

40W Integrated Solar Street Light

This integrated solar street light combines a solar panel, LED lamp, and LiFePO4 battery. It uses a human intelligence induction system to automatically manage the lighting mode.



ADDITIONAL IMAGES



Overview



Fully integrated unit featuring solar panel, LED light source, and battery in a durable aluminum housing.

Integrated Solar Lighting Solution

This 40W all-in-one solar street light integrates a high-efficiency solar panel, LED lamp, and LiFePO4 battery into a single, compact unit. Designed for professional B2B applications, it features an intelligent induction system that automatically controls lighting modes based on human presence. This sustainable solution is ideal for streets, parking lots, and pathways, offering easy 3-minute installation and autonomous operation.

Key Performance Metrics



Sleek, low-profile design optimized for wind resistance and easy mounting.

Key Performance Metrics

40 W

Power Output

160 LM/W

Max Luminous Efficacy

20 J

Impact Resistance

5 Days

Battery Backup

Light Source & Optics



Bright and focused beam providing safety and visibility in residential areas at night.

LED Chip Type	Cree Chip
Luminous Efficacy Range	140 LM/W - 160 LM/W
Brightness Performance	10%-20% brighter than conventional market lamps

Solar & Battery System

Solar Panel Details

- A-grade Sun-power cells
- Cell efficiency e 18.9%
- Integrated top-mount design

Battery Technology	High-quality Lithium (LiFePO4)
Controller Technology	PWM Solar Controller with IP68 waterproofing

Construction & Durability



Reinforced mounting bracket with powder-coated finish for secure pole or wall attachment.



Comparison showing the use of high-strength 4mm stainless steel and 9-screw fixation for maximum stability.



Use of stainless steel hardware prevents corrosion and ensures long-term structural integrity in outdoor environments.

Protection Ratings

Feature	Rating
Waterproof Degree (Light)	IP66
Waterproof Degree (Controller)	IP68
Impact Resistance	IK10 (20 Joules)
Hardware Material	Stainless Steel (Rust-proof)

Pole Construction

- Material: High-quality Q235 Steel
- Finish: Hot-dip galvanized and plastic coated
- Design: Four strengthening ribs on base plate
- Lifespan: More than 20 years

Frame Material

Aluminum Alloy

Installation & Service



Multiple units installed providing uniform illumination for a roadway.

Installation Speed

Approximately 3 minutes per set

Warranty

3-5 years

Compliance

Quality Certifications

CE, RoHS, IEC, TUV, FCC, SONCAP, SASO, CCC, ISO 9001:2000, IP66