About This Information Sheet

The goal of this information sheet is to inform purchasing decisions by providing the key technical specifications of products in a comparable format and provide country-specific distributor contact information.

Product performance data was obtained from the Standard Specification Sheets published by Lighting Global (www.lightingglobal.org/products).

The products included in the tables below have met the Lighting Global Quality Standards, certifying that they conform to minimum standards regarding:

- product warranty
- truth in advertising
- durability
- system quality

Performance Characteristics and Features

**Total lighting service** is the maximum brightness (lumens) multiplied by how long the product can run (hours) at the highest setting after solar charging for one day.

**Run time per day of solar charging** is how long the light can run on the highest setting after the battery has been charged for one day in the sun. Products will run longer if used on lower brightness settings.

**Maximum brightness** is measured in lumens. For comparison:
  - a candle has a brightness between 5-15 lumens
  - a typical kerosene lamp has a brightness of 25 lumens
  - a 50-watt incandescent light bulb has a brightness of 800-900 lumens

**Number of brightness settings** is how many brightness levels there are available on the product (High, Medium, Low, Bed Light, etc.)

**Pricing information** represents an estimate of what an individual can expect to pay for the products listed. Variation among local retailers and shipping or distribution costs may increase or decrease the prices.

The performance characteristics listed in this information sheet are intended to give an overview of the products within each category. More detailed information on the product performance and features, and distributor contact information for additional countries, can be found at d-lab.mit.edu/solar-lighting.

Distributor Information

The numbers listed next to each manufacturer refer to the distributors that sell that manufacturer’s products. The contact information for each of the distributors is listed below the product comparison tables.

To submit a new distributor into the database for inclusion on this information sheet, visit d-lab.mit.edu/solar-lighting-distributor.
## Portable Solar Lanterns ($5-$25)

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufacturer</th>
<th>Distributor</th>
<th>Total lighting service (\text{lumen}\times\text{hours}) (\text{solar\ day})</th>
<th>Maximum brightness in \text{lumens}</th>
<th>Hours of run time per day of solar charging</th>
<th>Product warranty in years</th>
<th>Brightness settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2</td>
<td>d.light Design(^2,5)</td>
<td></td>
<td>130</td>
<td>33</td>
<td>3.9</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>S20</td>
<td>d.light Design(^2,5)</td>
<td></td>
<td>130</td>
<td>29</td>
<td>4.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>A1</td>
<td>d.light Design(^2,5)</td>
<td></td>
<td>100</td>
<td>20</td>
<td>5.0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

More detailed information on the product performance and features can be found at [d-lab.mit.edu/solar-lighting-database](d-lab.mit.edu/solar-lighting-database)

## Portable Solar Lanterns with Mobile Charging ($25-$50)

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufacturer (^1,3)</th>
<th>Distributor</th>
<th>Total lighting service (\text{lumen}\times\text{hours}) (\text{solar\ day})</th>
<th>Maximum brightness in \text{lumens}</th>
<th>Hours of run time per day of solar charging</th>
<th>Product warranty in years</th>
<th>Brightness settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Hub</td>
<td>Freeplay Energy</td>
<td></td>
<td>1600</td>
<td>211</td>
<td>7.5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Mobile One</td>
<td>Fosera</td>
<td></td>
<td>900</td>
<td>210</td>
<td>4.3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Radiance Solar Lantern</td>
<td>Freeplay Energy</td>
<td></td>
<td>680</td>
<td>233</td>
<td>2.9</td>
<td>1</td>
<td>3</td>
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<tr>
<td>S300B</td>
<td>d.light Design(^2,5)</td>
<td></td>
<td>410</td>
<td>100</td>
<td>4.1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>S100</td>
<td>d.light Design(^2,5)</td>
<td></td>
<td>260</td>
<td>65</td>
<td>4.0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

More detailed information on the product performance and features can be found at [d-lab.mit.edu/solar-lighting-database](d-lab.mit.edu/solar-lighting-database)
### Sierra Leone

**Solar Lighting Systems with Mobile Charging ($50-$150)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufacturer</th>
<th>Total lighting service</th>
<th>Manufacturer</th>
<th>Hours of run time per day of solar charging</th>
<th>Product warranty in years</th>
<th>Number of lights</th>
</tr>
</thead>
<tbody>
<tr>
<td>D30</td>
<td>d.light Design$^{2,5}$</td>
<td>2500</td>
<td>360</td>
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<tr>
<td>Pico Solar Home System 7000</td>
<td>Fosera$^4$</td>
<td>1600</td>
<td>170</td>
<td>9.5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>D20</td>
<td>d.light Design$^{2,5}$</td>
<td>1200</td>
<td>170</td>
<td>7.2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Pico Solar Home System 2800</td>
<td>Fosera$^4$</td>
<td>650</td>
<td>87</td>
<td>7.5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

More detailed information on the product performance and features can be found at [d-lab.mit.edu/solar-lighting-database](http://d-lab.mit.edu/solar-lighting-database)

**12V Solar Power and Lighting Systems ($100-$400)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufacturer</th>
<th>Total lighting service</th>
<th>Manufacturer</th>
<th>Hours of run time per day of solar charging</th>
<th>Product warranty in years</th>
<th>Number of lights</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSHS 9800</td>
<td>Fosera$^4$</td>
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<td>910</td>
<td>9.1</td>
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</tr>
</tbody>
</table>

More detailed information on the product performance and features can be found at [d-lab.mit.edu/solar-lighting-database](http://d-lab.mit.edu/solar-lighting-database)
Sierra Leone

Distributors

1) Binatone
www.binatone.com
ghana@binatone.com
233 302 773 304
Labone, Accra, Ghana

2) d.light Africa
www.dlight.com
viney.sharma@dlight.com
254 739 532 568

3) Freeplay Energy
www.freeplayenergy.com
vjenkins@freeplayenergy.com
44 7876 572 120

4) Solar Era Sierra Leone
ages-energy.com/generators/solar-systems
sales@solarera.eu
232 79 29 90 00
Aberdeen, Freetown, Sierra Leone

5) TOTAL Awango Sierra Leone
ab.hotline-awango@total.com