The Spark Solar Home System is designed to meet the Lighting Global Pico-PV Quality Standards, offering mobile charging, Pay-As-You-Go enabled features, and includes two light points and a plug-and-play setup.

**WARRANTY INFORMATION**

A 3-year warranty covering manufacturing defects in the system.

**PERFORMANCE DETAILS**

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Description</th>
<th>Used alone</th>
<th>Used in combination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>included in kit</strong></td>
<td>LED lamps Two light points on high totaling 190 lumens and 1.4 W power</td>
<td>8.5 hours</td>
<td>2.5 hours</td>
</tr>
<tr>
<td><strong>sold separately</strong></td>
<td>Portable radio (3.7 Wh battery, 3.7 V nominal voltage) with rated power consumption of 2.3 W while in-use</td>
<td>3.9 hours</td>
<td>1.9 hours</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>Basic phone (3.7 Wh battery)</td>
<td>2.4 full charge(s)</td>
<td>0.6 full charge(s)</td>
</tr>
</tbody>
</table>

Available daily electrical energy \( E_{\text{daily}} \) (Wh/day)

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>Brightness setting: High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting full battery run time ( t ) for main unit (hours)</td>
<td>8.5</td>
</tr>
<tr>
<td>Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any auxiliary lights included with the product)</td>
<td>800</td>
</tr>
</tbody>
</table>

**NOTES:**
- Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates. 
- Without any other loads used during the run time.
- Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.
- Lighting full battery run time estimates do not account for mobile phone charging or other auxiliary loads; the run time is defined as the time until the output is 70% of the initial, stabilized output.

**LIGHTING DETAILS**

<table>
<thead>
<tr>
<th>Lamp name</th>
<th>Number of lamps</th>
<th>Number of settings</th>
<th>Setting</th>
<th>Light output (lm)</th>
<th>Lumen efficacy ( \text{lm/W} )</th>
<th>CRIf</th>
<th>CCTg</th>
<th>Distribution type</th>
<th>Lumen maintenanceh</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED lamp</td>
<td>2</td>
<td>3</td>
<td>High</td>
<td>94</td>
<td>140</td>
<td>83</td>
<td>5100</td>
<td>Wide</td>
<td>99%</td>
</tr>
</tbody>
</table>

\( E_{\text{daily}} \) is the power consumption at a light point during the light output test.

\( \text{CRI} \) Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

\( \text{CCT} \) Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

\( \text{Lumen maintenance} \) Percent of the original light output that remains after 2,000 hours of run time.
### SPECIAL FEATURES
- **PAYG** | **Pay-As-You-Go enabled**

### PORTS
<table>
<thead>
<tr>
<th>Port</th>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB 2.0 type A</td>
<td>One USB port is available to charge a mobile phone or power a radio. Adapters are not included.</td>
</tr>
<tr>
<td>2</td>
<td>Barrel jack</td>
<td>Two 3.2 V barrel jacks are used for light points only.</td>
</tr>
</tbody>
</table>

### DURABILITY
- Overall durability and workmanship: Pass
- Durability tests passed: Switch test, Strain relief test, physical ingress protection.
- Level of water protection:
  - **Main Lighting Unit**: Water ingress protection not tested, meant for indoor use only.
  - **PV module**: Has protection from permanent outdoor exposure

### SOLAR DETAILS
- **PV module type**: Polycrystalline silicon
- **PV maximum power**: 3.8 watts

### BATTERY DETAILS
- **Battery replaceability**: Not easily replaceable with common tools.
- **Battery chemistry**: Lithium iron phosphate
- **Battery type**: Other cylindrical
- **Battery capacity**: 3.8 Ah
- **Battery nominal voltage**: 3.2 V
- **Battery status indication**: Main unit has one indicator for charging status, battery state of charge, low energy mode, and error state

### PRODUCT DETAILS
- **Manufacturer name**: Fosera Solarsystems Gmbh & Co. KGaA
- **Product name**: Spark Solar Home System
- **Product model / ID number**: Spark 10 Angaza PAYG
- **Contact information**: info@fosera.com
- **Website**: http://www.fosera.com/
- **Co-brand of**: Spark Solar Home System Spark 10
- **Dimensions (entire product in package)**: 8 x 27.5 x 20 cm
- **Mass**: 1080 g

### SSS INFORMATION
- **Specs sheet expiration date**: February 28, 2022
- **Quality standards framework version**: 2020
- **Revision**: 2020.02