

***Inbrit***<sup>®</sup>



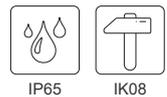
**LYRA**

ALL IN ONE SOLAR STREET LIGHT



# LYRA $\leq 20W/30W/40W$

## ALL IN ONE SOLAR STREET LIGHT



Self-cleaning system for solar panels.

The system features timed automatic dust removal, effectively cleaning solar panel surfaces to maintain high-efficiency power generation, save water and labor, and improve energy conversion rates.

The default cleaning frequency is set to three times each in the morning and evening.

If the LED module has 4 modules, the installation method will be different.

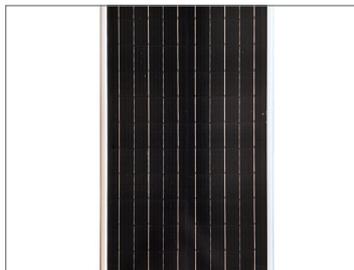
Featuring advanced solar technology with a high-power, high-lumen design, delivering long-lasting battery life on a single charge.

Equipped with a high-sensitivity sensor that automatically detects ambient light brightening when people approach and gradually dims when they leave—for energy-efficient and intelligent operation.



### High Brightness

High efficiency energy conversion, LED has high luminous efficiency. LED has long life, which can effectively reduce maintenance cost and replacement cycle. High safety, LED will not produce high temperature, explosion and other safety hazards, as well as waterproof, dustproof and other features, can be used in harsh environments.



### High Efficiency Solar Cells

Solar-powered, no need for external power supply, energy-saving and environmentally friendly



### Cleaner Model

Cleaning dust, independent drive to ensure full charging of solar panels, suitable for dusty environments



### MAIN BODY OF A STRUCTURE

The lamp body is a combination of aluminum profile + galvanized sheet, which is lightweight, high-strength and corrosion-resistant.

### OPTICAL ELEMENT

The light source adopts bat wing lens optical accessories

### ADJUSTABLE SLEEVE ANGLE

Adjustable sleeve for more scenarios and lighting needs

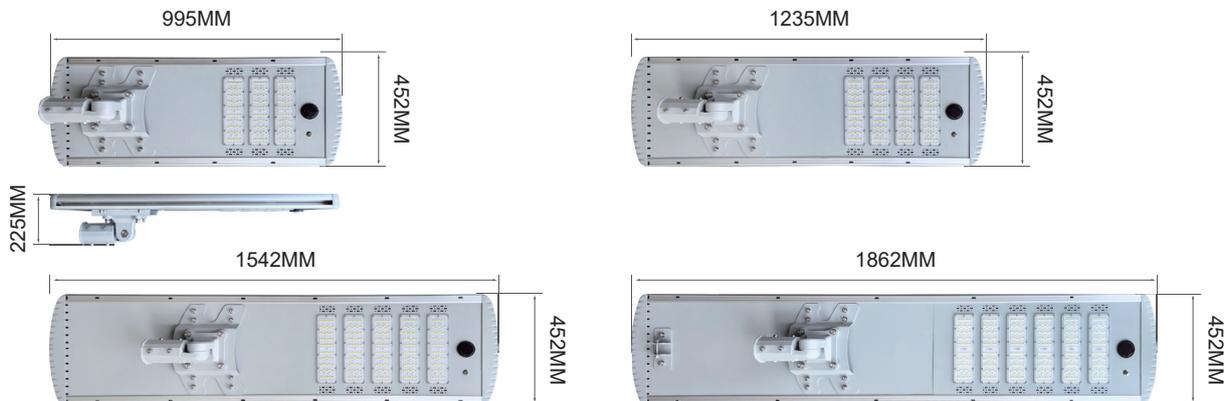
### AUTOMATIC CLEANING FUNCTION

Timed dust removal or manual control of dust removal time can be set



Model No.	LYRA-001A	LYRA-002A	LYRA-003A	LYRA-004A	LYRA-001B	LYRA-002B	LYRA-003B	LYRA-004B
<b>System Voltage</b>	DC3.2V				DC12.8V			
<b>Specifications</b>	Module 3	Module 4	Module 5	Module 6	Module 3	Module 4	Module 5	Module 6
<b>Rated Power</b>	≤20W		≤30W		≤30W		≤40W	
<b>Solar Panel</b>	40W/5V	60W/5V	80W/5V	105W/5V	45W/18V	60W/18V	80W/18V	105W/18V
<b>LiFePO4 Battery</b>	36AH/3.2V	48AH/3.2V	60AH/3.2V	72AH/3.2V	24AH12.8V	24AH12.8V	36AH12.8V	48AH12.8V
<b>Light Source</b>	5054							
<b>Controller</b>	15A20W		20A30W		6A30W		8A40W	
<b>Light Distribution</b>	Bat-Wing light distribution (150°×75°)							
<b>Light Efficiency</b>	140-160LM/W							
<b>Color Temperature</b>	3000-6000K							
<b>CRI</b>	≥Ra70							
<b>IP Rating</b>	IP65							
<b>Working Temperature</b>	-10°C -+60°C							
<b>LED Lifespan</b>	50000H-100000H							
<b>Mount Diameter</b>	Φ60MM							
<b>Lamp Dimension</b>	995×452×225MM (Cone-type dust collector)	1235×452×225MM (Cone-type dust collector)	1542×452×225MM (Cone-type dust collector)	1862×452×225MM (Cone-type dust collector)	995×452×225MM	1235×452×225MM	1542×452×225MM	1862×452×225MM
<b>Lamp Weight</b>	14.07KG	15.79KG	18.25KG	20.39KG	15.57KG	17.75KG	20.75KG	23.1KG
<b>Total Case Weight</b>	15.23KG	16.69KG	19.67KG	22.78KG	16.75KG	18.7KG	21.17KG	25.48KG
<b>Package Dimension</b>	1060×475×245MM	1300×475×245MM	1610×475×245MM	1930×475×245MM	1060×475×245MM	1300×475×245MM	1610×475×245MM	1930×475×245MM
<b>Suggested Mount Height</b>	4-6M			6-8M		4-8M		
<b>Warranty</b>	3 Years							

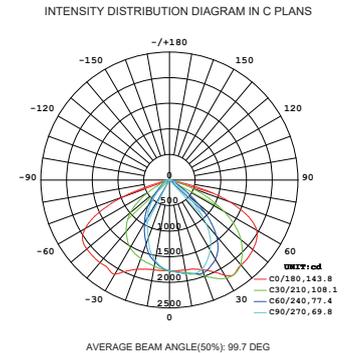
## LAMP DIMENSION



# LIGHT DISTRIBUTION CURVE

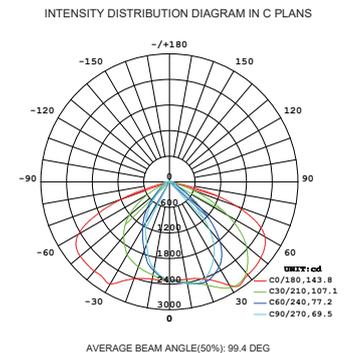
## STREETLIGHT PHOTOMETRIC TEST REPORT (30W)

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 163.90lm/W
MODEL	TQ-30W	Imax (cd)	2364	$\eta$ street_up (%)	0.3	
NOMINAL POWER (W)	30	LOR (%)	100.0	$\eta$ street_down (%)	58.7	
RATED VOLTAGE (V)	30	TOTAL FLUX (lm)	4917	$\eta$ house_up (%)	0.3	
NOMINAL FLUX (lm)	1639.04	MAXIMUM @(C, $\gamma$ )	15, 35.0	$\eta$ house_down (%)	40.8	
LAMPS INSIDE	3	$\eta$ up (%)	0.5	76 FLASHAREA (m <sup>2</sup> )	0.00100	
TEST VOLTAGE (V)	27.1	$\eta$ down (%)	99.5	SLI	17.615	



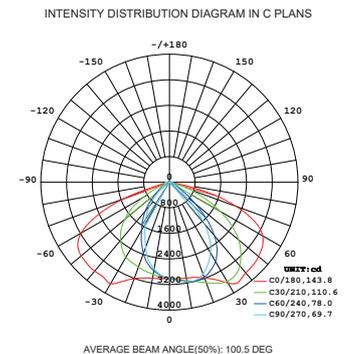
## STREETLIGHT PHOTOMETRIC TEST REPORT (40W)

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 159.34lm/W
MODEL	TQ-40W	Imax (cd)	3097	$\eta$ street_up (%)	0.2	
NOMINAL POWER (W)	40	LOR (%)	100.0	$\eta$ street_down (%)	59.0	
RATED VOLTAGE (V)	30	TOTAL FLUX (lm)	6374	$\eta$ house_up (%)	0.2	
NOMINAL FLUX (lm)	2124.6	MAXIMUM @(C, $\gamma$ )	15, 35.0	$\eta$ house_down (%)	40.6	
LAMPS INSIDE	3	$\eta$ up (%)	0.4	76 FLASHAREA (m <sup>2</sup> )	0.00100	
TEST VOLTAGE (V)	27.4	$\eta$ down (%)	99.6	SLI	18.144	



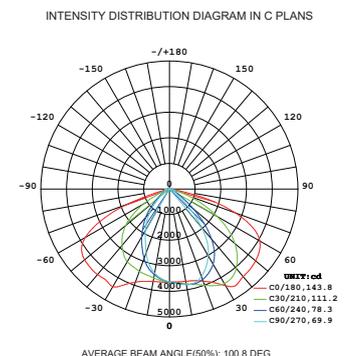
## STREETLIGHT PHOTOMETRIC TEST REPORT (50W)

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 164.98lm/W
MODEL	TQ-50W	Imax (cd)	3919	$\eta$ street_up (%)	0.2	
NOMINAL POWER (W)	50	LOR (%)	100.0	$\eta$ street_down (%)	56.4	
RATED VOLTAGE (V)	30	TOTAL FLUX (lm)	8249	$\eta$ house_up (%)	0.2	
NOMINAL FLUX (lm)	1649.77	MAXIMUM @(C, $\gamma$ )	15, 35.0	$\eta$ house_down (%)	43.2	
LAMPS INSIDE	5	$\eta$ up (%)	0.4	76 FLASHAREA (m <sup>2</sup> )	0.00100	
TEST VOLTAGE (V)	27	$\eta$ down (%)	99.6	SLI	18.780	



## STREETLIGHT PHOTOMETRIC TEST REPORT (60W)

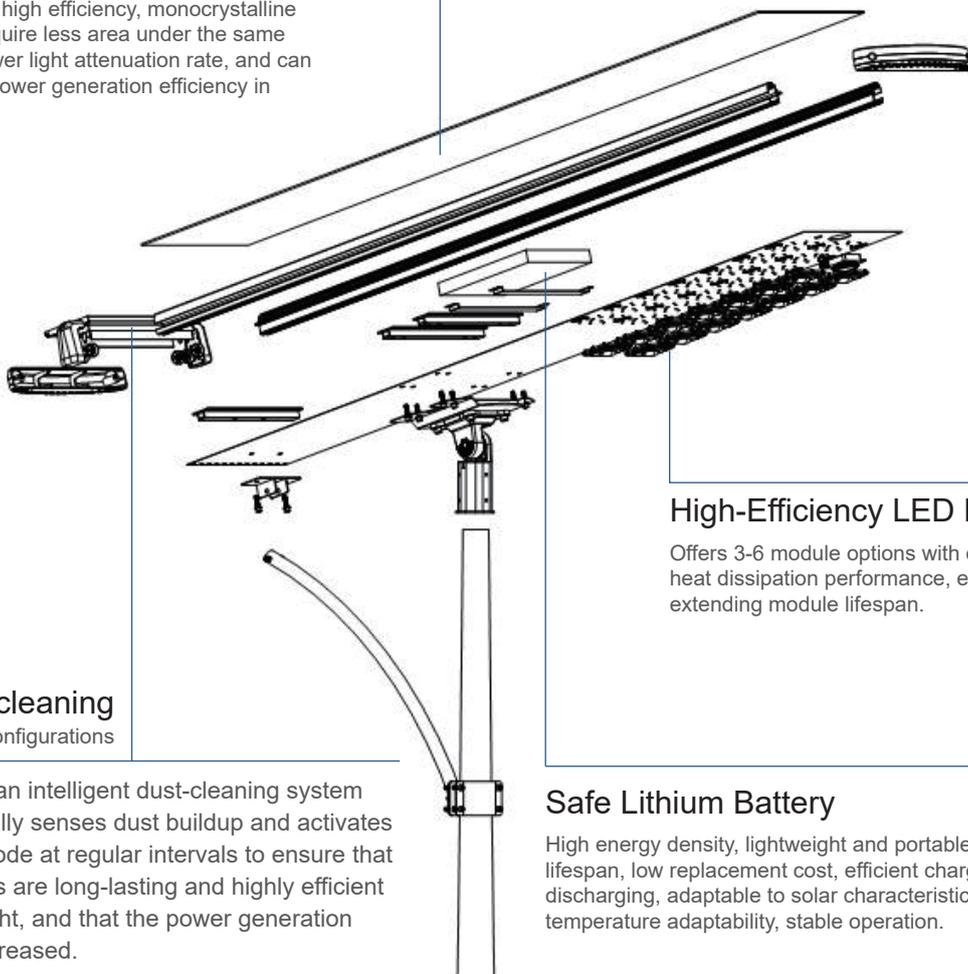
DATA OF LAMP		PHOTOMETRIC DATA				Eff: 164.95lm/W
MODEL	TQ-60W	Imax (cd)	4691	$\eta$ street_up (%)	0.2	
NOMINAL POWER (W)	60	LOR (%)	100.0	$\eta$ street_down (%)	55.8	
RATED VOLTAGE (V)	30	TOTAL FLUX (lm)	9897	$\eta$ house_up (%)	0.2	
NOMINAL FLUX (lm)	1649.49	MAXIMUM @(C, $\gamma$ )	15, 35.0	$\eta$ house_down (%)	43.7	
LAMPS INSIDE	6	$\eta$ up (%)	0.4	76 FLASHAREA (m <sup>2</sup> )	0.00100	
TEST VOLTAGE (V)	27	$\eta$ down (%)	99.6	SLI	19.223	



# STRUCTURE PRESENTATION

## Mono Solar Panel

Stable material performance, slow decay of efficiency in long-term use, high efficiency, monocrystalline silicon panels require less area under the same power output, lower light attenuation rate, and can maintain a high power generation efficiency in long-term use.



## High-Efficiency LED Module

Offers 3-6 module options with exceptional heat dissipation performance, effectively extending module lifespan.

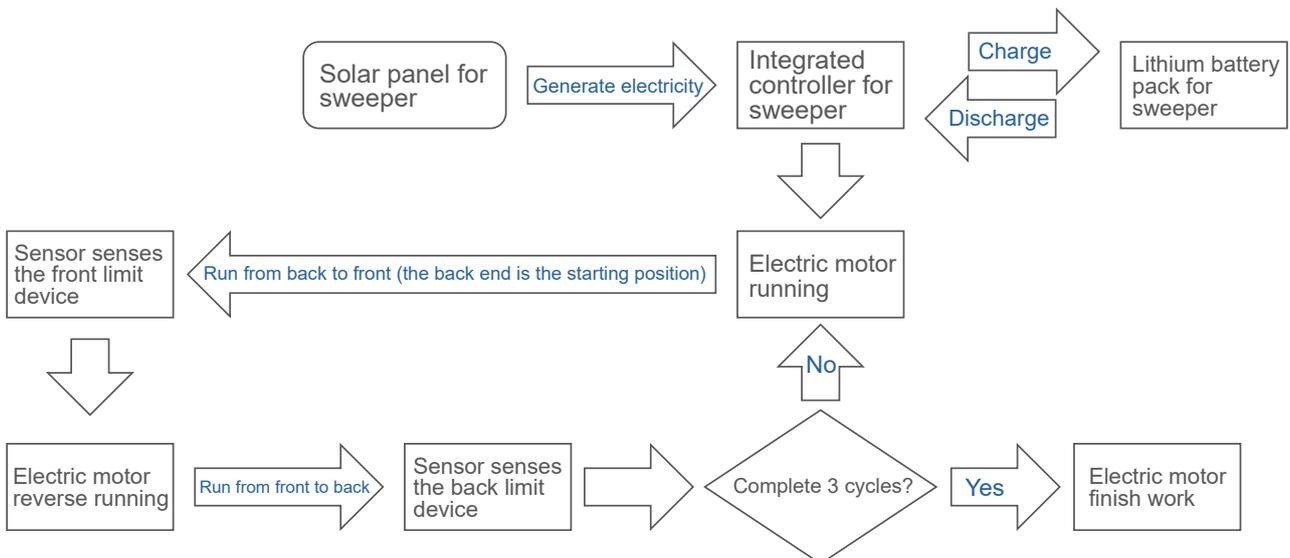
## Self-cleaning

\*Optional Configurations

Equipped with an intelligent dust-cleaning system that automatically senses dust buildup and activates the cleaning mode at regular intervals to ensure that the solar panels are long-lasting and highly efficient in absorbing light, and that the power generation efficiency is increased.

## Safe Lithium Battery

High energy density, lightweight and portable, long lifespan, low replacement cost, efficient charging and discharging, adaptable to solar characteristics, wide temperature adaptability, stable operation.





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.

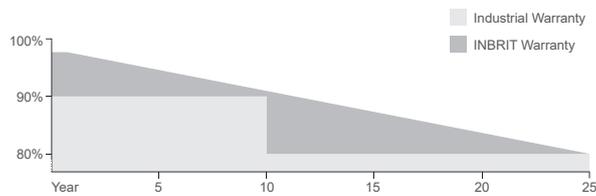


**Higher Efficiency**

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**



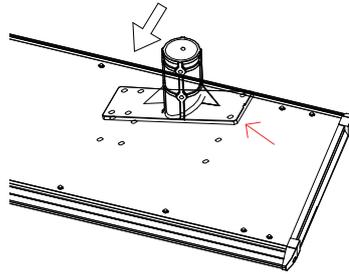
**Comprehensive certificates**

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



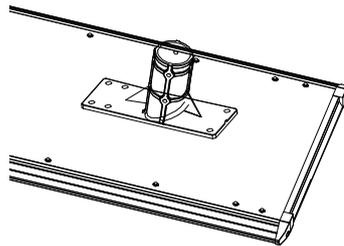
## LAMP INSTALLATION

①



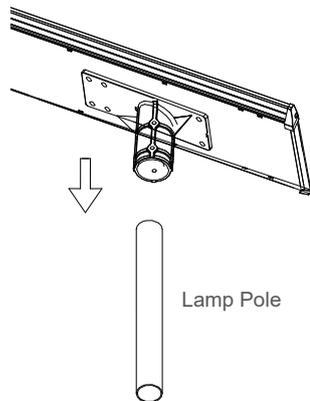
After removing the lamp,  
install the sleeve onto the lamp.

②



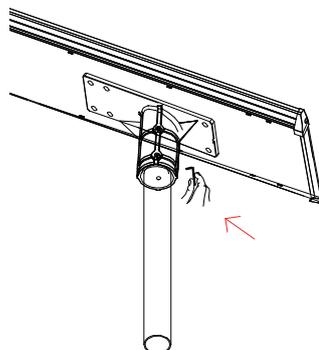
Tighten the screws after the  
sleeve is installed.

③



Align the lamp with the pole, insert it,  
and adjust the angle of the lamp.

④



After adjusting the lamp to the  
correct angle, tighten all screws,  
raise the lamp pole, and complete  
the installation.



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One-Stop LED Outdoor Lighting Manufacturer