket
-  IoT Smart Monitoring
-  Motion Sensor
-  Anti-theft Components
-  Camera
-  Anti-bird Spike

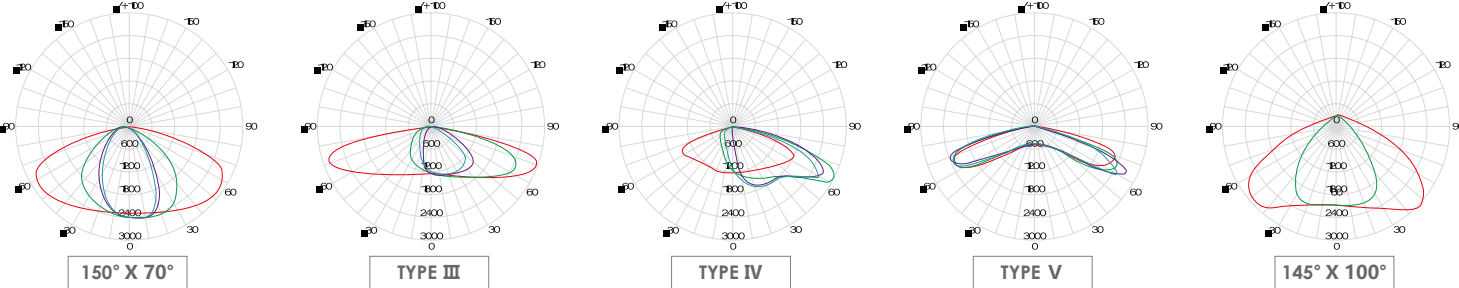
Applications

Highway / Street / Intersection / Roundabout / Parking Lot / Business District / Perimeter / Industrial Zone / Factory / Residential Community / Refugee Camp. Etc

Pole Design Options



First-class Lighting Solutions



JAGUAR INL-AIT5



FALCON INL-AIT6

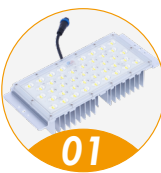
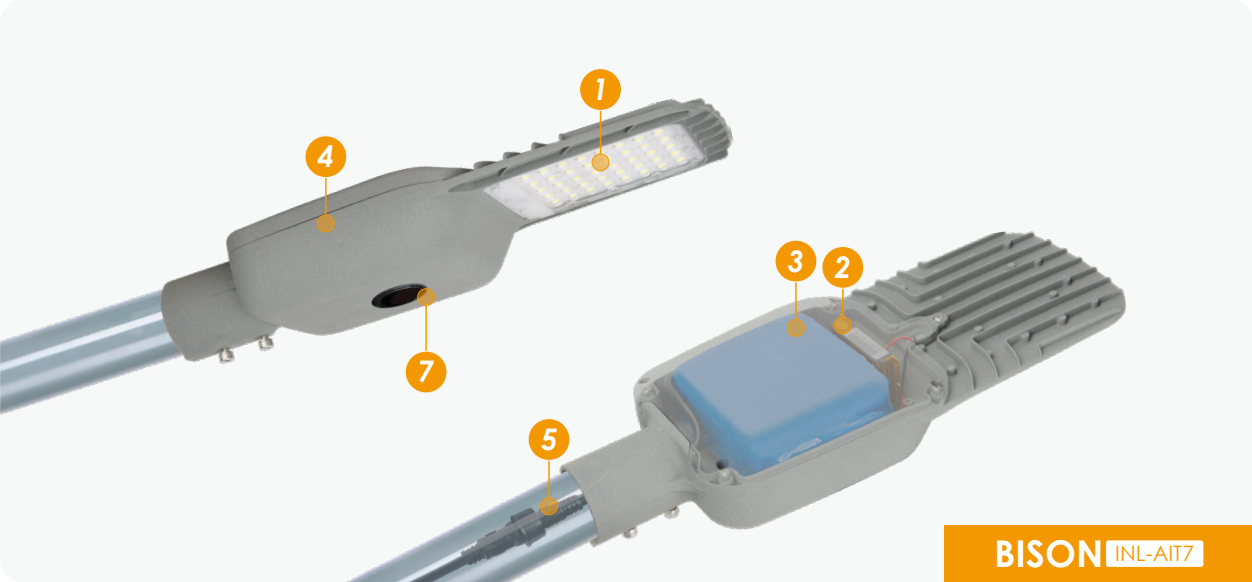
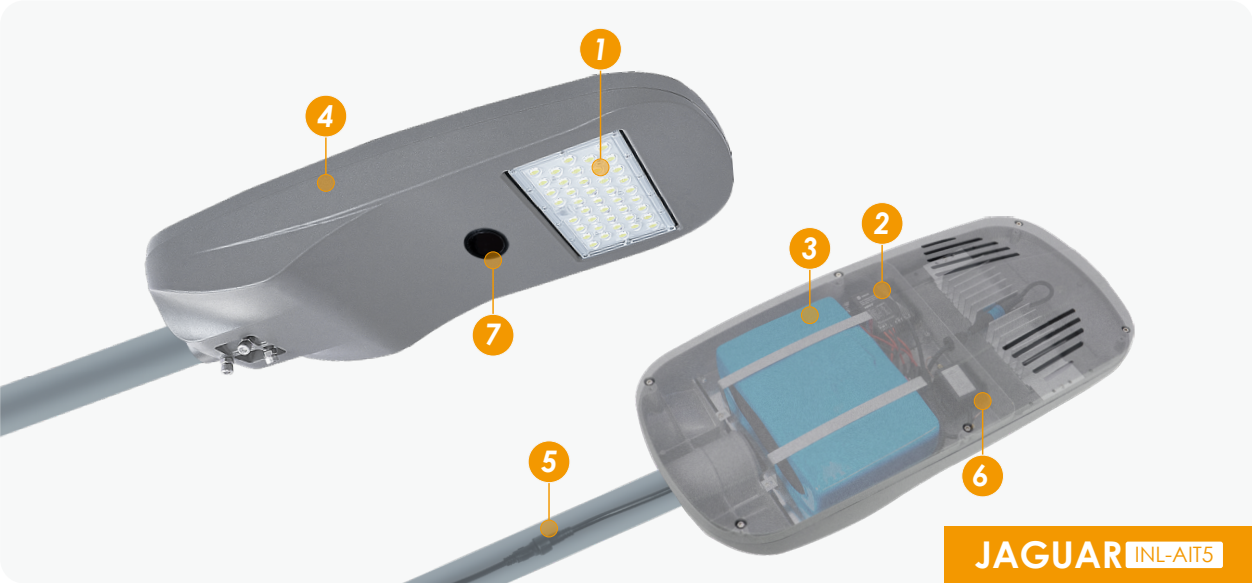


BISON INL-AIT7

Parameters

Model No.	INL-AIT5	INL-AIT6	INL-AIT7
Lamp Power	30W – 150W	20W – 80W	10W – 60W
Finished Lamp Luminous Efficiency	> 180lm/W	> 175lm/W	> 175lm/W
CCT	3000K-6000K		
LiFePO4 Lithium Battery Capacity	1920Wh(Max.)	680Wh(Max.)	410Wh (Max.)
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)		
Product Dimension	710*325*145mm	640*320*70mm	525*195*80mm
Suggested Mounting Height	6-12 Meters	5-8 Meters	3-7 Meters
System Life Span	> 10 years		
Protection Levels	IP66 / IK09		
Working Temperature	-20 – 65°C		
Motion Sensor	Optional		
IoT Monitoring System	Optional		

Product Details



IP67 Super Bright 5050/7070 LED Module
> 250lm/W LED Chip luminous efficiency
> 185lm/W Finished lamp luminous efficiency
> 100,000 hours life time



Smart Solar Controller

Advanced MPPT Technology

Smart Lighting Mode & 365-day non-stop operation



Multi-protection



Optional IoT smart monitoring system



Intelligent Temperature Adjustment



>10 years lifetime



Optional Motion Sensor



IP67



LiFePO4 Lithium Battery
more than 10 years lifespan, perfect high temperature & safety performance



Die-cast Aluminum Fixture
IK09 impact protection



Plug & Play Design
IP66 waterproof protection



IoT Smart Monitoring System (Optional)
based on **LoRa/Zigbee/4G** technology, achieve smart monitoring management of solar street lights through internet.



Motion Sensor(Optional)
brightness will dim to 30% (customizable) during periods of inactivity, and return to 100% when presence is detected

All-In-One Solar Street Light

All-In-One Solar Street Light integrates solar panel, lithium battery, LED module, and smart controller into one compact luminaire. The pre-wired, plug-and-play design simplifies installation and reduces transportation volume and labor cost. It is best suited for areas with stable sunlight, including municipal roads, rural streets, residential communities, and private projects.

Key Features

-  Service life of LiFePO4 lithium battery is more than 10 years, which is over 5000 deep cycles.
-  Extremely bright 5050 LED chips are adopted, which ensure over 250lm/W.
-  The intelligent integrated design simplifies installation remarkably by saving cable connections.

Optional Functions

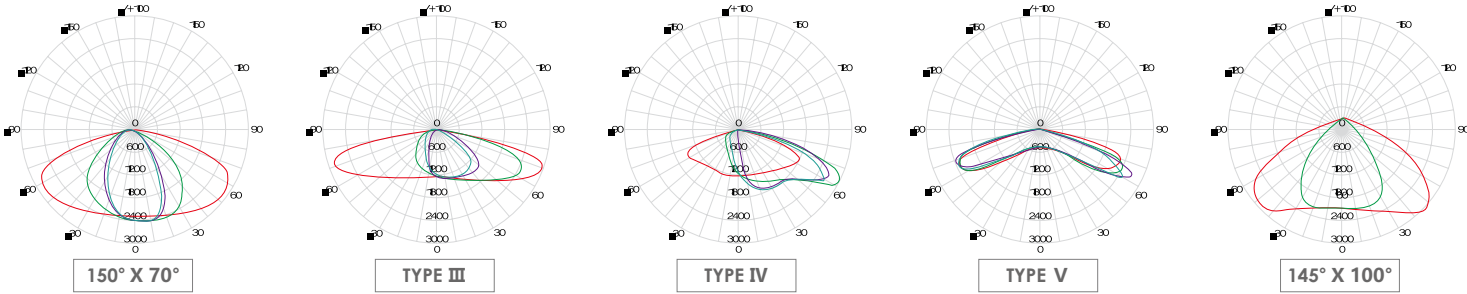
-  Adjustable Solar Panel Bracket
-  Anti-theft Components
-  IoT Smart Monitoring
-  Camera
-  Motion Sensor
-  Anti-bird Spike

Applications

Highway / Street / Intersection / Roundabout / Parking Lot / Business District / Perimeter / Industrial Zone / Factory / Residential Community / Refugee Camp. Etc



First-class Lighting Solutions



Parameters SIRIUS INL-AIO9

Luminous Flux & Power	9900lm (55W)	10800lm (60W)	12600lm (70W)	14400lm (80W)	16200lm (90W)	18000lm (100W)	21600lm (120W)
Solar Panel	140W	160W	180W	200W	240W	280W	360W
LiFePO4 Lithium Battery	640Wh	640Wh	768Wh	768Wh	1024Wh	1024Wh	1280Wh
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)						
Suggested Mounting Height	7-8 Meters	8-9 Meters	9-10 Meters	10-11 Meters	11-12 Meters	12 Meters	12 Meters
System Life Span	> 10 years						
Protection Levels	IP66 / IK09						
Motion Sensor	Optional						
IoT Monitoring System	Optional						

Parameters GALAXY INL-AIO6

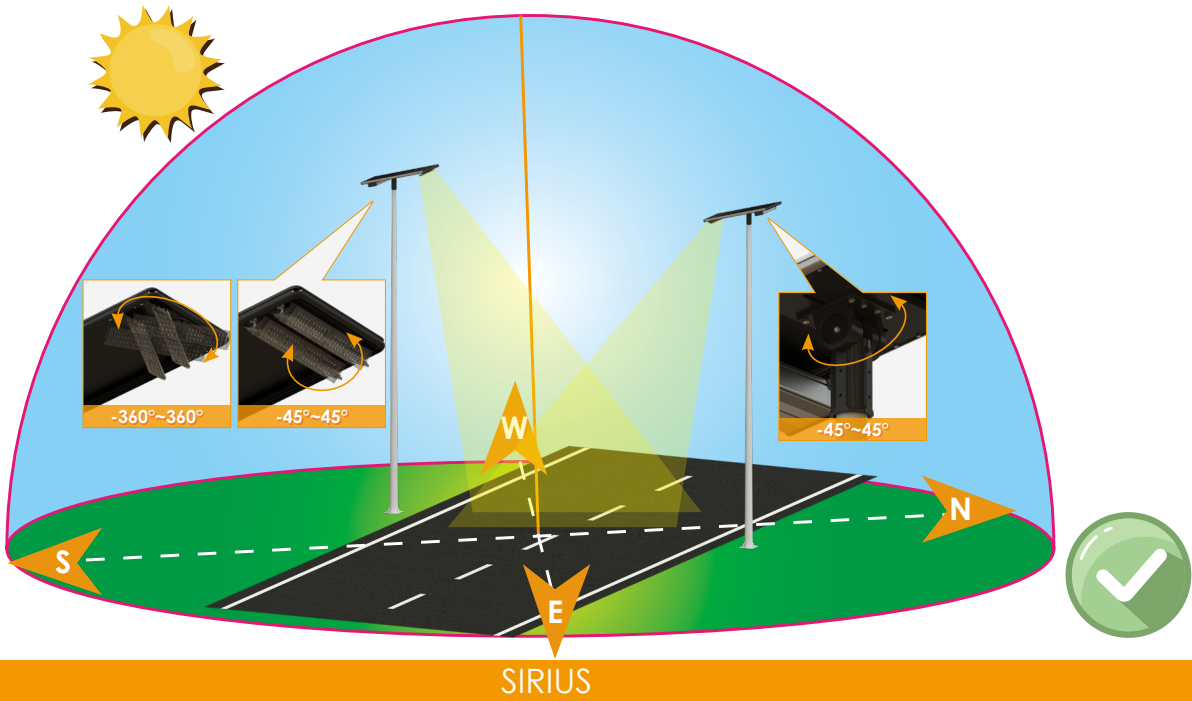
Luminous Flux & Power	2700lm (15W)	3600lm (20W)	4500lm (25W)	5400lm (30W)	6300lm (35W)	7200lm (40W)	9000lm (50W)
Solar Panel	50W	60W	70W	80W	90W	100W	120W
LiFePO4 Lithium Battery	128Wh	256Wh	256Wh	384Wh	384Wh	512Wh	512Wh
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)						
Suggested Mounting Height	4-5 Meters	5 Meters	5-6 Meters	6 Meters	6-7 Meters	7 Meters	7-8 Meters
System Life Span	> 10 years						
Protection Levels	IP66 / IK09						
Motion Sensor	Optional						
IoT Monitoring System	Optional						

Revolutionize All-In-One Solar Light Solutions

Compared with traditional designs, the SIRIUS series has redefined the all-in-one solar street light by introducing multiple brand-new features.

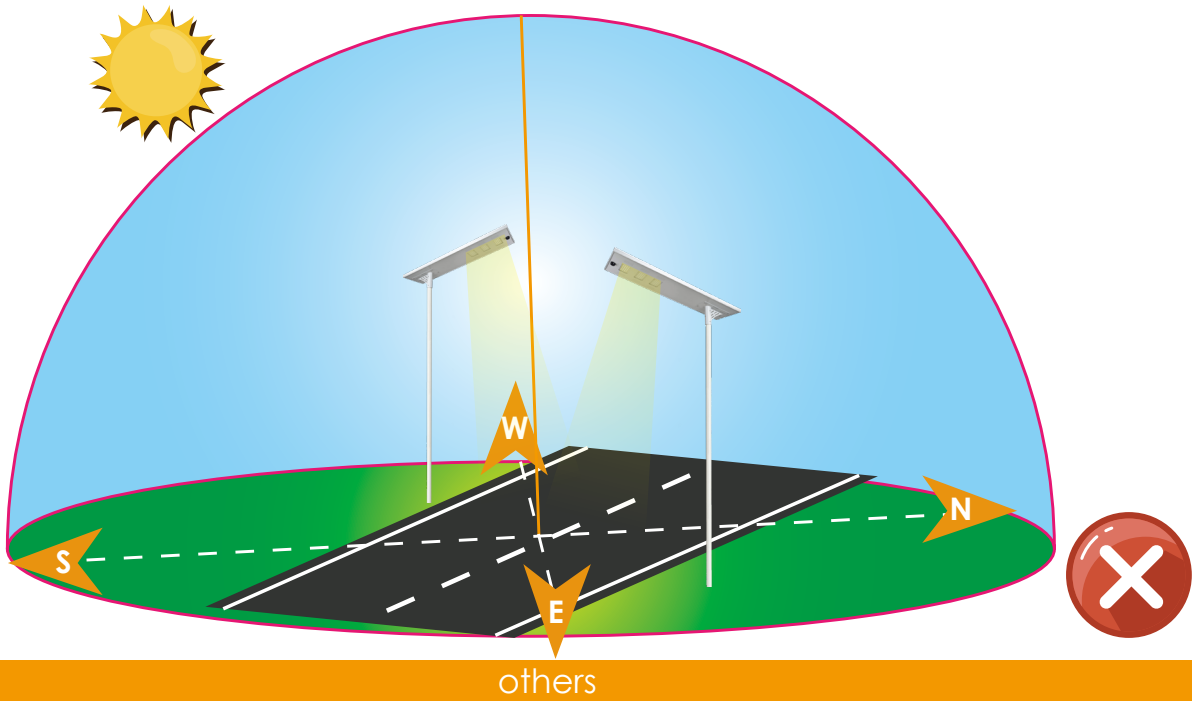
40% More Solar Power Generation

By adopting a design that allows the solar panel to face due south (in the Southern Hemisphere) or due north (in the Northern Hemisphere), a transparent solar panel, and an MPPT controller, the SIRIUS series can generate 40% more solar power annually (compared with traditional all-in-one solar lights), ensuring reliable operation even in winter in high-latitude regions.



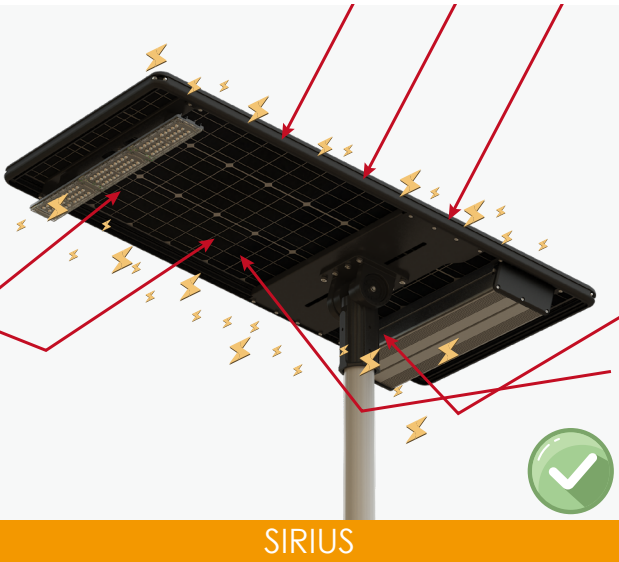
Lighting the Way with a Due South-Facing Solar Panel

The lighting source and lamp holder of the SIRIUS series can be adjusted vertically and horizontally, illuminating the road precisely while revolutionarily allowing the solar panel to face due south (in the Southern Hemisphere) or due north (in the Northern Hemisphere) to maximize sunlight absorption.



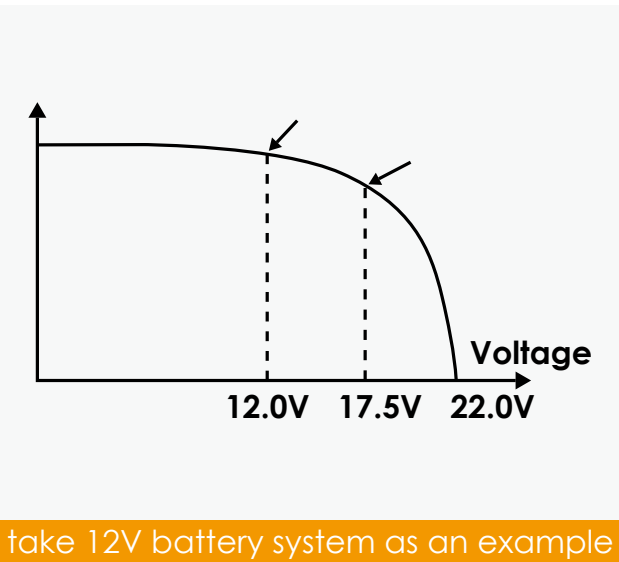
Transparent solar panel

Transparent solar panel captures sunlight on both sides, improving charging efficiency by 5%.



Maximum Power Point Tracking (MPPT) Charging Technology

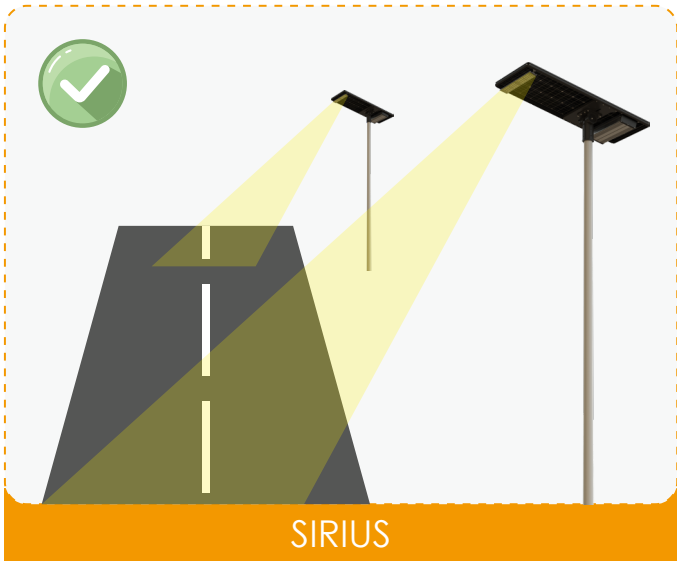
All SIRIUS models feature MPPT solar controllers that monitor real-time power generation and optimize voltage and current for maximum efficiency during charging, achieving 15% to 20% more energy utilization compared to traditional PWM controllers.



Suitable for All Road Conditions

Cover Wider Road

In many application scenarios, all-in-one solar lights must illuminate vast roads or be installed far from them. If the lighting source on the all-in-one solar light can't be adjusted, it can't illuminate the entire route. The SIRIUS series can adapt the lighting source angle to illuminate a wider road.



Innovative two-way street lighting solution

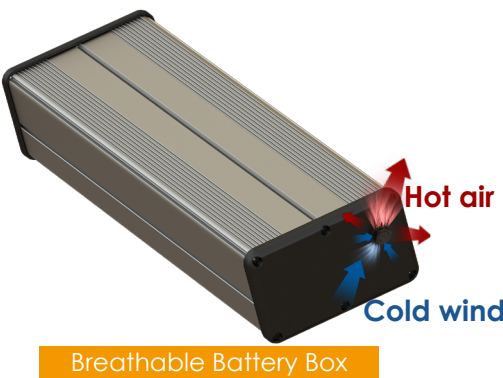
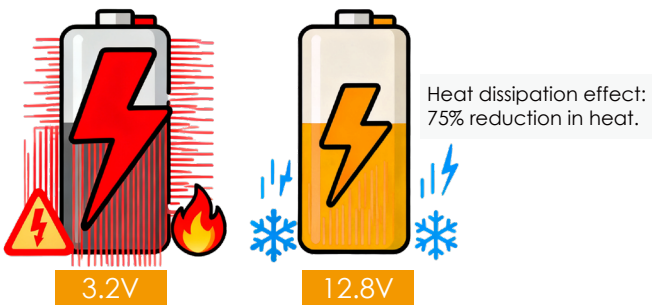
The SIRIUS-D series features an innovative dual-light-source design, particularly suited to two-way street illumination applications. Compared to traditional designs, it is more straightforward, more aesthetically pleasing, and more efficient.



Perfect Performance in High Temperatures

High Voltage, Low Current Technical Solution

SIRIUS uses 12.8V and 25.6V battery packs instead of 3.2V or 6.4V. The high-voltage system provides the same output power for solar streetlights while consuming less current. For instance, energy loss in the 12.8V system is only 25% of that in the 3.2V system. Additionally, the heat generated by components in the 12.8V system is reduced by up to 75%, enhancing the overall heat resistance of the solar street lighting system.

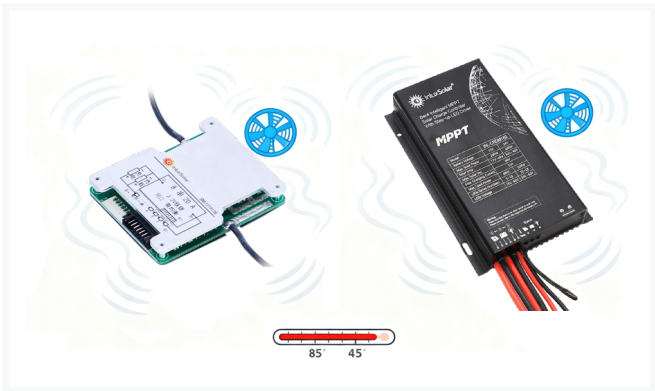
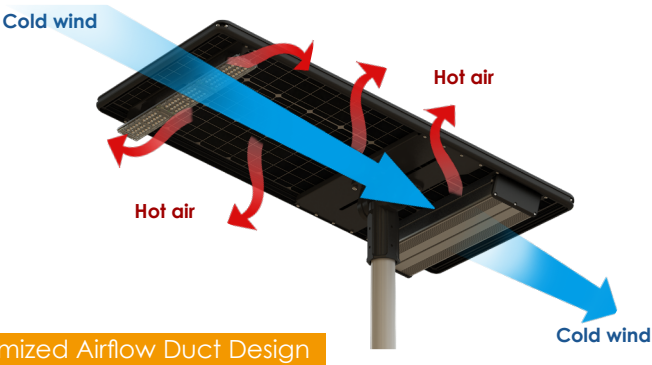


Breathable IP66 Battery Box

In high temperatures, the heat from the lithium battery and solar radiation can raise the battery box's interior temperature, reducing battery life. To address this, we installed a one-way ventilation valve that lets hot air escape and cool air enter, ensuring pressure equalization. This setup improves heat dissipation, prevents overheating, and keeps out rainwater and dust.

Optimizing Airflow with Innovative Duct Design

With back plate, heat accumulated under conventional solar panel is hard to dissipate, which will lead to high operation ambient temperature, thus significantly reducing the service life of electronic components.



Extreme High Temperature Protection Function

In extreme heat, the solar controller and BMS both automatically activate high temperature protection, reducing operating current to lower system heat, cool components, and safeguard the system.

Product Details



IP67 Super Bright 7070 LED Module
> 260lm/W LED Chip luminous efficiency
>190lm/W Finished lamp luminous efficiency
>100,000 hours life time



Smart Solar Controller
Advanced MPPT Technology
Smart Lighting Mode & 365-day non-stop operation



Multi-protection



Intelligent Temperature Adjustment



>10 years lifetime



Optional Motion Sensor



IP67



LiFePO4 Lithium Battery
More than 10 years lifespan,perfect high temperature & safety performance

Adjustable Bracket



±45° Vertical Adjustable

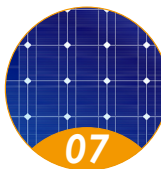


±360° Horizontal Adjustable



Adjustable Lamp Holder
±45° Vertical Adjustable

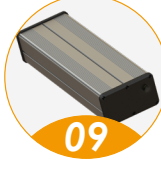
The lamp holder, adjustable vertically by ±45°, allows the solar panel to be adjusted to the optimal angle to maximize sunlight absorption. Meanwhile, the LED module mounting bracket, which is adjustable by ±45° vertically and ±360° horizontally, allows precise road illumination by adjusting the light source's direction.



Transparent High Efficiency Solar Panel
Transparent solar panel, capture sunlight on both sides.monocrystalline solar panel, >19% conversion efficiency.25 years life warranty.



High Strength Aluminum Frame
Anti-Corrosion, Anti-12typhoon



IP66 Aluminum Battery Box
IP66 waterproof and IK09 impact protection

SOLAR MAST LIGHT

Solar High Mast Light is a high-performance solar lighting system designed for large-area and high-mount illumination. Paired with high-power solar floodlights and tall mast poles, it delivers uniform, wide-area lighting with stable performance. Built for durability and low maintenance, it is ideal for highways, airports, ports, stadiums, and large public spaces.

Key Features

-  No electrical bills
-  Automatic running from dusk to dawn
-  Service life of LiFePO4 lithium battery is more than 10 years, which is over 5000 deep cycles.
-  Extremely bright 5050 LED chips are adopted, which ensures over 250lm/W.
-  Plug & Play.
-  Free maintenance all done at ground level, No work at elevated heights

Applications

Open Port / Airport / Sports Venue / Piazza. Etc

Solar Flood Light



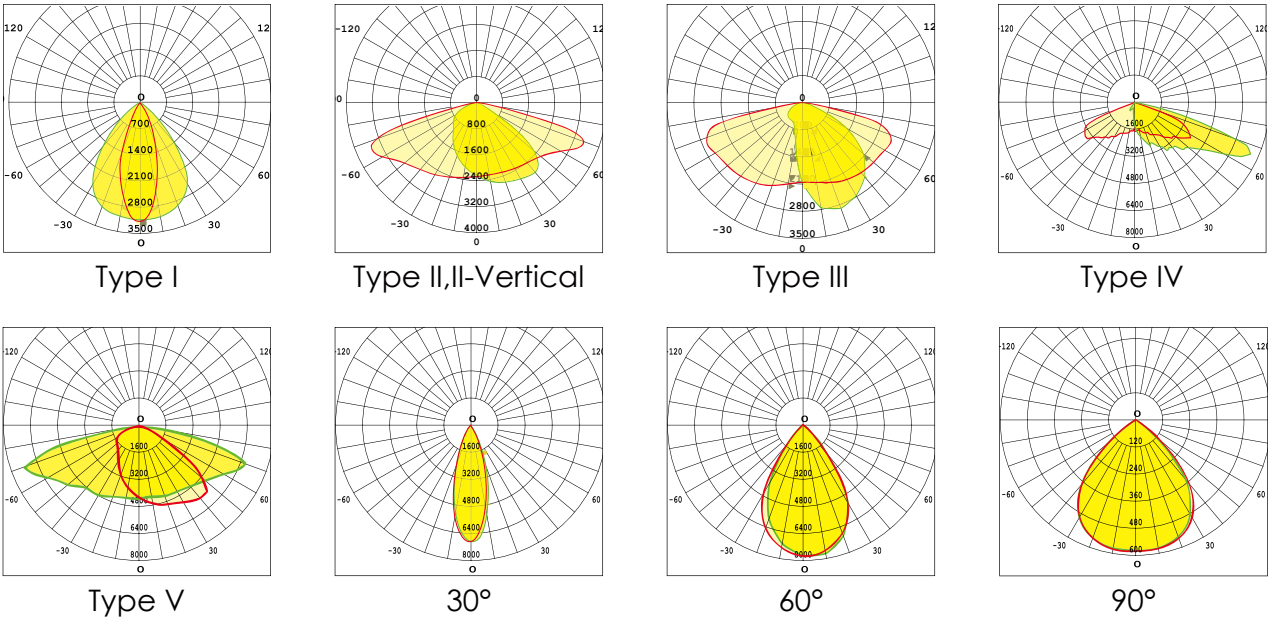
For more information



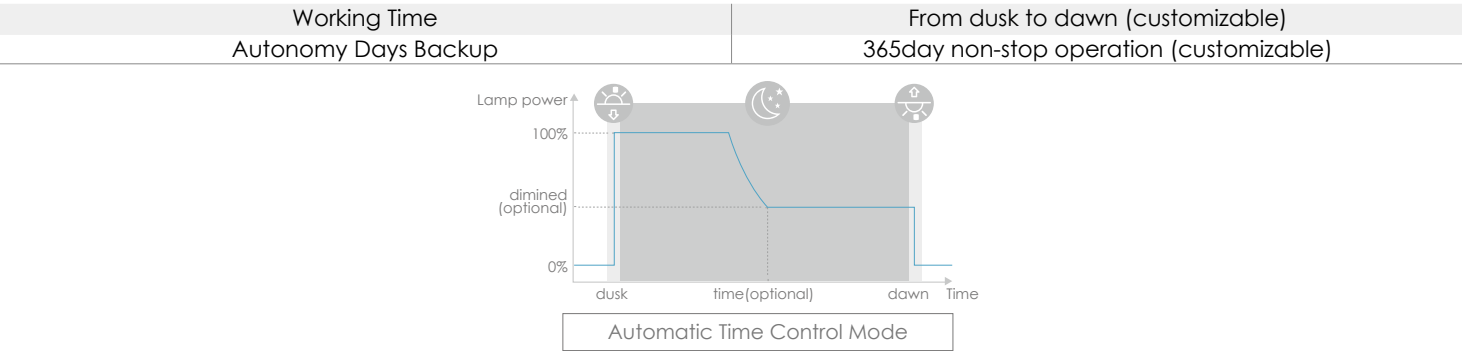
Parameters

Solar Flood Light	Model No.	TORCH-(INL-SF01-250W)	TORCH-(INL-SF01-500W)
	Lamp Power	50W - 250W	250W-500W
	Finished Lamp Louminous Efficiecn	>190lm/W	
	CCT	3000k-6000k	
	LiFePO4 Lithium Battery Capacity	1920Wh (Max.)	3840Wh (Max.)
	Solar Panel Capacity	280W - 720W (customizable)	
	Working Mode	Automatic Time Control Mode / IoT Smart Control Mode (Optional)	
Mast Pole	Protection Levels	IP66 / IK09	
	Solar Flood Light Qty	1-6pcs	2-6pcs
	Pole Height	6-15 Meters	12-30 Meters
	Pole Material	Q345b/A572, Q235b/A36	
	Wind Resistance Capacity	>160km/h	
	Raising & Lowering System	None	Optional
	Accessories	Foundation Kits, Lighting Rod, Climbing Ladder, Rain Cover	
System Life Time		>10 Years	
Working Temperature		-20 -65°C	

First-class Lighting Solutions



Smart Lighting Modes



Work at All Climates

With LiFePO4 battery's high-temperature resistance, LED module's fast heat dissipation design, controller's temperature-compensated function, BMS' temperature protection system, IP65-IP66 lamp fixture, SOLAR MAST LIGHT can operate well under extreme climate conditions.

-20-65°C

Operation Temperature

IP66

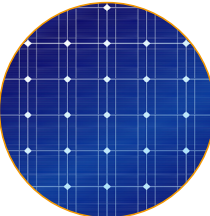
Water & Dust Resistance

90%

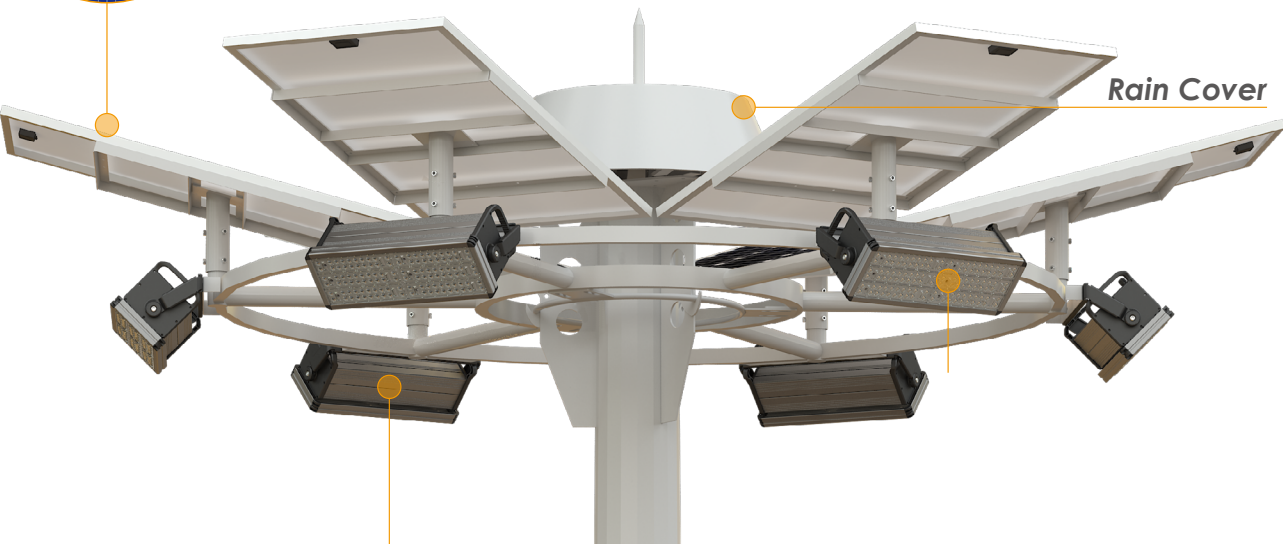
Relative humidity

Product Details

Solar Lamp Carriage



High Efficiency Solar Panel
monocrystalline solar panel, more than 20% transfer efficiency, 25years life warranty

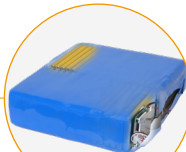


Rain Cover

Solar Power Unit



Waterproof Breather Valve



LiFePO4 Lithium Battery
more than 5000 deep cycles, more than 10 years lifespan perfect high temperature & safety performance



Smart Controller
smart lighting management optimizes lighting output and extends battery lifespan



IP66 Aluminum box
waterproof sealing ring



Polygonal Mast Pole

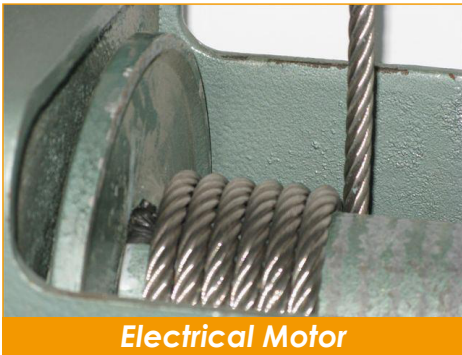
Hot Dip Galvanized Grade A Steel,
>180km/h Wind Resistance

Raising & Lowering System

no work at elevated heights easy floodlight installation and hassle free maintenance all done at ground level.



Three Drum Winch



Electrical Motor

Removabl Support Brackets
(3 Off Equi-Spaced)

Electrical Control Panel

Remote Control

operation can be done 3 meters away from the pole



Foundation Kits

Decorative Solar Street Light

Decorative Solar Street Light combines architectural aesthetics with reliable solar lighting performance. Designed with refined lamp heads and customized poles, it provides functional illumination while enhancing the visual appeal of public spaces. It is widely used in parks, residential communities, pedestrian streets, and commercial districts.

Key Features

-  Separate design ensures optimal angle of solar panel,thus the highest charging efficiency.
-  Service life of LiFePO4 lithium battery is more than 10 years,which is over 5000 deep cycles.
-  Extremely bright 5050 LED chips are adopted, delivering an efficiency exceeding 250 lm/W.
-  Easy installation by Plug & Play.

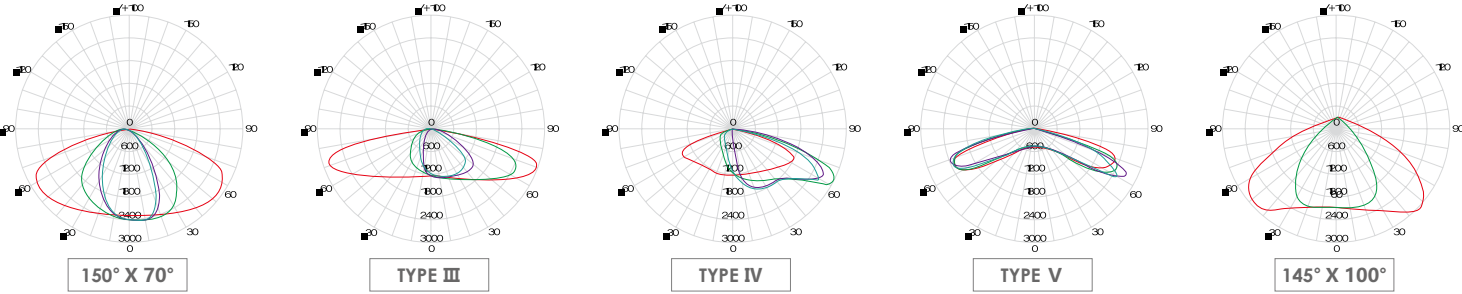
Optional Functions

-  Adjustable Solar Panel Bracket
-  Anti-theft Components
-  Motion Sensor
-  Anti-bird Spike
-  Camera

Applications

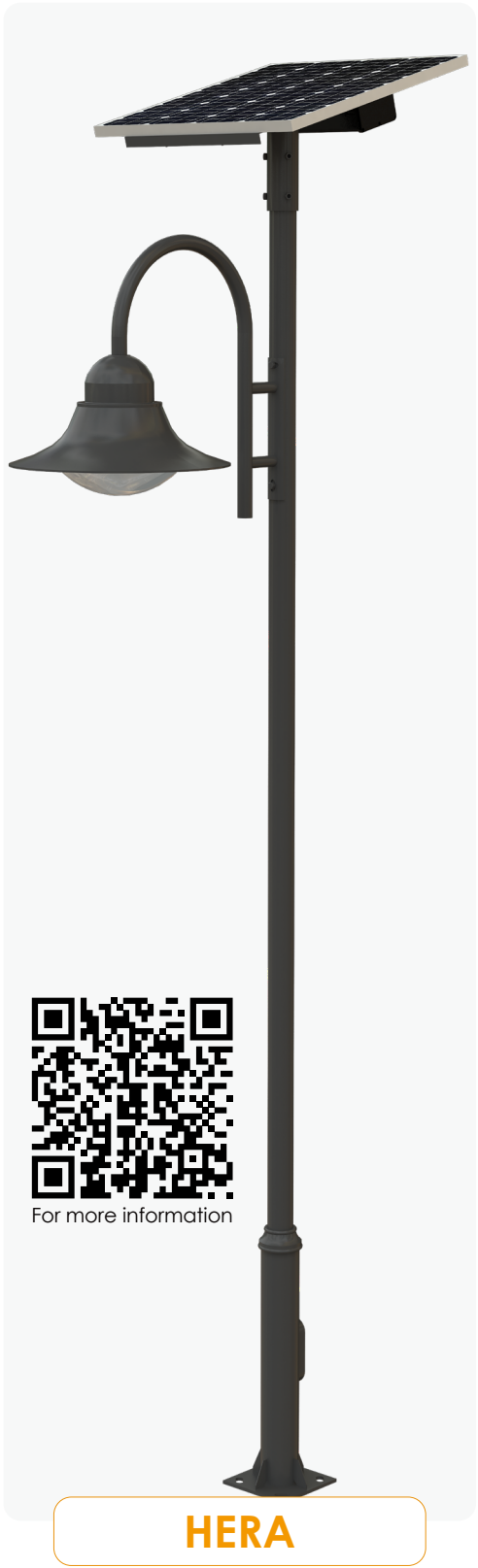
Park / Residential Communitie / Commercial District. Etc

First-class Lighting Solutions

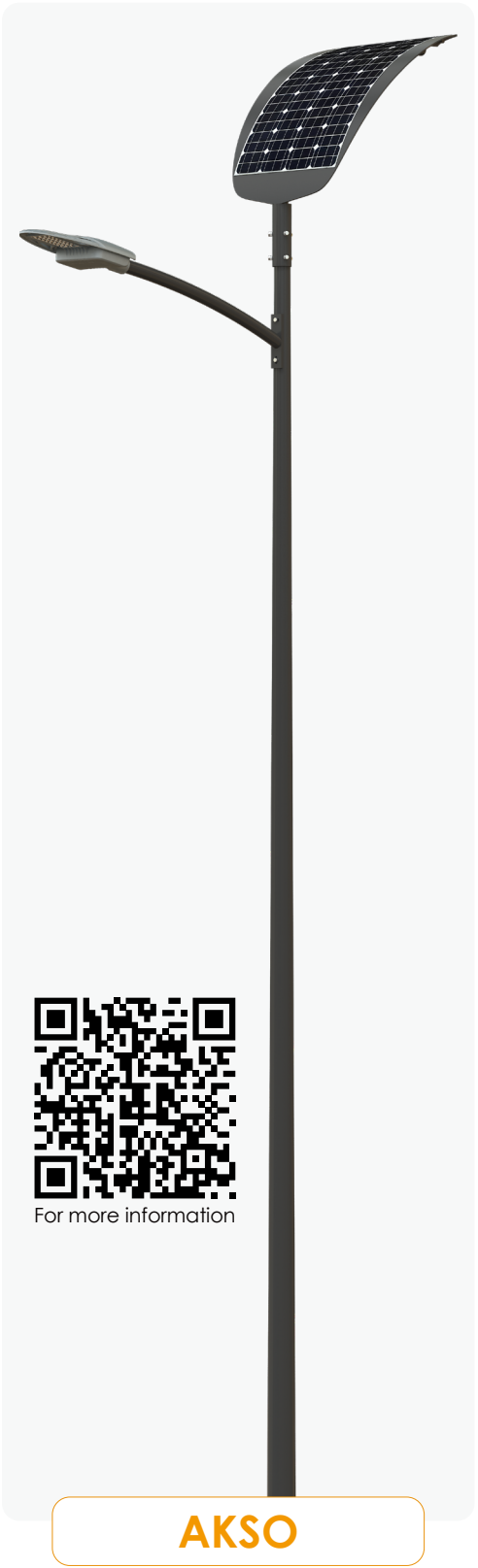


Parameters

Model No.	HERA	AKSO	ATHENA
Lamp Power	10W-80W	20W-120W	
Finished Lamp Luminous Efficiency	> 180lm/W	> 130lm/W	
CTT	3000K-6000K		
Solar Panel Capacity	Up To 320W	Up To 360W	
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)		
LiFePO4 Lithium Battery Capacity	Up To 1024Wh	Up To 1920Wh	
Suggested Mounting Height	3-8 Meters	3-10 Meters	
System LiFe Span	> 10 Years		
Protection Levels	IP65-IP66/IK09		
Working Temperature	-20-60°C		



HERA



AKSO



ATHENA

Solar Pole

Vertical Solar Pole Light

Vertical Solar Pole Light features vertically mounted solar panels integrated around the pole, capturing sunlight from multiple angles throughout the day.

This design improves wind resistance and space efficiency, while providing stable power for high-efficiency LED street lighting.

It offers a reliable, low-maintenance solution for roads, parking areas, pathways, parks, and public spaces.

Key Features

-  Solar panels are securely fixed on an octagonal frame, ensuring that 50% of them always face the sunlight.
-  The vertical solar panel design reduces the wind resistance area, which is especially adapted to very windy regions.
-  The solar panels vertically mounted on the pole is not easy to be covered by the dust or snow, which vastly reduces the requirements of solar panel cleaning.
-  Instead of top-mounted solar panels, the solar panels integrate vertically with the pole, creating a simple, modern design.

Optional Functions

-  Anti-theft Components
-  Camera
-  Motion Sensor
-  IoT Smart Monitoring

Applications

Park / Main Street / Highway / Parking lot / Perimeter / Resort. Etc

LED Lamp Fixture Options



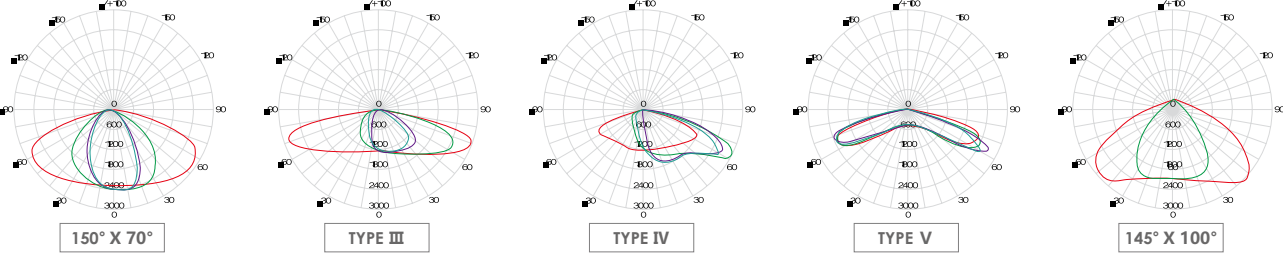
For more information



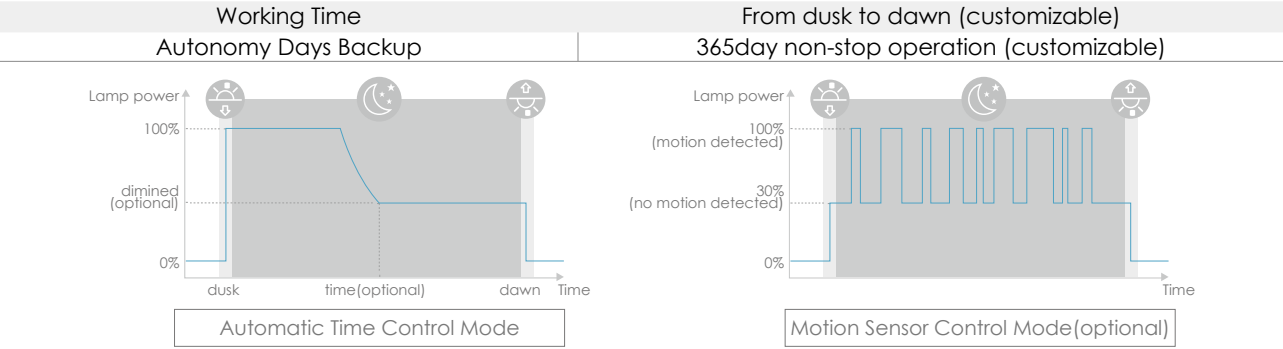
Parameters

Lamp Power	20W – 150W
Finished Lamp Luminous Efficiency	> 180lm/W
CCT	3000K-6000K
Vertical Solar Panel Capacity	1280W
LiFePO4 Lithium Battery Capacity	Up to 1920Wh
Suggested Mounting Height	3-12 Meters
System Life Span	> 10 years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 – 65°C
Motion Sensor	Optional
IoT Monitoring System	Optional

First-class Lighting Solutions



Various Smart Lighting Modes



Work at All Climates

With LiFePO4 battery's high-temperature resistance, lamp fixture's fast heat dissipation design, controller's temperature-compensated function, BMS' temperature protection system and IP65-IP66 lamp fixture, Solar Pole series can operate well under extreme climate conditions.



Split Type Solar Street Light Lithium Battery

Split Type Solar Street Light (Lithium Battery) features an externally mounted LiFePO4 battery combined with a separated solar panel, controller, and LED luminaire. This configuration delivers high power output, long autonomy, and easier maintenance, making it ideal for highways, industrial zones, arterial roads, and projects requiring extended lighting duration.

Key Features

- Separate design ensures optimal angle of solar panel and bigger lithium battery capacity,thus the biggest LED output.
- Service life of LiFePO4 lithium battery is more than 10 years,which is over 5000 deep cycles.
- Extremely bright 5050 LED chips are adopted, which ensures over 250lm/W.
- Plug & Play

Optional Functions

- Adjustable Solar Panel Bracket
- Anti-theft Components
- IoT Smart Monitoring
- Camera
- Motion Sensor
- Anti-bird Spike

Applications

Highway / Street / Intersection / Roundabout / Parking Lot / Business District / Perimeter / Industrial Zone / Factory / Residential Community / Refugee Camp. Etc

LED Lamp Options



100W-200W
INL-LED25



50W-200W
INL-LED24



50W-240W
INL-LED23



60W-200W
INL-LED22



60W-200W
INL-LED13



30W-150W
JAGUAR

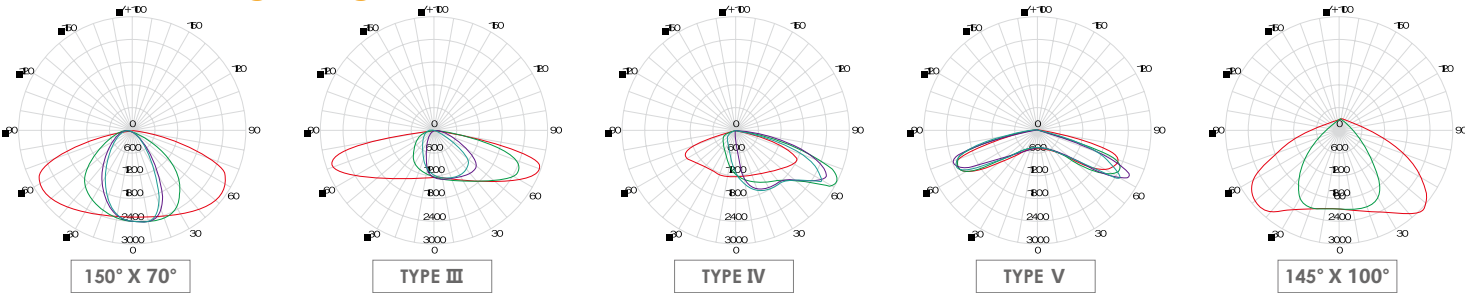


20W-80W
FALCON



10W-60W
BISON

First-class Lighting Solutions



Parameters

Lamp Power	20W - 200W
Finished Lamp Luminous Efficiency	> 180lm/W
CCT	3000K-6000K
Solar Panel Capacity	60W - 720W (customizable)
Lithium Battery Capacity	customizable
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)
Pole Height	3-15 Meters
System Life Span	> 10 years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 – 65°C
Motion Sensor	Optional
IoT Monitoring System	Optional



LED Lamp
IP65-IP66 / IK09 Aluminum Lamp fixture, Anti-Rust,250lm/W Ultra Bright 5050 LED chips from top brands,>100,000hours life time



Solar Panel
High efficiency, outstanding performance in weak sunlight conditions,IEC 61215/ IEC 61730 certificates qualified, 25years warranty



Lighting Pole
Grade A hot-dip galvanized steel,Made of one piece steel sheet,Powder Coating, Anti-Rust,>120km/h Wind Resistance,> 25years life time

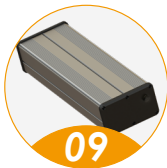


Smart Solar Controller

Advanced MPPT Technology	Multi-protection	Intelligent Temperature Adjustment	Optional Motion Sensor
Smart Lighting Mode & 365-day non-stop operation	Optional IoT smart monitoring system	>10 years lifetime	IP67



LiFePO4 Lithium Battery
more than 10 years lifespan,perfect high temperature & safety performance



IP66 Aluminum Battery Box
IP66 waterproof and IK09 impact protection

Split Type Solar Street Light Gel Battery

Split Type Solar Street Light (Gel Battery) adopts a separated system design with solar panel, controller, LED luminaire, and gel battery installed independently. The buried gel battery configuration supports large battery capacity and stable long-hour operation, making it suitable for high-power lighting systems used in highways, main roads, and large-scale infrastructure projects.

Key Features

-  Separate design ensures optimal angle of solar panel and bigger lithium battery capacity, thus the biggest LED output.
-  Free Maintenance Gel Battery
-  Extremely bright 5050 LED chips are adopted, which ensures over 250lm/W.

Applications

Highway / Street / Intersection / Roundabout / Parking Lot / Business District / Perimeter / Industrial Zone / Factory / Residential Community / Refugee Camp. Etc

GEL Battery Position

- Buried-Underground:** IP65-IP67 plastic box, buried. Provides stable temperature for optimal performance and longevity.
- External-Hanging:** Lockable IP65 iron box, mounted on pole. Designed for theft prevention.



For more information

Parameters

Lamp Power	20W - 200W
Finished Lamp Luminous Efficiency	> 180lm/W
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)
Working Mode	3000K-6000K
Solar Panel Capacity	60W - 720W (Customizable)
Gel Battery	Customizable
Pole Height	3-15 Meters
System Life Span	> 10 Years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 - 65°C
Motion Sensor	Optional
IoT Monitoring System	Optional



Buried-Underground Type

External-Hanging Type

Explosion Proof Specific Solar Street Light

Explosion-Proof Solar Street Light is engineered for hazardous environments such as oilfields, gas stations, chemical plants, and industrial zones. It adopts certified explosion-proof LED luminaires, sealed battery enclosures, and reinforced electrical components to ensure safe and reliable off-grid lighting. Designed to meet strict safety standards, it provides stable illumination for high-risk industrial applications.

Applications

Oil field, power plant, chemical plant, gas station. Etc

Explosion Proof Components



For more information

Parameters

Lamp Power	20W - 160W
Finished Lamp Luminous Efficiency	> 130lm/W
CCT	3000K-6000K
Solar Panel Capacity	60W - 720W (Customizable)
Working Mode	Automatic Time Control / Motion Sensor Control(optional) / IoT Smart Control (Optional)
Battery Type	Gel Battery / LiFePO4 Lithium Battery
Suggested Mounting Height	3-15 Meters
System Life Span	> 10 Years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 - 65°C
Motion Sensor	Optional
Ex-Marking	Ex db IIC T6 GB / Ex tb IIIC T80°CDb (100A) Ex db IIC T4 GB /Ex tb IIIC T130°CDb (200A)
Applicable Hazardous Areas	Zone 1 / Zone 2

Solar AC Hybrid

Specific Solar Street Light

Solar AC Hybrid Street Light combines solar power with AC grid input to ensure continuous lighting all year round. The system prioritizes solar energy and automatically switches to AC power when battery capacity is low, or operates on solar power during grid outages. It is ideal for areas with limited sunlight, unstable grid supply, or projects requiring uninterrupted road lighting.

Applications

Park, Main Street, Highway, Parking lot, Perimeter, Resort. Etc



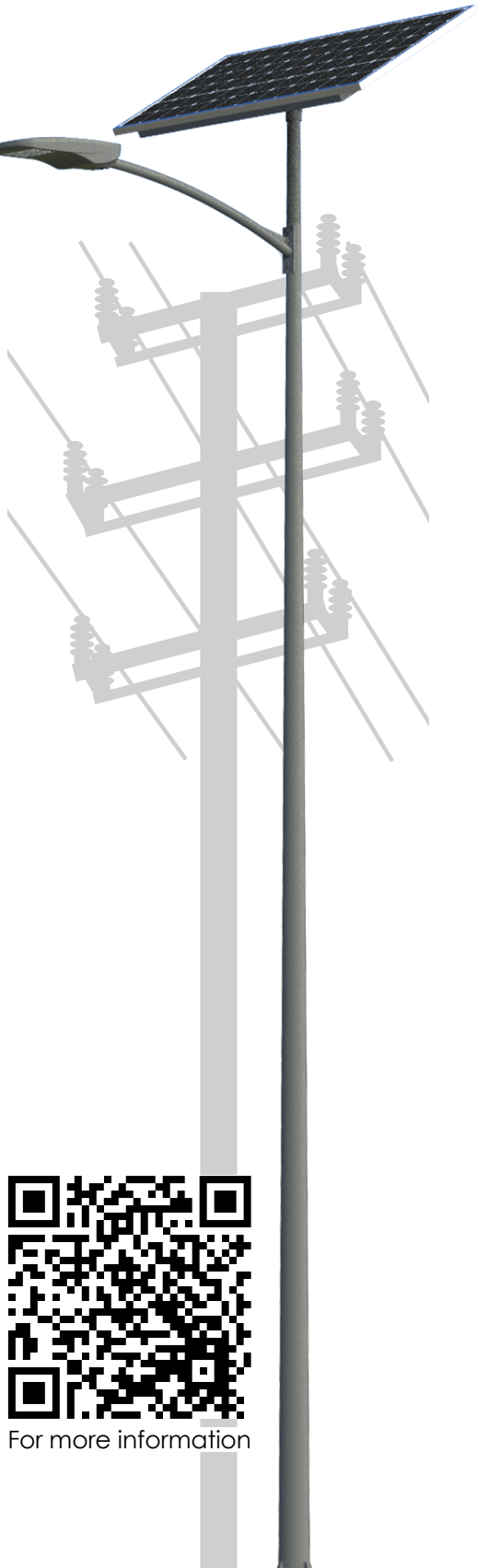
Parameters

Lamp Power	20W - 200W
Finished Lamp Luminous Efficiency	> 180lm/W
CCT	3000K-6000K
Solar Panel Capacity	60W - 720W (customizable)
Battery Type	Gel Battery / LiFePO4 Lithium Battery
Pole Height	3-15 Meters
System Life Span	> 10 years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 – 65°C
Motion Sensor	Optional
IoT Monitoring System	Optional

Power Priority Modes

Solar Energy Priority: Hybrid solar street lights will prioritize using the solar energy stored in the battery to work. When the system's battery power is insufficient, it automatically switches to the AC-Grid power supply. After the battery power is sufficient from the solar panel, the system automatically switches to solar power.

AC-Grid Power Priority: Hybrid solar street light will prioritize AC-Grid power supply. If there is an AC-Grid outage, the system will automatically switch to solar power. After the mains power is restored, the system automatically switches to the AC-Grid power supply.



For more information

Solar Wind Hybrid

Specific Solar Street Light

Solar Wind Hybrid Street Light combines solar panels with a wind turbine to supply power from both solar and wind energy. Solar energy is utilized during sunny days, while wind energy supplements power generation at night or in poor weather conditions. This complementary system ensures stable, off-grid lighting, especially suitable for areas with unstable sunlight or strong wind resources.

Applications

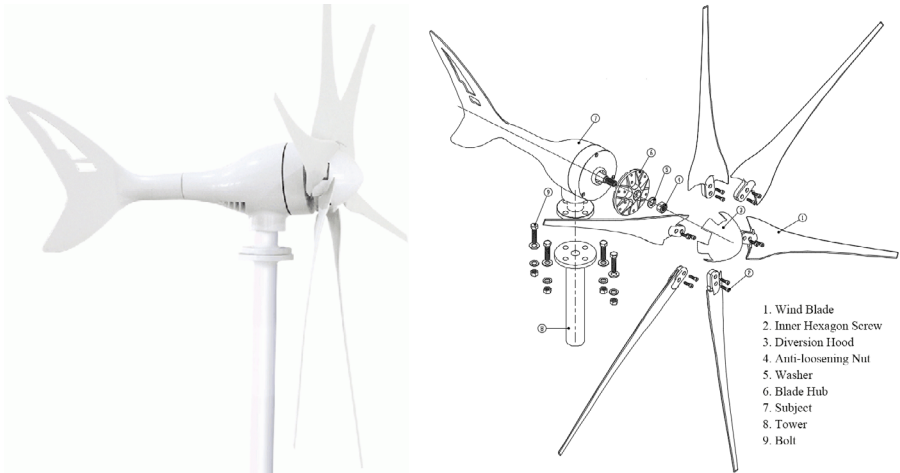
Park, Main Street, Highway, Parking lot, Perimeter, Resort. Etc



Parameters

Lamp Power	20W - 200W
Finished Lamp Luminous Efficiency	> 180lm/W
CCT	3000K-6000K
Solar Panel Capacity	60W - 720W (customizable)
Wind Turbin	100W - 1000W
Battery Type	Gel Battery / LiFePO4 Lithium Battery
Pole Height	3-15 Meters
System Life Span	> 10 years
Protection Levels	IP65-IP66 / IK09
Working Temperature	-20 – 65°C
Motion Sensor	Optional
IoT Monitoring System	Optional

Wind Turbine

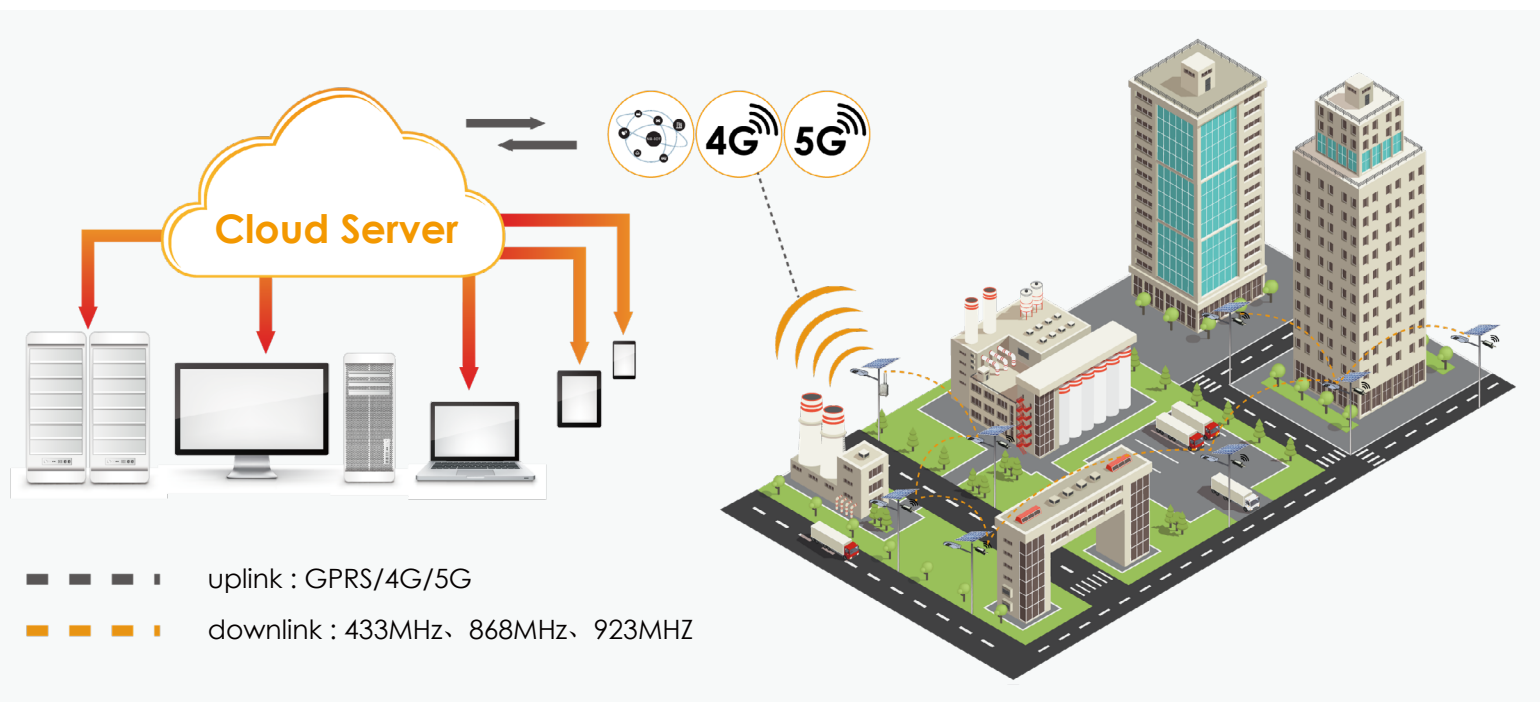


For more information

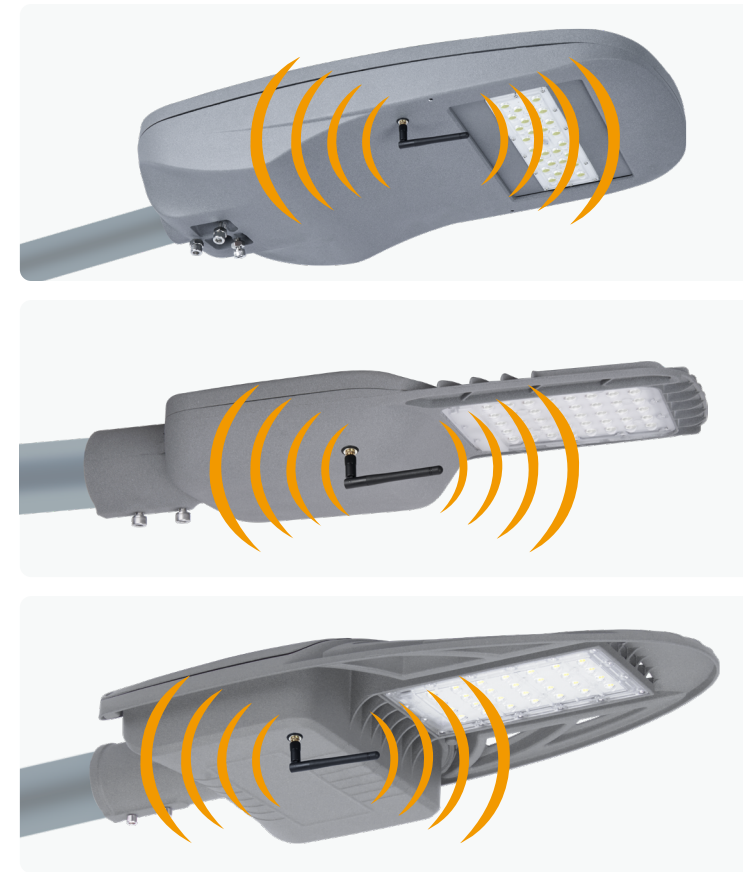
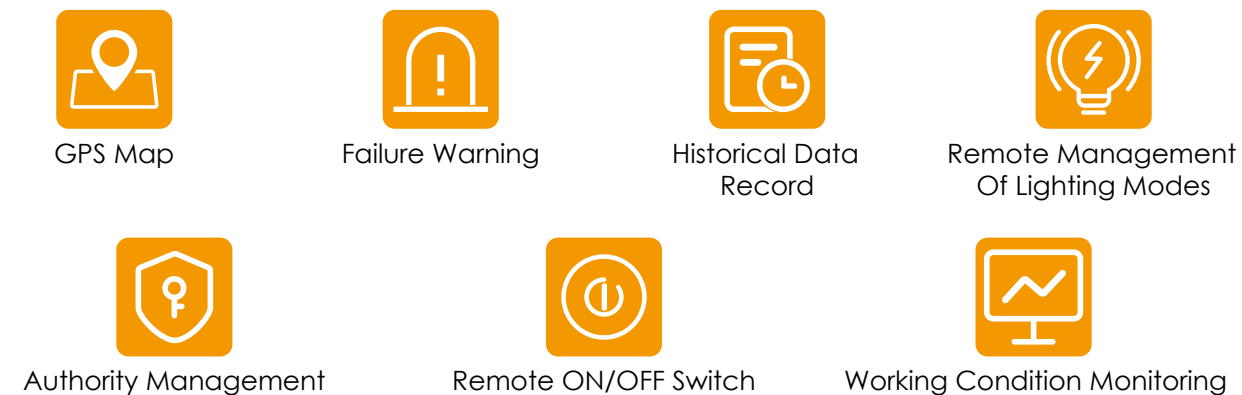
IoT Smart Monitoring System

Based on LoRa/Zigbee/4G technology

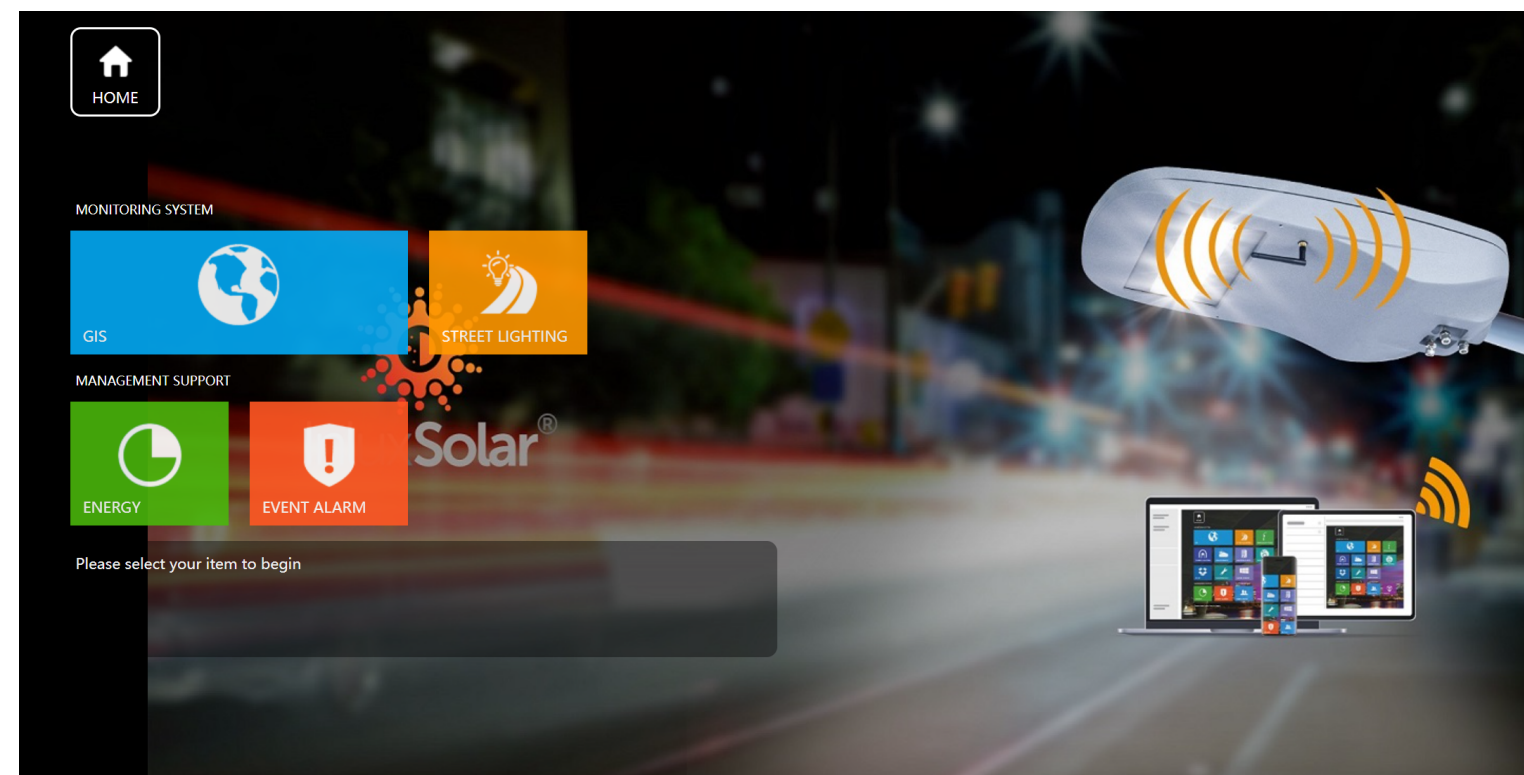
Based on LoRa, Zigbee, and 4G communication technologies, Inlux Solar IoT Smart Monitoring System enables intelligent management of solar street lights via PC, tablet, and mobile platforms. It allows real-time monitoring and remote control, significantly simplifying maintenance and improving operational efficiency.



Functions:

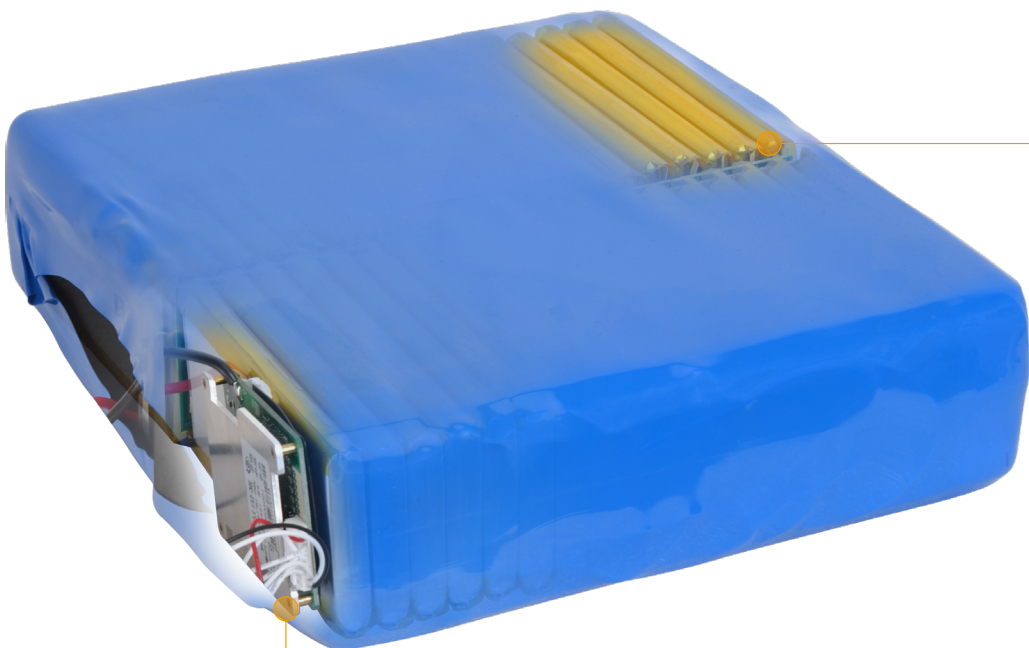


Internet Operation Platform

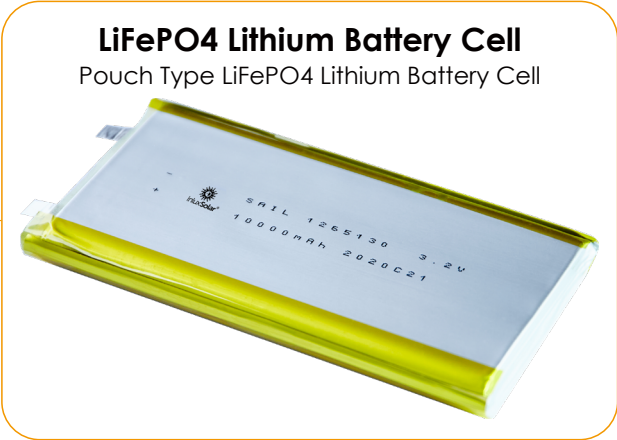


Reliable and Durable LiFePO4 Battery system

We offer a wide range of lithium iron Phosphate (LiFePO4) battery, and each has been specially engineered to deliver long cycle life and excellent thermostable performance. Along with multi-protection applied by BMS unit, solar controller contributes to maintaining normal operation under various extreme climates. LiFePO4 battery is the most reliable lithium battery available on the current market.



BMS Unit
BMS Unit provides multiple protections for the LiFePO4 Lithium Battery package



LiFePO4 Lithium Battery Cell
Pouch Type LiFePO4 Lithium Battery Cell



Extending cycle life by protecting the battery from over-charging and over-discharging.



Coulomb counting and dynamic drift correction are applied to monitor charging status.



Monitors internal resistance of individual cells and the measured capacity of the battery pack.



Multiple methods to control chargers, motor controllers and other external devices.



Over-temperature and under-temperature protection.



Efficient passive balancing is applied to making the utmost of usable capacity of battery packs.



More than 10 years life time



High discharge rate of up to 10C



Different shape selection applies to different products



At room temperature 1C charge and discharge, the battery capacity after 3000 cycles is still more than 80%



Environmentally friendly
No heavy metals, no pollution, in line with ROHS standards



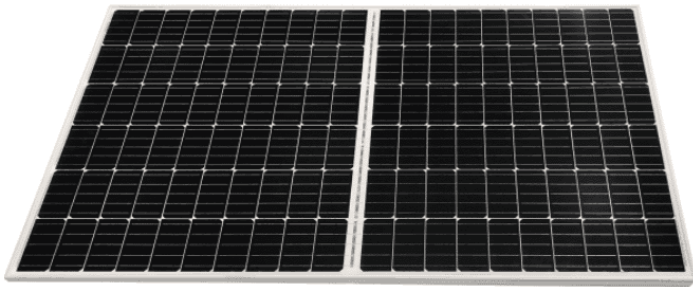
High temperature performance
The peak temperature can withstand up to 500°C, 65°C can still work normally



High safety standards
The anode material of lithium iron phosphate has good electrochemical performance, stable charging and discharging platform and stable structure during charging and discharging

High Efficient Solar Panel

Our solar street lighting system utilizes industry-leading TOPCon high-efficiency solar panel technology, achieving a conversion efficiency of up to 23.2%, placing them at the forefront of the market and ensuring stable, high-power output even in low-light and high-temperature environments, while integrating several cutting-edge technologies such as multi-busbar technology to effectively reduce resistive losses, highly corrosion-resistant coated glass and weather-resistant frames that have passed rigorous tests for durability and reliability in extreme environments, as well as large silicon wafers and half-cell technology that significantly reduce hot-spot risk and lower the system-levelized cost of electricity (LCOE).



High Quality & Reliable Controller

Top-notch electronic component, together with advanced packaging technology makes an IP67 controller. The controller, adopting mature and concise algorithm program, has been verified by thousands of actual cases that its service life has reached over 10 years. It is able to maintain stable working status as well as extremely low failure rates even under extreme climates.



- **Intelligent Temperature Adjustment**
Temperature sensor in the controller keeps monitoring battery temperature while the system is under operation. Once abnormal temperature detected, controller will adjust charging current to regulate battery temperature, so as to ensure safe operation.
- **Multi-protection**
Battery reverse polarity protection, solar panel reverse polarity protection, solar panel over-voltage protection, lithium battery overcharge and over discharge protection, lithium battery BMS overcharge detection protection, over temperature protection, load open circuit and short circuit protection, load over current protection, etc.
- **I-Cloud Smart Solar Lighting Wirelss Control Option**
Featuring real-time data detecting and system monitoring via Internet, I-Cloud Smart Solar Lighting Wireless Control System makes maintenance much easier.

- **Optional Motion Sensor**
With optional PIR sensor, controller realizes energy saving by controlling output power of LED lamp via motion detection.
- **Advanced MPPT Technology**
The controller can detect real-time power generation and track the maximum voltage and current, which enables the system to charge the battery with the highest efficiency, thus increase energy utilization by 15% to 20%
- **Smart Lighting Mode & 365-day non-stop operation**
5-stage working modes can be set on customers' demand. During continuous rainy days, the system will intelligently reduce output power of LED lamp to extend working time, thus ensure the non-stop operation.

Lighting Pole

Steel and aluminium poles with various designs are available.



Key features



Anti-corrosion



High-strength

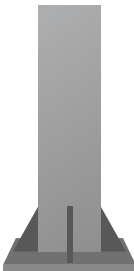


Various design and colors

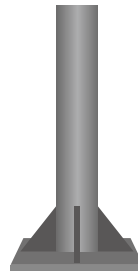


Over 20 years of service life

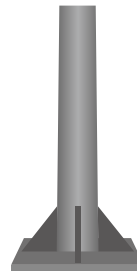
Pole Shape options



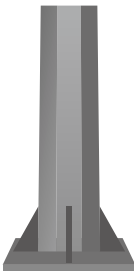
Square Shape



Round Shape



Conical Shape

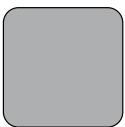


Octagonal shape

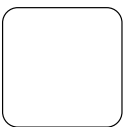
Painting Color Options



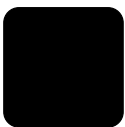
Dark Grey



Light Grey



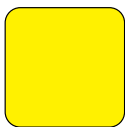
White



Black



Green



Yellow

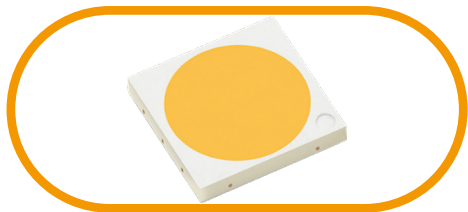


Blue

First-Class Lighting Solutions

BRIGHTER LED LUMINOUS SOURCE FROM TOP BRANDS

The CREE, LUMILEDS, SAN'AN 5050 LED chips adopted by Inlux Solar provide 50% higher lumen output (up to 250lm/w) and longer-lasting stability than normal 3030 LED chips. It is the brightest LED lighting source solution on the market now.



Customized Lighting solution

We will propose lighting solutions according to different application situations, and issue DIALUX report to simulate the illuminating effects of the light to be installed.



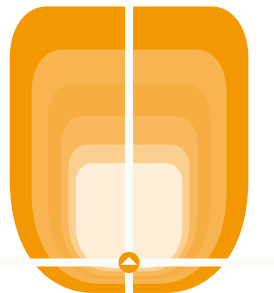
Type1: Two-way lateral suitable for 2 lane roads and walkways. Meant to be placed in the center.



Type2: Lateral but a little larger than Type 1. Good for 4-lanes, on-ramps, and usually located roadside.



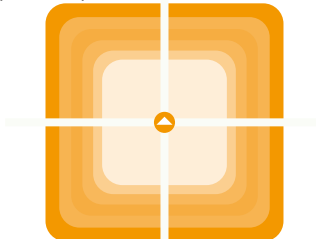
Type3: Commonly known as "bat-wing" it is suitable for perimeters where other interior pole placements fill the site.



Type 4: Known as a "forward throw", or asymmetric, is best along perimeters where spill light is a concern and/or there are no places to add poles within the site.

Type 5: Available as a square/ rectangular or as a circle pattern. Best for large interior areas within a site.

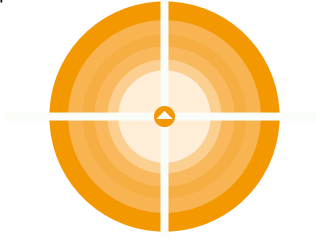
Type 5 Square



Type 5 Rectangle



Type 5 Circle

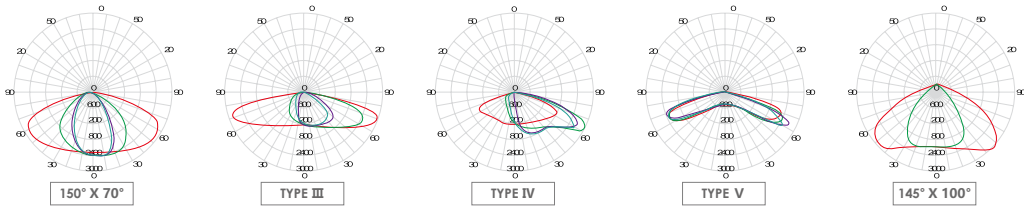


BRAND-NEW LED MODULE DESIGN

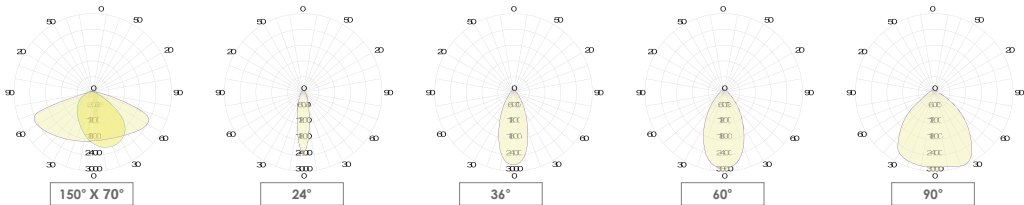
Exquisite design with high power output and better waterproof performance.



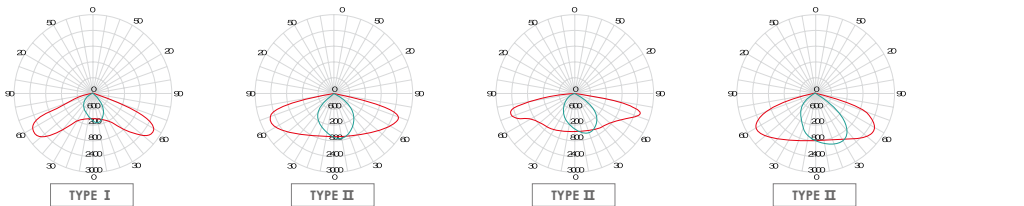
INL-M1 Series



INL-M2 Series



INL-M3 Series



Advantage

1. Patent independent module design, flexible installation.
2. Aluminum alloy heat sink processed by anti-corrosion dull polish treatment, professional fin design, good thermal performance.
3. Luminous efficiency can reach 200lm/W.
4. Multiple beam angles, suitable for various application scenarios.
5. Easy installation and maintenance.
6. Up to IP67 protection grade.
7. Extreme climates endurable.

WORLDWIDE PROJECTS

Abundant Project Experience

With over 300,000 solar street lights installed across 1,000+ sites in 101 countries, we are committed to delivering sustainable and high-performance solar lighting solutions. Our products enhance safety on roads and in public spaces, operate efficiently in extreme climates, and require free maintenance. Designed for durability and reliability, they help reduce energy costs and carbon footprints while bringing brighter, smarter, and greener illumination to communities, businesses, and infrastructure projects worldwide.



2,5089 Locations



1,8261 Clients

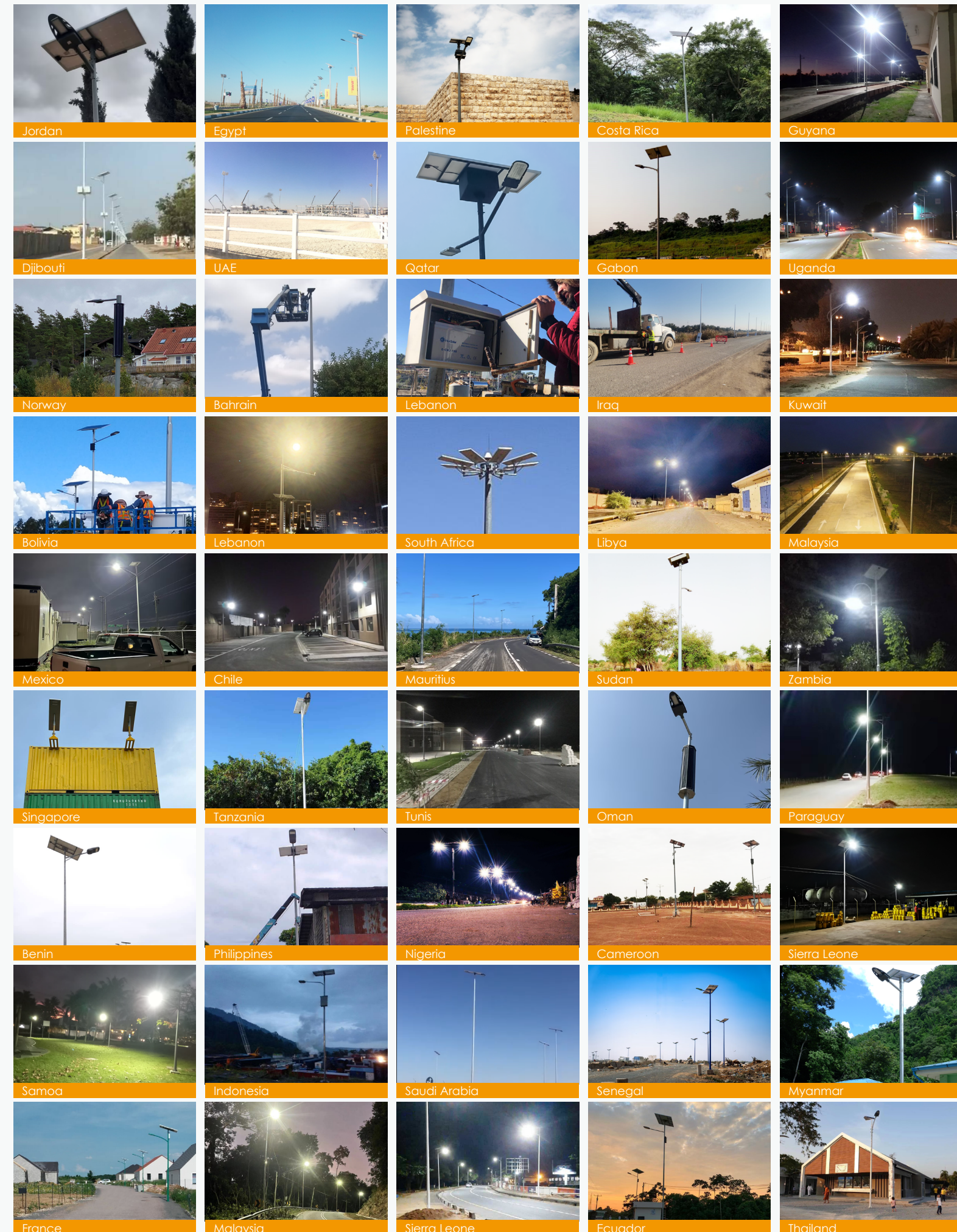


101 Countries



301,280 Devices

Global Clients



Stabilization Facility for Libya (SFL)

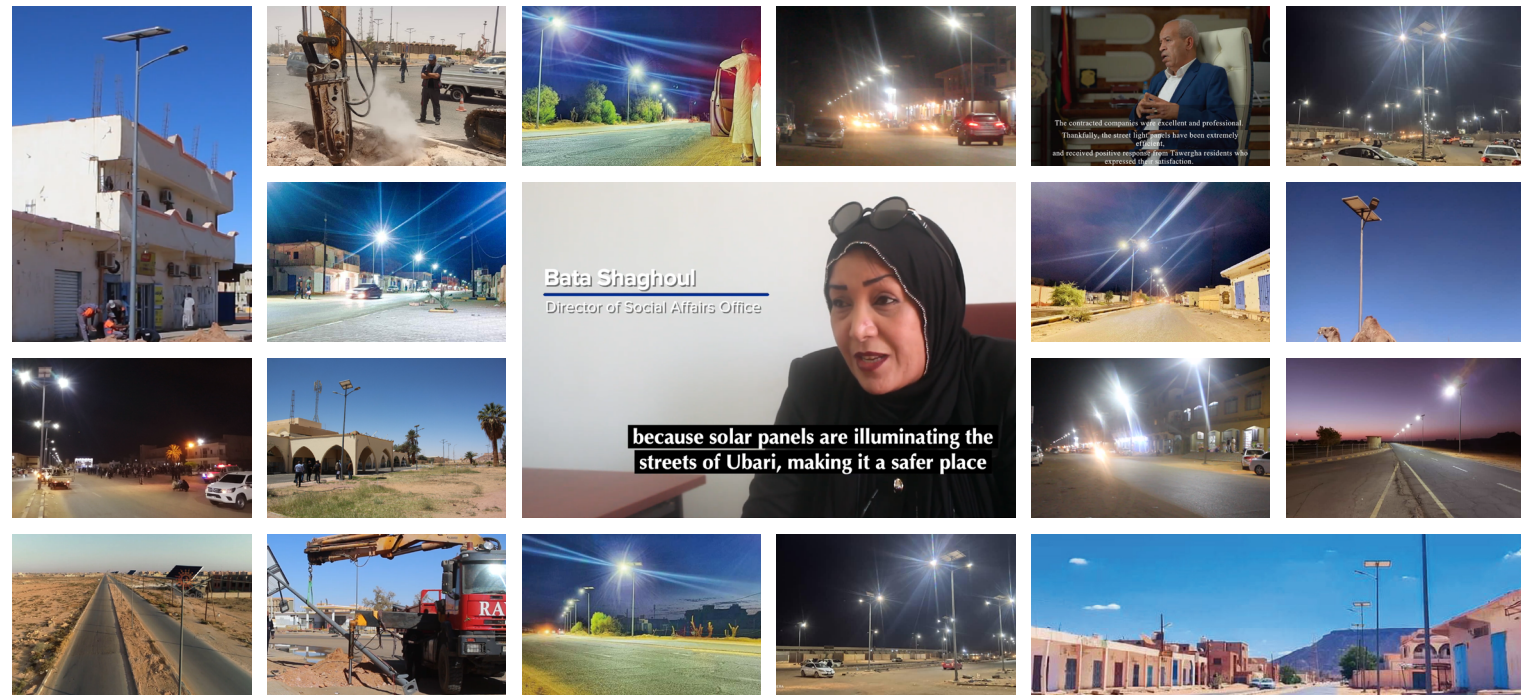


YEAR 2019-2024

2500 Sets



2019-2024, Since 2019, Inlux Solar has provided 2,500 solar street lights to Libya (SFL), for supporting the Government of National Accord (GNA) and the Libyan Political Agreement (LPA) which is funded by the United Nations Development Programme (UNDP). Each set of solar street lights embodies our ultimate pursuit of craftsmanship and strict requirements for quality.



Bringing Refugee Settlements Out of the Dark

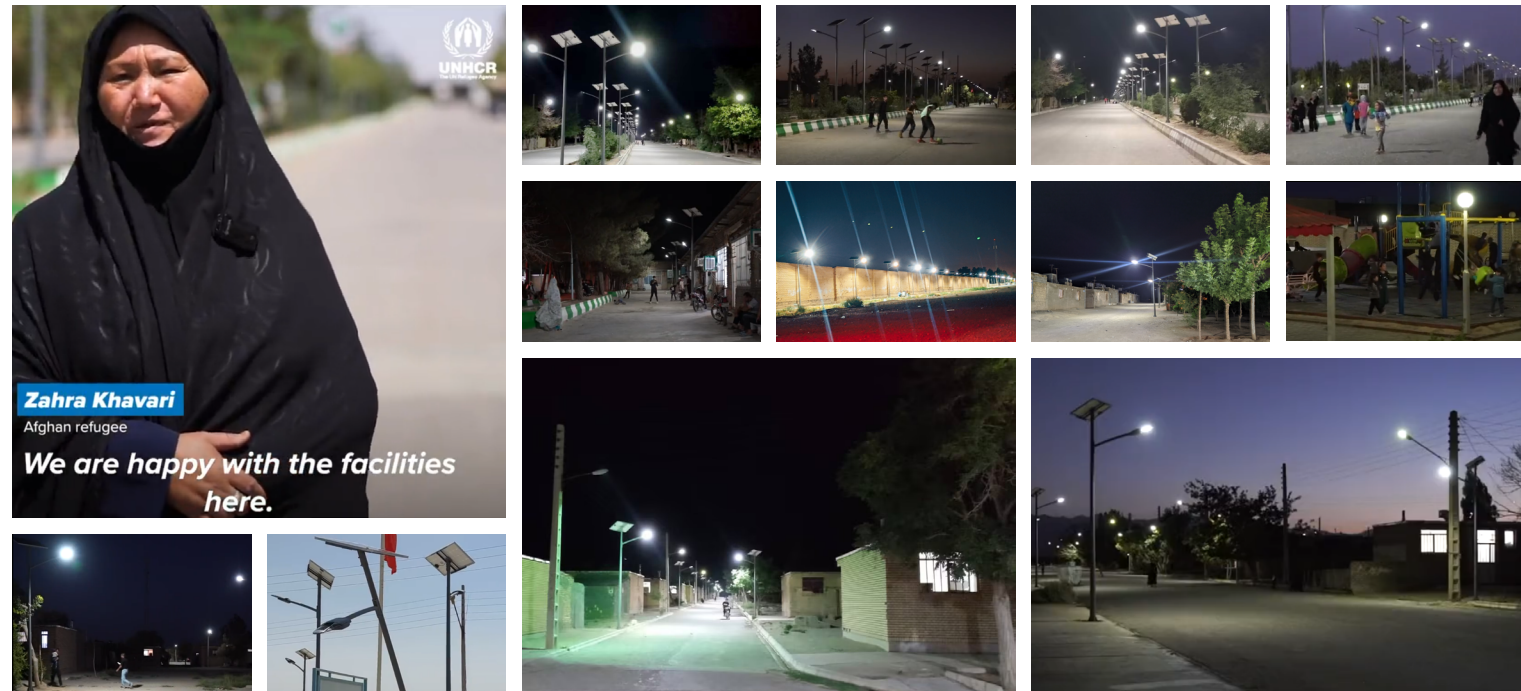


YEAR 2022

4200 Sets



In 2022, Inlux Solar provided 4,200 solar street lights to the UN Refugee Agency (UNHCR), which have been installed in 10 refugee settlements in Iran. The solar lights illuminate the streets at night, improving security and building community life after sunset. Refugees can confidently walk around, and children enjoy playing in the evenings.



UNHCR's Largest Solar Project in the Middle East

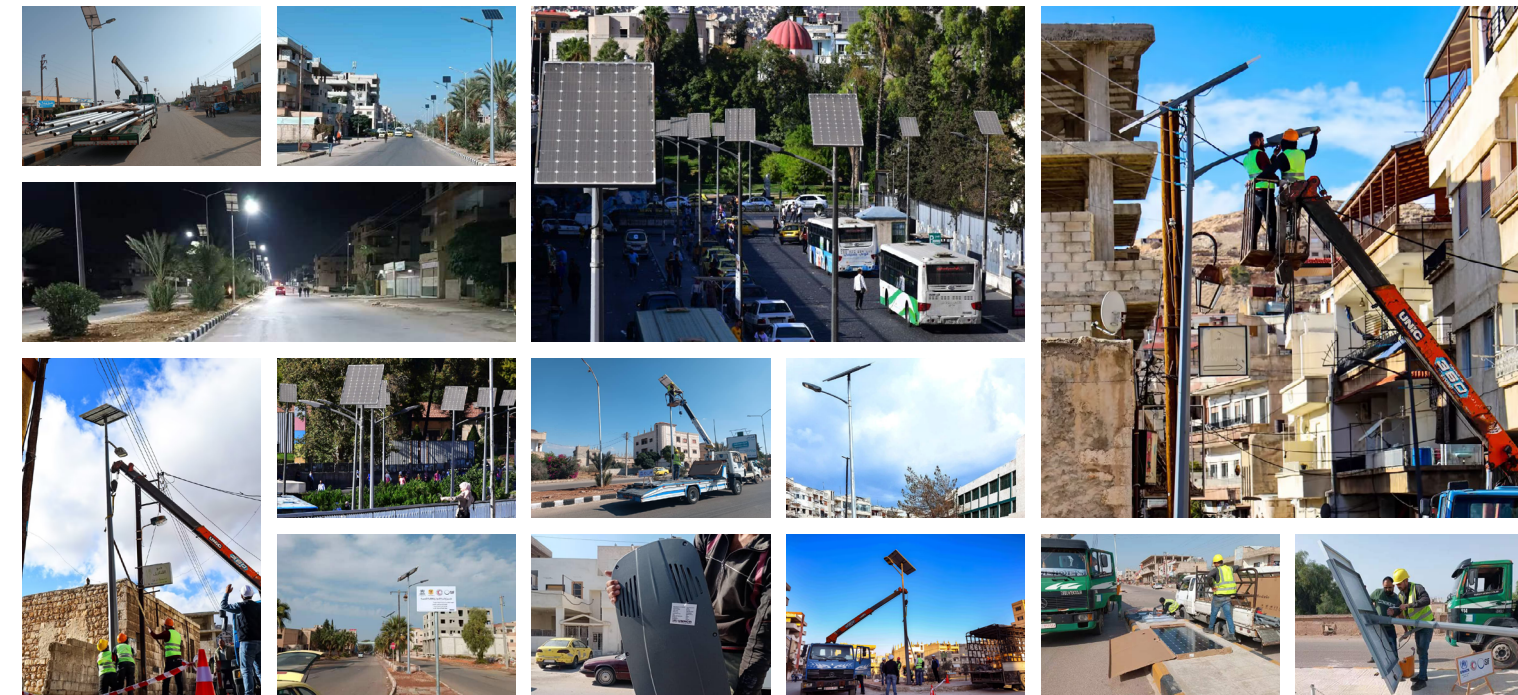


YEAR 2021-2023

10750 Sets



In 2021, Inlux Solar supplied 10,750 solar street lights to six major cities in Syria (Damascus, Aleppo, Sweida, Tartous, Homs, and Qamishly) as part of a UNHCR project. Designed for easy installation, the lights have enhanced safety, improved infrastructure, and empowered local workers with efficient setup skills.



Bamako Solar Street Light Project Story



YEAR 2025

3162 Sets

In 2025, Inlux Solar deployed 3,162 JAGUAR 150W solar streetlights in Bamako, Mali. This IoT-enabled system replaced grid power, delivering bright, reliable illumination and remote O&M. The project significantly enhanced urban safety, slashed energy costs, and marked a major step towards sustainable city development.



Empowering Niger's Desert Cities with Light

 Niger

 YEAR 2021

 1750 Sets



In 2021, Inlux Solar supplied UNDP with 1,750 solar street lights for Baroua and Diffa, Niger. These APPOLO Split Type lights, with LiFePO4 batteries and MPPT controllers, are designed for high-temperature environments and offer wide illumination—an ideal solution for countries like Niger that experience high temperatures year-round.



Light Up Burkina Faso with IoT Technology

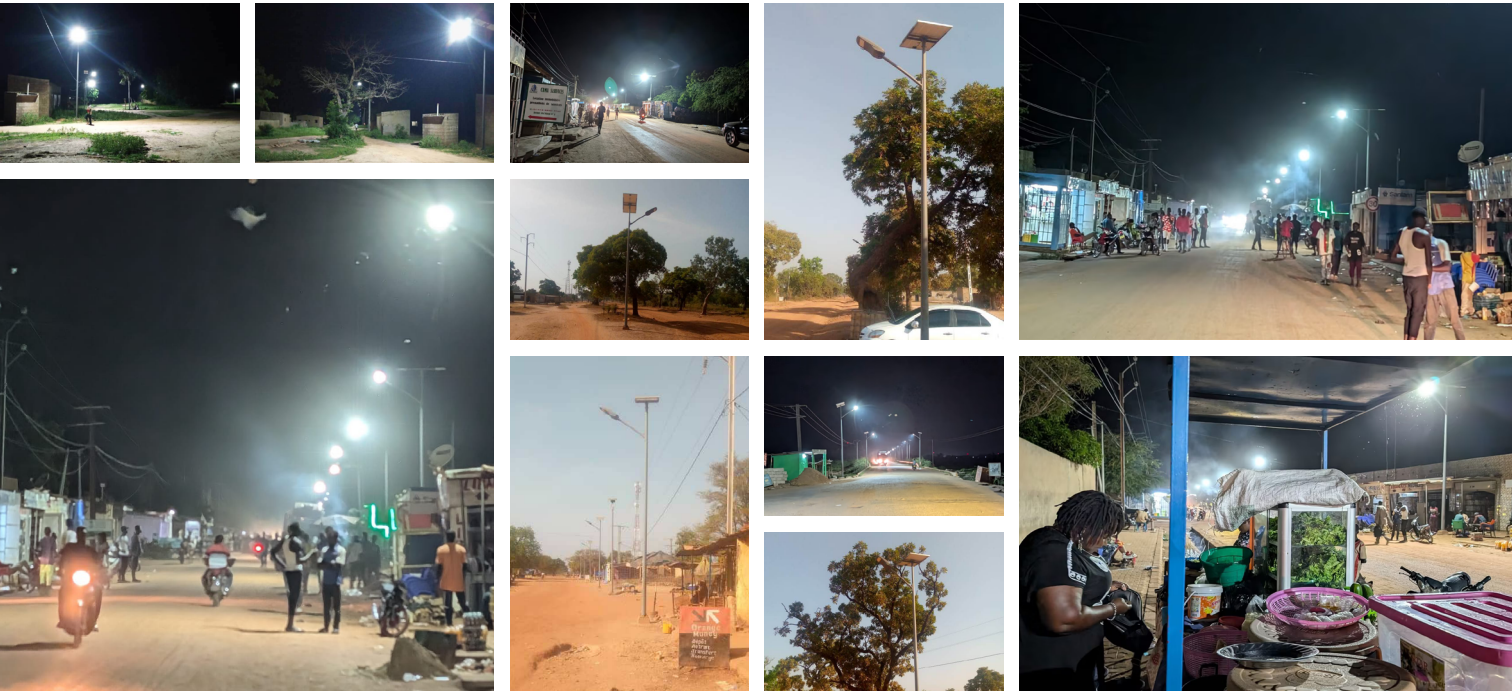
 Burkina Faso

 YEAR 2024

 1095 Sets



In 2024, Inlux Solar supplied 1,095 solar street lights in Burkina Faso's Sahel region, a project funded by the World Bank. The project set strict requirements for brightness, durability, LED technology, and energy efficiency while emphasizing IoT integration for real-time monitoring. Our solar street lights with an IoT monitoring system met all requirements and achieved great success.



Illuminates the Path Ahead for Myanmar Refugees

 Myanmar

 YEAR 2022

 1000 Sets



In 2022, Inlux Solar provided 1,000 solar street lights to UNHCR for 21 public halls in Kachin State, aiding 6,000 displaced people. By early 2023, our solar lights improved schools, roads, and water tanks in Kayin and southern Shan States, benefiting 21,000 people. Additionally, 170 lights in four southern Shan villages enhanced safety for 1,500 residents.



Lighting Cox's Bazar Refugee Camp

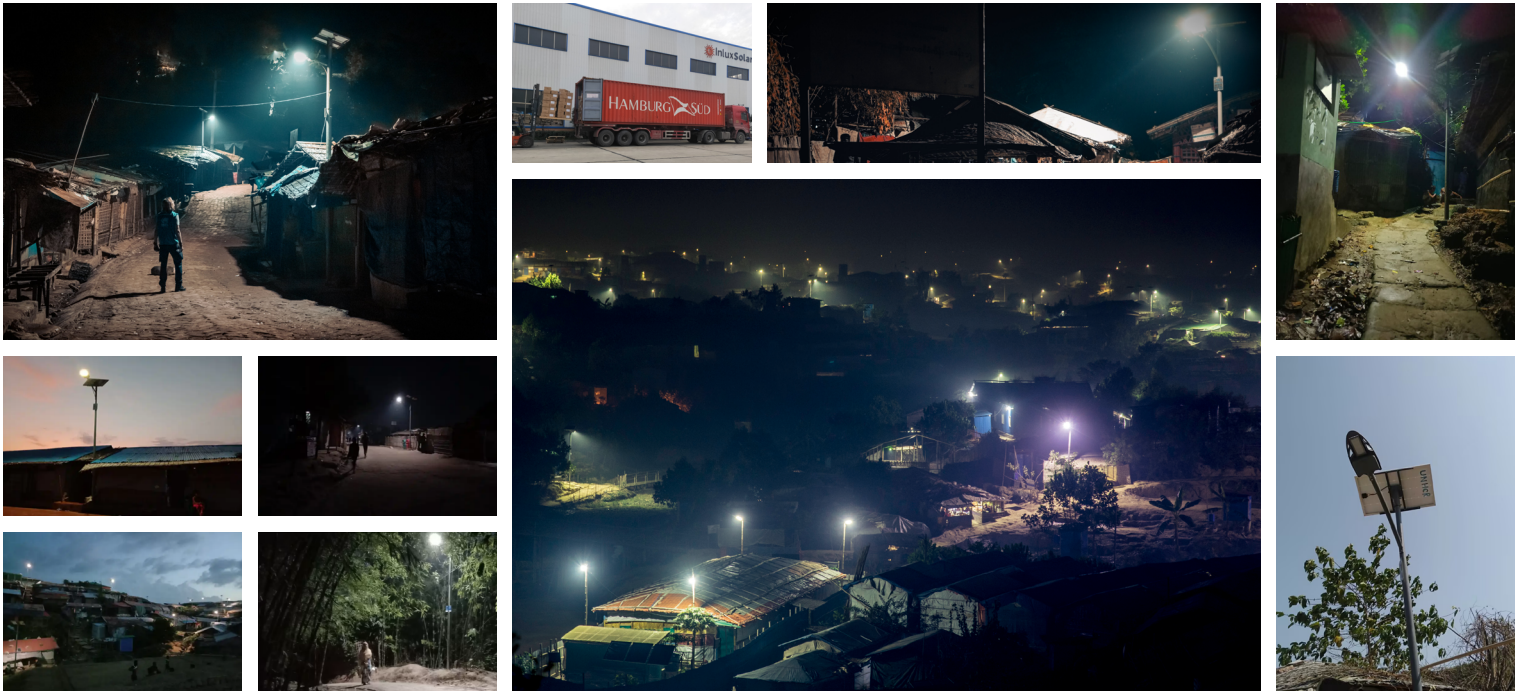
 Bangladesh

 YEAR 2020

 4000 Sets



Inlux Solar 4,000 solar street lights have illuminated the world's largest refugee camp in Bangladesh In Kutupalong and also light up the paths of nearly one million Rohingya refugees in 2020. As a part of the UN's SAFE+2 initiative, these lights have protected 12,000 hectares of forest land, reduced environmental strain, and supported community resilience.





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