

**LEADSUN<sup>®</sup>**  
Bright Ideas For An Even Brighter Future.



# AE3C (All In One) Solar Street Light

LEADSUN's AE3C all in one solar street light integrates high-efficiency panel, super bright LEDs, motion sensor, and intelligent controller for quick installation on poles. Its adaptive system dims the light when no motion is detected and brightens when movement is sensed, balancing energy efficiency and safety. Equipped with industry-leading LiFePO4 battery and smart controller, it withstands extreme temperatures and weather, requiring minimal maintenance and offering greater durability than standard solar street lights. This wire-free solution reduces deployment costs by 60% and provides reliable off-grid lighting for streets, parks, residential areas, and remote areas for years.



# AE3C SOLAR STREET LIGHT

## Features

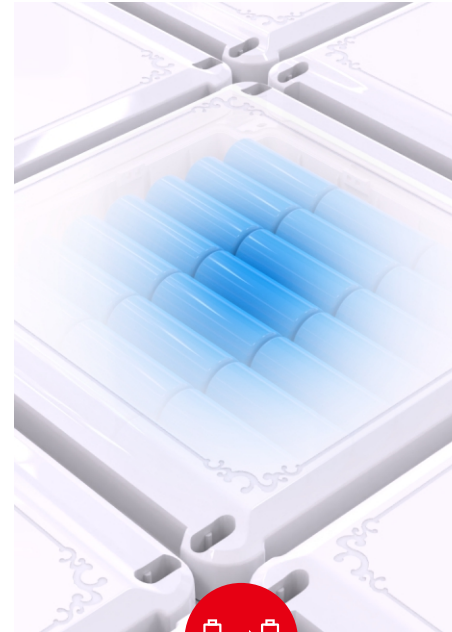
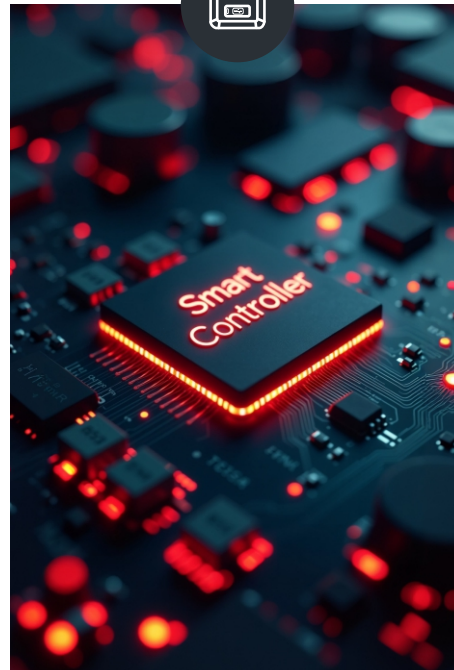


### Monocrystalline Solar Module

- **23% Conversion Efficiency** – Maximizes energy output.
- **Advanced Light Harvesting** – Synergistic design with smart controller.
- **Strong Low-Light Performance** – Efficient in all conditions.
- **Reliable and Durable** – Ensures long-term savings.

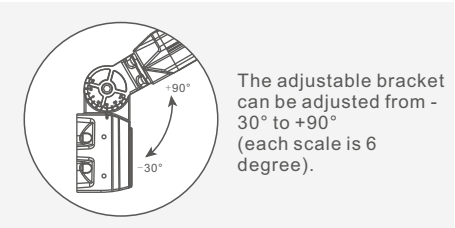
- **Smart Lighting Control** – Enables intelligent control of street lights.
- **Comprehensive System Protection** – Offers full protection for the entire system.
- **High Quality and Performance** – Ensures durability in outdoor environments.
- **Easy Maintenance** – Facilitates future maintenance with user-friendly waterproof ports.

### Smart Controller



### Dual Batteries

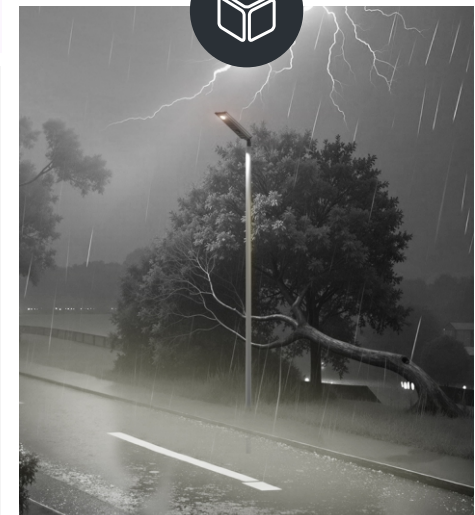
- **Environmentally Friendly LiFePO4 Battery** – No harmful metals used.
- **Patented Shallow Charge&discharge Technology** – **4,000+ cycles**.
- **Comprehensive Protection** – Prevents over-charge, over-discharge and over-temperature.
- **Over 8 Years Lifespan** – Ensures durability and reliable performance.



The adjustable bracket can be adjusted from -30° to +90° (each scale is 6 degree).

- **Modular Design** – Flexible expansion/maintenance.
- **Corrosion-Resistant** – High-strength aluminum alloy shell and excellent multi-layer surface treatment.
- **IP66/IK08 Rated** – Dust/water/impact resistance.
- **All-Weather Durability** – Withstands rain/snow/storms.

### Robust Structure





# AE3C SOLAR STREET LIGHT

## Features

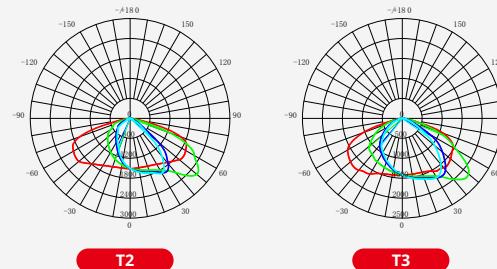
- **High-Efficiency LEDs** – Achieves up to **200lm/W** luminous efficiency (@25°C).
- **Cutoff Design** – Reduces lighting pollution, supporting environmental preservation.
- **Durable Sealing Lens** – Made of anti-ultraviolet PC for anti-aging and impact resistance.
- **Excellent Optics** – Improves lighting uniformity and extends light coverage.

### LED Light Source



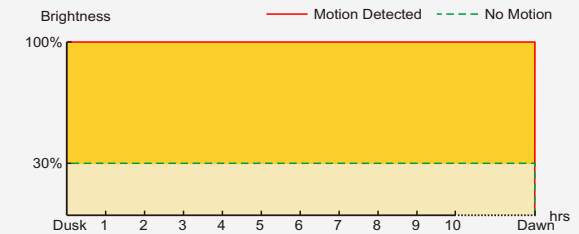
### Bat Wing Light Distribution

The optical lenses independently designed and developed by Leadsun enhance lighting uniformity and coverage, greatly improving lighting performance. Users can select different lenses based on the specific lighting requirements of their scene.



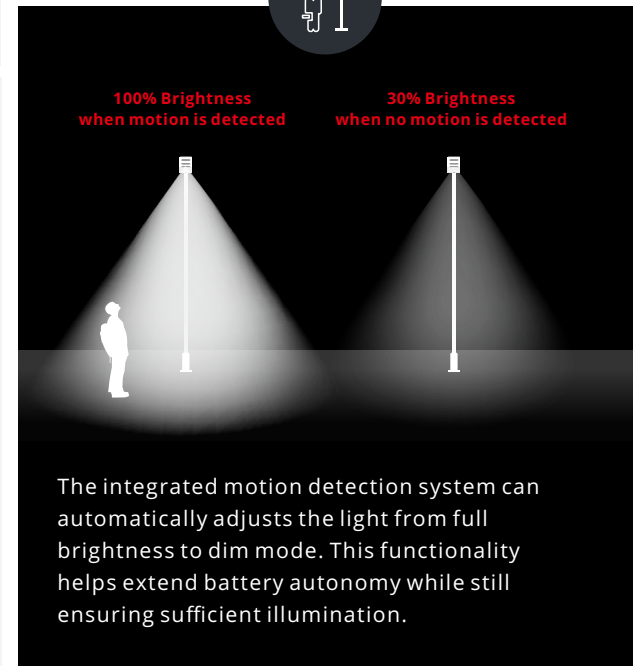
### PIR Working Mode

100% brightness for 30s when motion is detected, 30% brightness when no one is around.



100% Brightness  
when motion is detected

30% Brightness  
when no motion is detected

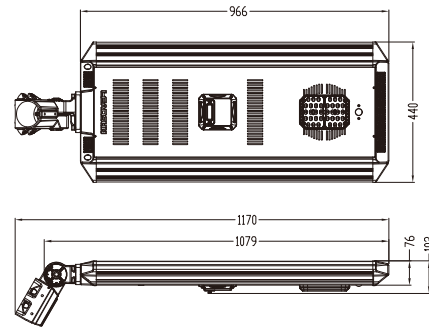


The integrated motion detection system can automatically adjust the light from full brightness to dim mode. This functionality helps extend battery autonomy while still ensuring sufficient illumination.

# AE3C SOLAR STREET LIGHT



## Physical Dimensions (mm):



**Monocrystalline  
Solar Panel**



**Efficient  
Controller**



**LiFePO4 Li-ion  
Battery**



**Motion  
Sensor**



**Superior  
Outdoor LED**



**Robust  
Structure**

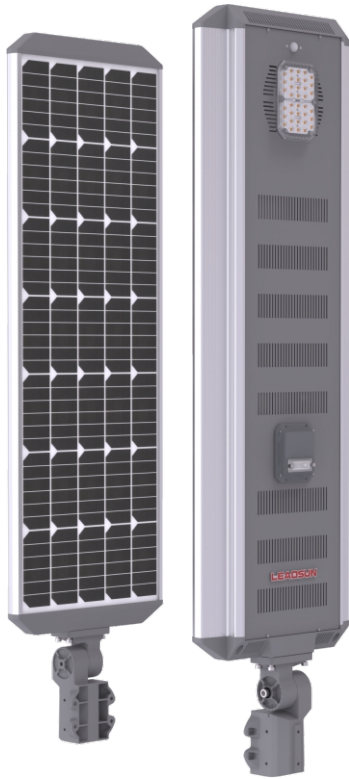
Certificates	CE/IP66/IK08
Warranty (years)	5

- \* The light source contained in this luminaire shall only be replaced by the manufacturer, its service agent or a qualified person.
- \* The torque for any bolt or screw used to secure the light fixture to the bracket should be set to 14 N·m.
- \* Use for outdoors only.

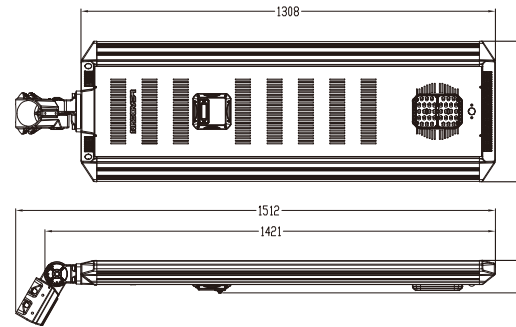
# PARAMETERS

Model No.		AE3C6020N	
Physical Parameters			
Power of PV Module (W)		60	
Lithium Battery Capacity (Wh)		308	
Qty. of LED Chips (pcs)		36	
PIR Sensor		√	
Net Weight of Product (kg)		17.5	
Dimension of Product (mm)		1079(L)×440(W)×102(T)	
Controller Type		Touch-tone controller	
Wireless Control Function (Optional)		/	
Light Parameters			
Light output (W)		20	
Optical Distribution		T2/T3	
Visual Angle		140°×70°	
Color Temperature (k)		3000/4000/5000	
Typical Luminous Flux (lm)		3800	
Min. Working Time (hours)	Bright Mode	13	
	DIM Mode (30%)	44	
Light Photosensitivity (lx)		60~90	
Packing Parameters			
Dimension of Carton (mm)×2 Sets		1170(L)×260(W)×510(T)	
Gross Weight of Product (kg)		38	
Environment Requirement			
Charge Temperature		0℃~51℃	
Discharge Temperature		-20℃~60℃	
Storage Temperature (<3 months)		-20℃~45℃	
Storage Temperature (3~12 months)		-20℃~25℃	
Mounting Recommendation			
EPA (Effective Projected Area) (ft <sup>2</sup> )		3.05(30°)	
APA (Actual Projected Area) (ft <sup>2</sup> )		2.54(30°)	
Wind Load Rate (mph)		130	
Top of Pole or Tenon OD (mm)		70~76	
Installation Height (m)		4~7	
Installation Distance (m)		15~25	

# AE3C SOLAR STREET LIGHT



## Physical Dimensions (mm):



# PARAMETERS

Model No.	AE3C9030Q	AE3C9040R
<b>Physical Parameters</b>		
Power of PV Module (W)	90	90
Lithium Battery Capacity (Wh)	512	615
Qty. of LED Chips (pcs)	36	36
PIR Sensor	√	√
Net Weight of Product (kg)	21.5	22
Dimension of Product (mm)	1421(L)×440(W)×102(T)	1421(L)×440(W)×102(T)
Controller Type	Touch-tone controller	Touch-tone controller
Wireless Control Function (Optional)	√	√
<b>Light Parameters</b>		
Light output (W)	30	40
Optical Distribution	T2/T3	T2/T3
Visual Angle	140°×70°	140°×70°
Color Temperature (k)	3000/4000/5000	3000/4000/5000
Typical Luminous Flux (lm)	5550	7200
Min. Working Time (hours)	Bright Mode	15
	DIM Mode (30%)	48
Light Photosensitivity (lx)	60~90	60~90
<b>Packing Parameters</b>		
Dimension of Carton (mm)×2 Sets	1510(L)×260(W)×510(T)	1510(L)×260(W)×510(T)
Gross Weight of Product (kg)	46	49
<b>Environment Requirement</b>		
Charge Temperature	0°C~51°C	0°C~51°C
Discharge Temperature	-20°C~60°C	-20°C~60°C
Storage Temperature (<3 months)	-20°C~45°C	-20°C~45°C
Storage Temperature (3~12 months)	-20°C~25°C	-20°C~25°C
<b>Mounting Recommendation</b>		
EPA (Effective Projected Area) (ft <sup>2</sup> )	3.99(30°)	3.99(30°)
APA (Actual Projected Area) (ft <sup>2</sup> )	3.33(30°)	3.33(30°)
Wind Load Rate (mph)	130	130
Top of Pole or Tenon OD (mm)	70~76	70~76
Installation Height (m)	6~8	6~8
Installation Distance (m)	25~35	25~35



**Monocrystalline Solar Panel**



**Efficient Controller**



**LiFePO4 Li-ion Battery**



**Motion Sensor**



**Superior Outdoor LED**



**Robust Structure**

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