OUTDOOR SOLAR LIGHTING SOLUTIONS

BOLLARD

Greenshine

OUTDOOR SOLAR LIGHTING SOLUTIONS
**SOLAR BOLLARD LIGHT**

**BOLLARD (GS-SL-3W3K-12660BK)**

Solar Bollard Light (GS-SL-3W3K-12660BK) is ideal for pathway lighting, private road lighting, area lighting, gate lighting, yard lighting, campus lighting etc.

<table>
<thead>
<tr>
<th>Solar Panel</th>
<th>6.0W, mono crystalline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Source</td>
<td>3.0W, white LED@150lumen per watt, 3000K</td>
</tr>
<tr>
<td>Battery</td>
<td>12V 6Ah, lithium battery</td>
</tr>
<tr>
<td>Work Time</td>
<td>Up to 10 hours</td>
</tr>
<tr>
<td>Material</td>
<td>Aluminium</td>
</tr>
<tr>
<td>Height</td>
<td>3ft</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>32-122 Degrees Fahrenheit</td>
</tr>
<tr>
<td>Weight</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>Finish</td>
<td>Black powder coating</td>
</tr>
</tbody>
</table>

**STANDARD FEATURES**

- Solar Panel – Designed for 25+ years of operation
- LED lifespan 50,000+ hours
- Solar charge intelligent controller
- Over charging/discharging protection
- Corrosion resistant
- Cast aluminum pole

**APPLICATIONS**

- Pathway Lighting
- Area Lighting
- Yard Lighting
- Private Road Lighting
- Fence Lighting
- Farm & Ranch Lighting
- Campus Lighting
INSTALLATION

Please fix the lamp body, make an opening at the concrete road or concrete foundations according to the lamp’s fixed hole before the installation, then fix the lamp on the foundation (refer to below installation diagram).
BOLLARD
Solar Powered LED Lighting System

Concrete foundation

Stainless steel anchor-bolts M8*120mm

Installation Diagram

Discharging Characteristics curve graph (25°C/77°F)

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Website: streetlights-solar.com
BOLLARD
Solar Powered LED Lighting System

Work Mode Setting

Always on

1 hour

2 hours

3 hours

4 hours

5 hours (default)

6 hours

7 hours

8 hours

9 hours

10 hours

11 hours

12 hours

13 hours

D2D
# BOLLARD
Solar Powered LED Lighting System

## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>POSSIBLE ISSUES</th>
<th>CAUSES</th>
<th>SOLUTIONS</th>
</tr>
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<tbody>
<tr>
<td><strong>Testing</strong></td>
<td>The switch is off</td>
<td>Please turn on the switch.</td>
</tr>
<tr>
<td>The light doesn't work when the solar panel is covered.</td>
<td>Poor connection</td>
<td>Please make sure the wires are correctly connected to the controller.</td>
</tr>
<tr>
<td></td>
<td>The controller is damaged</td>
<td>Repair the controller or replace it with the same model controller.</td>
</tr>
<tr>
<td></td>
<td>Ambient light is much weaker</td>
<td>The light source will start automatically when the ambient light is strong enough.</td>
</tr>
<tr>
<td><strong>The light fails to turn off</strong></td>
<td>Poor connection</td>
<td>Check the connection between solar panel and controller to make sure wire interface is under normal condition.</td>
</tr>
<tr>
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<td>The controller is damaged.</td>
<td>Repair the controller or replace it with the same model controller.</td>
</tr>
<tr>
<td><strong>Lights shut off too soon</strong></td>
<td>The solar panel is covered by other</td>
<td>Clean the solar panel.</td>
</tr>
<tr>
<td></td>
<td>Poor connection</td>
<td>Check the connection between the battery and the controller to make sure wire interference is in good condition.</td>
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<tr>
<td></td>
<td>The voltage of the battery is low</td>
<td>If the low voltage is caused by too many rainy days, it will recover automatically when weather improves.</td>
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BOLLARD 3W - 3’ POLE / 3D Rendering
BOLLARD 3W - 3' POLE / False Color Rendering
BOLLARD 3W - 3' POLE / Calculation Grid 1 / Isolines (E, Perpendicular)

Position of surface in external scene:
Marked point: (165.881 ft, 164.942 ft, 0.000 ft)

Grid: 7 x 7 Points

<table>
<thead>
<tr>
<th></th>
<th>$E_{av}$ [fc]</th>
<th>$E_{min}$ [fc]</th>
<th>$E_{max}$ [fc]</th>
<th>$u_0$</th>
<th>$E_{min} / E_{max}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values in Footcandles, Scale 1 : 34</td>
<td>0.35</td>
<td>0.07</td>
<td>1.49</td>
<td>0.20</td>
<td>0.05</td>
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BOLLARD 3W - 3' POLE / Calculation Grid 1 / Value Chart (E, Perpendicular)

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Greenshine New Energy shall not be liable for any revisions not reflected in this document
1 Year Warranty (Bollard System)

Greenshine New Energy provides a 1 year warranty on its Bollard products. Greenshine will, at its option, repair or replace any Greenshine Bollard system that is defective.

This warranty does not cover damage or malfunction, as determined by Greenshine service technicians or engineers, due to abuse, misuse, incorrect installation, or accident such as, but not limited to:

- Failure to follow storage, installation, operation, and maintenance instructions provided by Greenshine
- Vandalism, theft, lightning, flood, “Acts of God”, and other problems beyond the control of Greenshine
- Unauthorized or improper repairs or adjustments including use of any replacement parts not provided by Greenshine.
- Deployed in an abnormal or inconsistent manner from Greenshine New Energy written and verbal instructions
- Greenshine New Energy liability and Purchaser's remedy under Greenshine New Energy warranty is limited to the replacement of any defective item, but under no circumstance shall exceed the purchase price of the goods. Other warranties may be available for an additional cost with additional coverage and/or labor allowance included.
- Any repair cost not approved by Greenshine New Energy will not be reimbursed.
- Purchaser is responsible for any and all costs involved to service and/or replace defective goods including labor, shipping, and rental of equipment.

Greenshine New Energy Co., Ltd.
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