

ALL-IN-TWO SOLAR STREET LIGHT

Semi-integrated solar lighting. Cleaner project installation.

Integrated LED, A-grade LiFePO4 battery and MPPT controller in the light head, paired with a separately oriented mono-crystalline PV module.



30-150W

PUBLIC RANGE

150W

PROJECT OPTION

IP66 / IK08+

OUTDOOR PROTECTION

Semi-integrated, but still project-ready.

All-in-two architecture keeps battery and control inside the luminaire while letting the PV module face the best solar direction for the site.



SYSTEM COMPONENTS

01 Integrated light head

LED engine, A-grade LiFePO4 battery and MPPT controller are housed in one serviceable luminaire body.

02 Independent PV module

Separate mono-crystalline solar panel supports better orientation than compact all-in-one designs.

03 Waterproof connection

A single outdoor cable connects the PV module to the luminaire for a tidy installation.

04 Adaptive control

Default 3h 100% + 2h 80% + 7h 25% dimming can be customized by project.

01

Better solar angle

Panel tilt and orientation can be adjusted to improve charging across markets and seasons.

02

Cleaner installation

Fewer external boxes than full split systems, with less site wiring and simpler service.

03

Project autonomy

Scaled PV and LiFePO4 storage support 3-5 adaptive nights after full charge.

CORE PERFORMANCE

170 lm/W

SYSTEM EFFICACY

0-60 deg

PV TILT RANGE

3-5 nights*

ADAPTIVE BACKUP

-25 to 65 C

WORKING RANGE

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

All-in-two series configuration matrix

Standard 30W-120W models cover common road and area lighting projects. The 150W configuration is reserved for site-specific engineering.

PARAMETER	30W	40W	60W	80W	100W	120W
Actual LED input	30W	40W	60W	80W	100W	120W
System luminous flux	5,100 lm	6,800 lm	10,200 lm	13,600 lm	17,000 lm	20,400 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 30Ah	12.8V 42Ah	12.8V 54Ah	12.8V 72Ah	12.8V 90Ah	12.8V 100Ah
Mono solar module	18V 60W	18V 80W	18V 100W	18V 130W	18V 160W	18V 200W
Light head envelope	575x280 x100	575x280 x100	665x280 x100	750x280 x100	845x280 x100	980x340 x130
Mounting height	4-6 m	4-6 m	5-7 m	6-8 m	7-10 m	8-12 m
PV tilt range	0-60 deg	0-60 deg	0-60 deg	0-60 deg	0-60 deg	0-60 deg
Charge recovery	6-8 PSH	6-8 PSH	6-8 PSH	6-8 PSH	6-8 PSH	6-8 PSH
Backup duration	3-5 nights adaptive	3-5 nights adaptive	3-5 nights adaptive	3-5 nights adaptive	3-5 nights adaptive	3-5 nights adaptive

150W project option: 25,500 lm, 25.6V 60Ah LiFePO4 battery, 36V 300W mono PV. Confirm wind load and bracket before selection.

COMMON SPECIFICATIONS

HOUSING

Die-cast aluminum luminaire body + tempered glass / PMMA optics

CCT / CRI

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

CONTROL

MPPT + 3h 100% + 2h 80% + 7h 25% default dimming

WARRANTY

3 years standard; 5-year project option

PROTECTION

Luminaire IP66; IK08 standard, IK10 project option

OPTICS

Type II-M or Type III-M road distribution

CONNECTION

Outdoor waterproof PV cable, project length configurable

APPLICATION

Roads, villages, parks, campuses, parking and perimeter lighting

Between compact and municipal systems.

Use all-in-two when the project needs better solar orientation than all-in-one products, but does not require a full external battery cabinet.



Best fit

- Village and township roads
- Parks, campuses and public areas
- Commercial parking and perimeter lighting

Specify before order

- Peak-sun-hours and rainy-night target
- Pole height, arm length and spacing
- Wind exposure and panel bracket method

Available project options

- 150W project configuration
- IES/LDT files and optical selection
- IoT or LoRa remote monitoring option

REQUEST A CONFIGURATION

Share pole height, road width, location and backup target.

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