Hybrilux

SLB05-SOLAR PATHFINDER

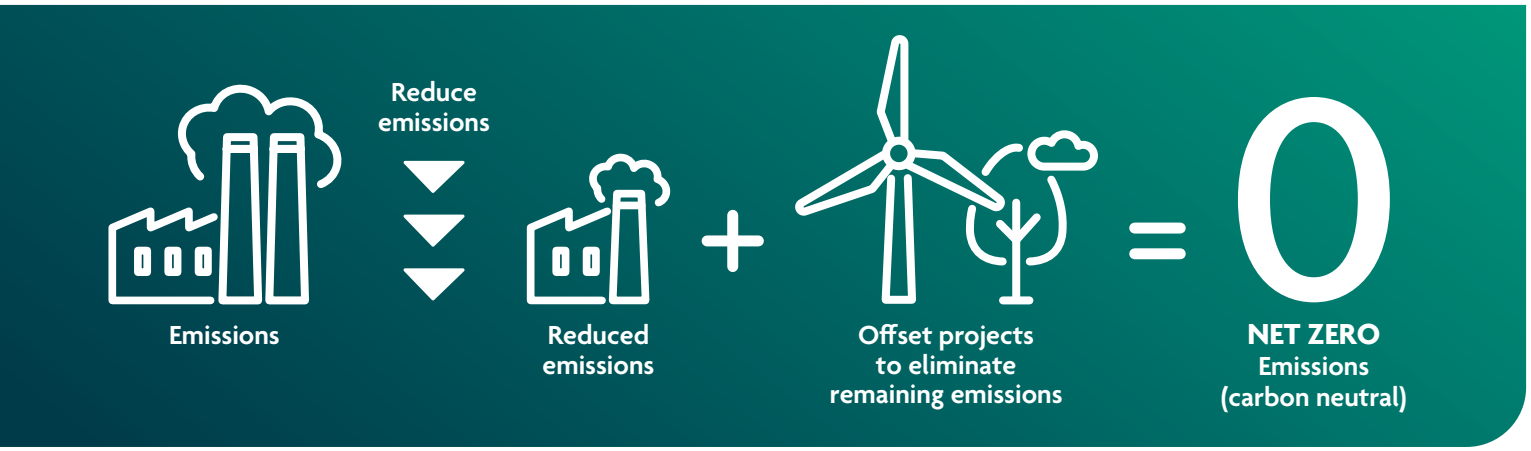
Solar LED Bollard: Beautiful, tough and Off-Grid.

Integrated PIR sensor; PV panel protected by a transparent, UV-stabilized polycarbonate (PC) cover, IK07 impact-rated.

- Up to 420 lm/W
- 3W
- IP66
- IK07
- LiFePo4 Battery
- 32°C to + 122°C
- Mono-crystalline Silicon Panel

Carbon Neutrality — Lighting the Path Toward a Sustainable Future

Companies, processes, and products achieve carbon neutrality when they measure their carbon emissions and compensate for what cannot be eliminated through verified carbon offset projects. In other words, unavoidable local emissions are balanced by initiatives that reduce or remove carbon elsewhere.
At Hybrilux, we apply this same principle through the design of our Solar Pathfinder Bollard — an off-grid, self-powered lighting solution that eliminates on-site emissions and supports a broader transition to carbon-neutral infrastructure. By combining innovative solar technology with sustainable engineering, Hybrilux helps communities and organizations take measurable steps toward a carbon-neutral future.



Why Carbon Neutrality Matters

The Intergovernmental Panel on Climate Change (IPCC) has determined that to meet the Paris Agreement's 1.5°C target, global carbon and greenhouse gas emissions must be reduced to net zero by 2050 — a milestone driving innovation across sustainable industries, including solar lighting.

What Hybrilux does

Empowering a Carbon-Neutral Future, Sustainably and Economically.

Hybrilux is a proud contributor to the global carbon-neutral movement, driving an economically sensible transition through innovative, solar-powered lighting solutions that reduce emissions and operating costs.

Hybrilux designs and builds advanced LED solar lighting systems such as the Solar Pathfinder.

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Where Elegance Meets Performance

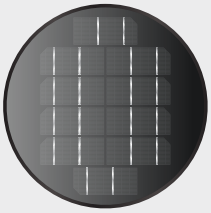
Engineered for independence, the system operates entirely off-grid with zero carbon emissions, reducing both installation and long-term operational costs.

Sturdy Materials

Integrated solar panel, impact-resistant polycarbonate lens, and a corrosion-resistant plastic and aluminum body.

Mono-crystalline Solar Panel

22% high conversion rate



Built-in PIR Sensor

To achieve intelligent mode and extend working time

Optic Lens

Specialized and customized optical lens: symmetric & asymmetric

Slim Bollard

Available in two heights:
19-in. or 36-in.

Mounting kit

With anchor bolts for quick installation

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SLB05-SOLAR PATHFINDER

All-Weather & Impact-Resistant. Built to Last.

The SLB05 Pathfinder integrates a high-performance monocrystalline solar panel beneath a flat polycarbonate top, delivering superior weather protection and long-lasting clarity. With an impact resistance of 2 joules — equal to a 1.1-pound object dropped from 15 ¾ inches — this luminaire is engineered for resilience, making it an ideal choice for parks, plazas, pathways, and other public spaces.

3 CCT Selectable — Flexible Color Temperature Options for Any Environment

With a simple long press of the switch, the fixture offers three selectable color temperatures, allowing seamless adaptation to diverse applications.

Press and hold for 3s to turn on the light to 3000K

Press and hold for 3s to switch to 5000K

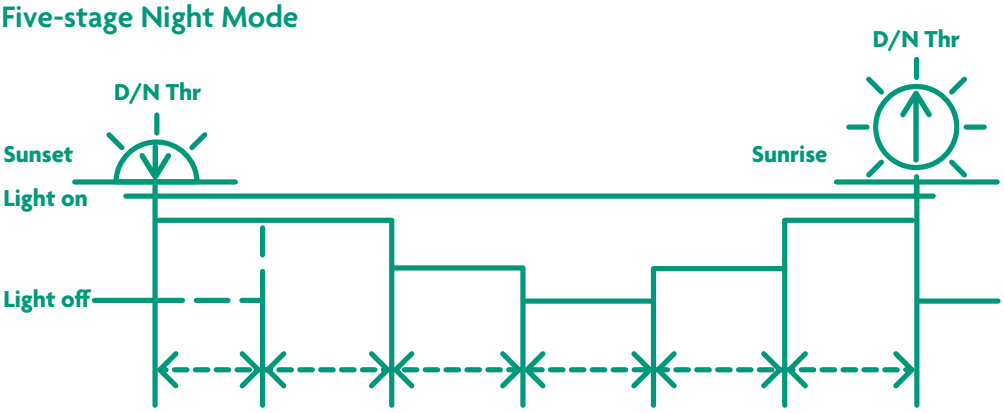
Press and hold for 3s to switch to 4000K

Press and hold for 3s to turn off the light

Intelligent Control System — Operating Modes

It is recommended to use the factory default settings, which automatically adjust power output based on PIR sensor activity and time intervals to ensure long-term, stable lighting performance. For customized applications, intelligent control settings can be pre-programmed during manufacturing to meet specific project requirements.

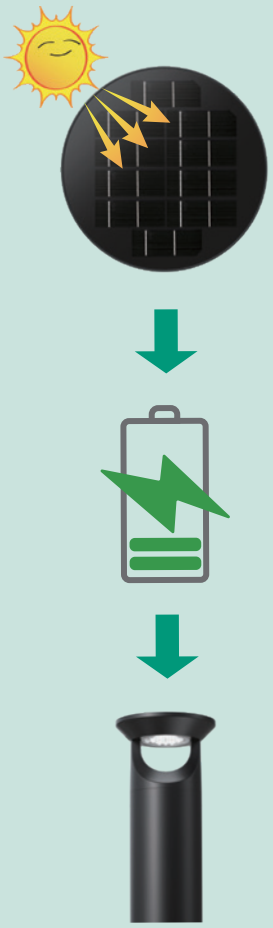
Five-stage Night Mode



Lighting scheme	Time 1	Time 2	Time 3	Time 4	Time 5	Energy comsumption	Battery Autonomy
1 (Factory default)	6Hx 30%	0Hx 100%	0Hx 100%	TOTx 0%	1Hx 30%	7.4 Wh	4-5 Days
2	6Hx 30%	6Hx 30%	0Hx 100%	0Hx 0%	0Hx 100%	12.6 Wh	3-4 Days
3	6Hx 50%	6Hx 30%	0Hx 100%	0Hx 0%	0Hx 100%	16.8 Wh	2-3 Days
4	4Hx 70%	4Hx 30%	4Hx 30%	0Hx 0%	0Hx 100%	18.2 Wh	1-2 Days
5	4Hx 100%	2Hx 50%	0Hx 100%	0Hx 0%	0Hx 100%	17.5 Wh	2-3 Days
6	2Hx 50%	4Hx 30%	0Hx 100%	TOTx 0%	1Hx 30%	12.3 Wh	3-4 Days
7	4Hx 30%	2Hx 30%	0Hx 100%	TOTx 0%	1Hx 80%	16.1 Wh	2-3 Days

*The table of rainy days is for reference only, the actual working days is subject to the local sunshine conditions.

How it works



Battery Storage, each bollard will be energized by the (LiFeP04) battery system stored at the solar panel

Accessories

Remote Control
Remote control for solar LED bollard light

Round House Side Shield
To reduce glare light

Backfilled Anchor
Q235 +SPCC, hot dip galvanizing
Φ130x508mm

SLB05-SOLAR PATHFINDER

Electrical Information

Model No.	SLB05-3
Power Consumption (±20%)	3W
Battery	LiFePO4 battery
Battery Capacity	38.4Wh
Solar Panels	Mono-Crystalline solar panel
Solar Panels Wattage	5W
Charging Time	>8hours
Operating Time	Normal mode>11 hours,Intelligent mode 2-3 days

Working mode

Lighting scheme	Time 1	Time 2	Time 3	Time 4	Time 5	Energy consumption	Working hours in rainy days
1 (Factory default)	6H×30%	0H×100%	0H×100%	TOT×0%	1H×30%	7.4Wh	4-5 Days
2	6H×30%	6H×30%	0H×100%	0H×0%	0H×100%	12.6Wh	3-4 Days
3	6H×50%	6H×30%	0H×100%	0H×0%	0H×100%	16.8Wh	2-3 Days
4	4H×70%	4H×30%	4H×30%	0H×0%	0H×100%	18.2Wh	1-2 Days
5	4H×100%	2H×50%	0H×100%	0H×0%	0H×100%	17.5Wh	2-3 Days
6	2H×50%	4H×30%	0H×100%	TOT×20%	1H×30%	12.3Wh	3-4 Days
7	4H×80%	2H×30%	0H×100%	TOT×0%	1H×80%	16.1Wh	2-3 Days

Control	NA
Note	NA

*The table of rainy days is for reference only, the actual working days is subject to the local sunshine conditions.

Description

SLB05 Solar Pathfinder is an innovative LED Solar bollard light which got enhanced in both aesthetic and creative. IP66, mono-crystalline solar panel, UV resistant PC material, with architectural design is quite popular in pathway areas, gardens, sidewalks, building entrance, etc.

Optic Information

LED Type	LED 2835
Luminous Flux (±10%)	340lm(R03201)/ 320lm(R03202)/ 420lm(R03203)
Efficacy (4000K Ra80)	105lm/W(R03201)/ 100lm/W(R03202)/ 130lm/W(R03203)
Correlated Color Temperature	4000K (3000K, 5000K optional)
Color Rendering Index	Ra80 (Ra70 optional)
Beam Angle	R03201(Type V),R03202(Type IV),R03203(Type V)
UGR level	NA

Key Features

- IP66 and IK07
- Unique and gorgeous appearance
- Professional Type IV / Type III Lighting distribution
- High efficiency Mono-crystalline solar panel
- Long lifespan LiFePO4 battery, 8-hour charging, working 2-3 days.

Dimensions and Mount

Product Dimension	0.5m: Φ230×520mm (Φ9.06"×20.47") 0.9m: Φ230×920mm (Φ9.06"×36.22")
Luminaire Net Weight (±0.3kg/±0.66Lbs)	0.5m: 5.1kg (11.24Lbs) 0.9m:6.6kg(14.55Lbs)
Export Carton Size (All-in-one-package)	
Gross Weight (All-in-one-package) (±0.3kg/±0.66Lbs)	Full-assembled 0.5m: 6.43kg (14.18Lbs) Full-assembled 0.9m: 8.3kg (18.3Lbs)
Export Carton Size (Separated package)	Heading: 280×280×275mm (11.02"×11.02"×10.83") Bollard 0.5m: 505×210×215mm (19.88"×8.27"×8.46") Bollard 0.9m: 915×210×215mm (36.02"×8.27"×8.46")
Gross Weight (Separated package) (±0.3kg/±0.66Lb)	Heading: 3.46kg (7.63Lbs) Bollard 0.5m: 2.94kg (6.48Lbs) Bollard 0.9m: 4.9kg (10.8Lbs)
Mounting Option	Mounting kit with anchor bolts
Material	Aluminum alloy Polycarbonate optical lens LiFePO4 battery Mono-Crystalline solar panel
Finish	Powder coating
Fixture Color	Black (RAL 9017)
EPA	NA
IK Rating	IK07
IP Rating	IP66
Category of Corrosion	C3

SLB05-SOLAR PATHFINDER

Applications

- Gardens
- Pathways
- Sidewalk
- Building entrance

Lifespan and Warranty

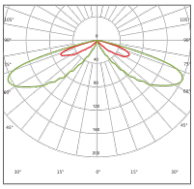
Operating Temperature		0°C to + 50°C(32°F to 122°F)
Lifetime of LED @Ta=25°C		80,000hrs-L90
		169,000hrs-L80
		271,000hrs-L70
Warranty	**Battery**	3 Years
	Other accessories	5 Years

New Features

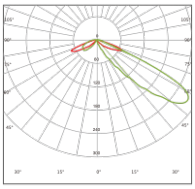
**** Please consult us for details.***

Photometry

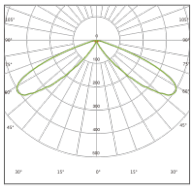
3W bean angle



R03201



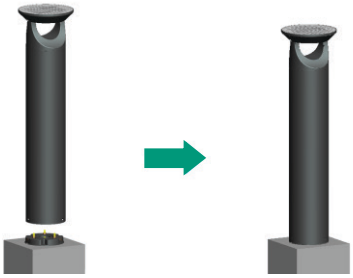
R03202



R03203

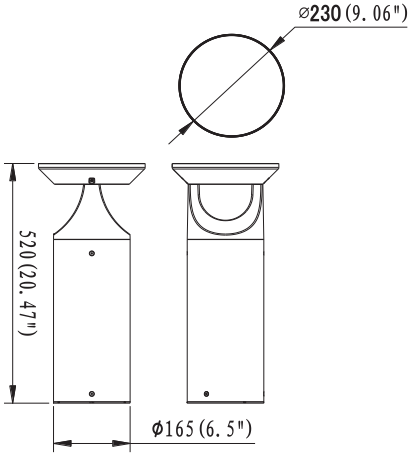
Mounting Options

Mounting kit with anchor bolts

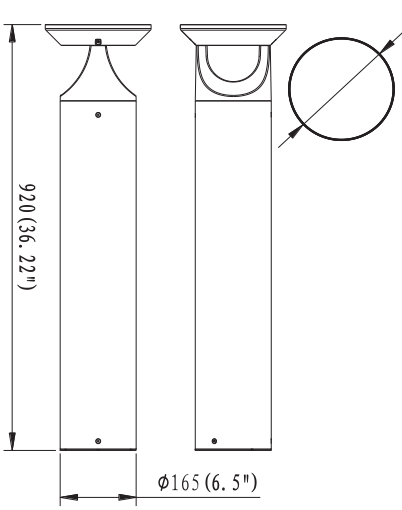


Dimensions

0.5m

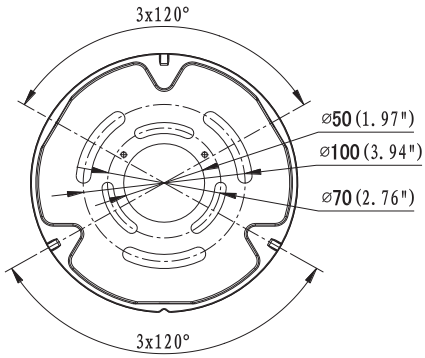


0.9m



Base plate templates

Unit:mm/inch



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