VeraSol Standardized Specifications Book

Manufacturer: Shenzhen Power-Solution Ind Co., Ltd.

Component Family Name: Solar Media Family

Date of Standardized Specifications October 31, 2022

Book Expiration:

Verify Online: https://data.verasol.org/products/sek/sps-sr77family

Contact Information: susan@power-solution.net.cn

Website: https://www.power-solution.net.cn/

Co-Brand of: Solar Media Family, ShenZhen Solar Run Energy Co., Ltd.



This VeraSol Standardized Specifications Book presents a component-level Standardized Specifications Sheet listing the available components in the product family by component type, each individual component's performance rating, and performance results for each component tested according to the Edition 4 of IEC 62257-9-5. Following the component-level Standardized Specifications Sheet is a list of the systems covered by this Specifications Book that use combinations of these components.

NOTICE: Systems or kits developed using components from the component family will each perform differently and have not all been evaluated on a system-level basis. All systems listed in this Specifications Book are regarded to have passed the applicable Lighting Global Quality Standards or to meet the requirements in IEC 62257-9-8*.

Quality Standards Framework Version: 2021

Revision: 2021.09

Component-Level Standardized Specifications Sheet

Shenzhen Power-Solution Ind Co., Ltd. Solar Media Family

| Battery / Control Box | | | | |
|--------------------------------|------------------------|------------------------|------------------------------------|--------------------------------------|
| Name / Model Number | Battery Chemistry | Nominal Voltage (V) | Battery Capacity Rating (Ah) | Measured Battery Capacity (Ah) |
| SR77A Main Unit | Lithium iron phosphate | 6.4 | 6 | 5.9 |
| SR77B Main Unit | Lithium iron phosphate | 12.8 | 6 | 6 |
| Solar Torch with Integrated PV | Lithium iron phosphate | 3.2 | 0.6 | 0.6 |

| PV Module | | | | | | | |
|-------------------------------|------------------------------|--------------------------------|--|--|--|--|--|
| Name / Model Number | Peak Power at STC Rating (W) | Measured Peak Power at STC (W) | | | | | |
| 10/12 W PV Module | 6 | 10.2 | | | | | |
| 20 W (18V Vmp) PV Module | 20 | 22 | | | | | |
| Solar Torch with Integratd PV | 0.2 | 0.18 | | | | | |

| Light Sources* | | | | | | |
|---|---------------------------|-----------------------------|----------------------------------|--|--|--|
| | Luminous Flux Rating (lm) | Measured Luminous Flux (lm) | Measured Lamp Efficacy (lm/W) | | | |
| Name / Model Number | High/On | High/On | High/On | | | |
| 1 W LED Lamp | 100 | 100 | 92 | | | |
| 2 W LED Lamp | 200 | 170 | 95 | | | |
| 3 W LED Lamp | 300 | 280 | 120 | | | |
| Solar Torch with Integrated PV (Front Light) | 50 | 56 | 95 | | | |

| Appliances* | | | | | | | |
|--|---|--------------------|--|--------------------------------------|---|--|--|
| Name / Model Number | Description | Rated Power (W) | Measured Power During Use (W) | Rated Battery Capacity (Ah) | Measured Battery Capacity (Ah) | | |
| Integrated Video Display with Remote Controller | 7" diagonal screen integrated to both main unit options | 1 | 1.6 | 1 | | | |
| Radio (F170) | | - | 0.44 | 1.5 | 1.2 | | |

<u>NOTICE:</u> As indicated, not all components listed on this page were tested according to the Quality Test Method (QTM) in Edition 4 of IEC 62257-9-5. However, based on the satisfactory performance of the tested components in the family, the components that were not tested are regarded to have passed the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8. In addition, all tested components passed an internal inspection, the full array of applicable QTM durability tests, as well as ingress protection testing (where applicable).

*Light points and appliances may perform differently when used with different systems.

List of Covered Systems

Shenzhen Power-Solution Ind Co., Ltd. Solar Media Family

| | | Number of each component included in each system | | | | | | | | |
|---------------|--------------------|--|--------------------|--------------------|--------------------|-------------------------|-------------------|----------------------|---|-------|
| System Name | 1 W LED Bulb | 2 W LED Bulb | 3 W LED Bulb | SR77A Main Unit | SR77B Main Unit | 10/12 W PV Module | 20 W PV Module | Remote Controller | Solar Torch with Integrated PV | Radio |
| SR77A** | | 3 | | 1 | | 1 | | 1 | | |
| SR77B** | | | 3 | | 1 | | 1 | 1 | | |
| SR77A*****TG | 0-3 | 0-3 | 0-3 | 1 | | 1 | | 1 | 0-1 | 0-1 |
| SR77B******TG | 0-3 | 0-3 | 0-3 | | 1 | | 1 | 1 | 0-1 | 0-1 |

^{**}Tested as full systems. Individual SSS available on VeraSol website.

Key

********: Each *can be either 1,2, 3 or blank. The **** is used to represent the type and number of light bulbs (1W,2W,3W) included with the kit. For example:SR77A1223 includes one 2W bulb and two 3W bulbs.

R represents a Radio and T represents a Torch included. G represent PAYG mode, Blank without PAYG.

NOTICE:

Only the SR77A and SR77B were fully tested as systems according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the SR77A, the SR77B, and the at https.data.verasol.org/products/sek/ Systems that were not tested, but that were developed using components from the component family will perform differently than the system(s) shown in the individual system-level SSS. All systems listed above are regarded to have passed the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8.

Unless otherwise noted, the following information applies to all listed systems and components:

Warranty Information

Two year warranty on all kits and components

| Marks and Certifications | | | | |
|--------------------------|-------------------------------|--|--|--|
| Factory certification | ISO 9001; ISO 45001; ISO14001 | | | |

Available Daily Electrical Energy and Port Information

Shenzhen Power-Solution Ind Co., Ltd. Solar Media Family

| System Name | Available Daily Electrical Energy (Wh/day) | Includes ports for charging? |
|-------------|---|------------------------------|
| SR77A | 23 | yes |
| SR77B | 53 | yes |

^{**}Tested as full systems. Individual SSS available on VeraSol website.

NOTICE:

The available daily electrical energy (Wh/day) is calculated for fully tested systems following the energy service calculations as described in IEC/TS 62257-9-5 Ed. 4. For products in a family that are not tested as a full system, estimations of available daily electrical energy (Wh/day) are calculated according to an alternative method using data from the test reports of fully-tested products and components. Estimating Wh/day values requires making assumptions about system efficiencies, power consumption, and user behavior. As with any calculation based on multiple assumptions, there is some degree of error in the Wh/day estimate, which may be greater or less than the actual value for a given product.