

SPLIT SOLAR STREET LIGHT

Engineered for reliable road lighting.

Independent solar module, high-efficiency LED luminaire and modular LiFePO4 energy storage for flexible project configuration.



60-200W

MODEL RANGE

IP66 / IK10

LUMINAIRE PROTECTION

3-5 YEARS

WARRANTY OPTIONS

A modular system built for project flexibility.

The split architecture allows the solar module, luminaire and battery configuration to be matched to local irradiation, road geometry and operating profile.



SYSTEM COMPONENTS

01 LED luminaire

Die-cast aluminum housing with modular optical lens and adjustable mounting interface.

02 Mono PV module

Independent panel orientation supports better solar collection across project locations.

03 LiFePO4 storage

12.8V / 25.6V deep-cycle battery platform with BMS protection and replaceable architecture.

04 Smart controller

Dusk-to-dawn operation, time-based dimming, remote control and optional PIR sensing.

01

Reliable optics

Type II-M / Type III-M road optics, 2700K-6500K CCT options and controlled glare distribution.

02

Flexible charging

Independent mono-crystalline PV orientation with 7-9 peak-sun-hour full-recovery reference.

03

Serviceable design

Separate system components simplify replacement, project upgrades and lifecycle maintenance.

CORE PERFORMANCE

170 lm/W

SYSTEM EFFICACY

12 h/night

OPERATING PROFILE

3 nights*

ADAPTIVE BACKUP

-25 to 65 C

WORKING RANGE

* Backup duration is based on the programmed adaptive dimming profile, not continuous full output.

Split series configuration matrix

Six scalable configurations for municipal roads, wider roadways, industrial access, campuses and public infrastructure.

PARAMETER	60W	80W	100W	120W	150W	200W
Actual LED input	60W	80W	100W	120W	150W	200W
System luminous flux	10,200 lm	13,600 lm	17,000 lm	20,400 lm	25,500 lm	34,000 lm
System efficacy	170 lm/W	170 lm/W	170 lm/W	170 lm/W	170 lm/W	170 lm/W
LiFePO4 battery	12.8V 54Ah	12.8V 72Ah	25.6V 50Ah	25.6V 60Ah	25.6V 75Ah	25.6V 100Ah
Mono solar module	18V 100W	18V 150W	36V 200W	36V 240W	36V 300W	36V 360W
Mounting height	5-7 m	6-8 m	7-9 m	8-10 m	9-12 m	10-12 m
Charge recovery	7-9 PSH	7-9 PSH	7-9 PSH	7-9 PSH	7-9 PSH	7-9 PSH
Lighting profile	12 h adaptive	12 h adaptive	12 h adaptive	12 h adaptive	12 h adaptive	12 h adaptive
Backup duration	3 nights adaptive	3 nights adaptive	3 nights adaptive	3 nights adaptive	3 nights adaptive	3 nights adaptive

COMMON SPECIFICATIONS

HOUSING

Die-cast aluminum + PMMA optical lens

CCT / CRI

2700K-6500K; CRI >= 70, CRI >= 80 optional

CONTROL

Light sensor + time control + remote; PIR optional

WARRANTY

3 years standard; 5-year option by project configuration

PROTECTION

Luminaire IP66 / IK10; battery enclosure IP65

OPTICS

Type II-M or Type III-M road distribution

TEMPERATURE

-25 to 65 deg C

ARCHITECTURE

Independent luminaire, PV module and battery enclosure

Specify the system around the site.

Final solar module, battery capacity and dimming profile should be selected against local solar irradiation, required illuminance, pole spacing and consecutive rainy-day target.

01 Application inputs

- Road classification and target lux
- Pole height, arm length and spacing
- Location and peak-sun-hours
- Required backup nights and seasonal risk

02 Configuration options

- 2700K-6500K color temperature
- Type II-M / Type III-M optical lens
- Time dimming, PIR or remote control
- Pole, arm, cable and foundation kit

03 Quality and delivery

- Illumination and aging inspection
- Waterproof and salt-spray testing
- OEM branding and packaging
- Export document coordination

START A PROJECT

info@reluxlight.com

+86 186 1687 2899

Industry Area of Guoji Town, Yangzhou City, Jiangsu Province, P.R. China

Backup duration depends on dimming profile, solar irradiation and battery state of charge. Specifications may be optimized by project conditions.