

SELF-POWERED SOLAR PATHWAY BOLLARD

SolBol™

A fully self-powered solar bollard
that thinks for itself.

SolBol™ represents the next generation of pathway lighting, a fully self-powered, municipality-grade solar bollard engineered to deliver reliable illumination in real-world conditions where conventional bollards cannot.

Its unique triple-surface solar intake system, a 30 Wp wraparound vertical module, 4 Wp top module, and 3 Wp recessed "mouth" module, ensures maximum charging throughout the day from every angle, even in partially shaded environments.

Designed with a sculptural monolithic form, SolBol™ blends into premium landscapes while delivering powerful, energy-efficient asymmetric pathway lighting (IES Type II) at 3000 K.



High Power Battery

3000-cycle LiFePO₄ battery



High Power Solar

Triple-surface wraparound, IP67 + IK10 protection



Adaptive Lighting

All-night operation with sensor

180 lm

LIGHT
OUTPUT

37 Wp

SOLAR
INPUT

3000

CHARGE
CYCLES

IK10

IMPACT
RATED



Why Self-Powered Bollard

Conventional bollards need trenching, conduit, and a grid connection, costly and disruptive in finished landscapes. SolBol™ is fully self-powered. Its triple-surface solar intake captures light from a wraparound vertical module, a top module, and a recessed "mouth" module, so it charges from every angle throughout the day, even in partial shade.

A 3000-cycle LiFePO₄ battery and an adaptive night profile keep it running all night, while the sculptural monolithic form blends into premium landscapes. The result is powerful, energy-efficient asymmetric pathway lighting with no trenching, no conduit, and no utility connection.

STEP 1 · CAPTURE

Triple-Surface Solar

Wraparound, top, and recessed modules charge from every angle, even in partial shade.

STEP 2 · STORE

3000-Cycle Battery

153 Wh LiFePO₄ storage rated for long, maintenance-free service life.

STEP 3 · ILLUMINATE

Lighting That Thinks

Adaptive night profile holds 100% for 5 hours, then 30% standby, rising to 100% on motion.

Core Advantages

- **Triple-Surface Solar Capture:** Wraparound, top, and recessed modules charge from every angle, even in partial shade.
- **Lighting That Thinks for Itself:** Holds 100% for five hours, drops to 30% standby, returns to full on motion.
- **Engineered for Public Spaces:** Stainless-steel body, aluminium head, IP67 and IK10 rated against weather and vandalism.
- **Fully Self-Powered:** 3000-cycle LiFePO₄ battery and onboard solar, no trenching, conduit, or grid connection.

Specifications

MECHANICAL

Battery Type	LiFePO ₄
Battery Capacity	153 Wh
Cycle Life	3000 cycles
Total Solar Input	37 Wp multi-surface PV
PV Surfaces	Top + recessed + wraparound vertical
Construction	Stainless-steel body + aluminium head
Finish	Custom colors
Total Weight	46.7 lbs

MOUNTING

Height	3.75 ft minimum (custom options)
Diameter	7.4 in
PV Rating	IP66
Protection Rating	IP67 / IK10

LIGHTING

Light Output	200+ lm (135 lm/W × 1.5 W)
Power Range	1.5–5 W (programmable)
Color Temperature	3000 / 4000 / 5000 K
Optics	IES Type II
Dimming	4-stage adaptive
Motion Activation	PIR or microwave
Night Profile	5 hrs @ 100%, then 30% standby, 100% on motion

Applications: Parks, bike lanes, pedestrian routes, HOA streets, campuses, and smaller municipal projects.