

VeraSol Standardized Specifications Book

Manufacturer: OffgridSun

Component Family Name: Energy Station Family

Date of Standardized Specifications Book Expiration: January 31, 2024

Verify Online: <https://data.verasol.org/products/sek/os-esfamily>

Contact Information: n.baggio@offgridsun.com

Website: www.offgridsun.com



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.

Revision: 2022.01

Component-Level Standardized Specifications Sheet

OffgridSun

Energy Station Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage(V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
Main Box with 6000 mAh battery	Lithium iron phosphate	6.4	6000	5900

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
8 W PV module	8	8
10 W PV module	10	--
15 W PV module	15	16

Light Sources

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	ON	ON	ON
1 W lamp	107	100	100
1.6 W lamp	160	170	120
2 W lamp	--	200	120
Torch (front lamp)	--	57	120

Appliances

Name / Model Number	Description	Rated Power (W)	Measured Power (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Torch (front lamp on)	Torch with 0.2 W/ 5V PV module	--	0.47	250	330
Radio	Portable radio with 3.7 V Li-Ion battery	3	0.45	1500	2000

NOTICE: 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

OffgridSun

Energy Station Family

System Name	Number of each component included in each system									
	Main Box with 6000 mAh battery	Main Box with 6000 mAh battery PAYGO	1 W Lamp	1.6 W Lamp	2 W lamp	8 W PV Module	10 W PV Module	15 W PV Module	Torch	Radio
Energy Station Plus	1	--	3	--	--	1	--	--	--	--
Energy Station Plus with Torch and/or Radio	1	--	3	--	--	1	--	--	0-1	0-1
Energy Station Premium	1	--	1	--	2	--	1	--	0-1	0-1
Energy Station Premium PAYG	--	1	1	--	2	--	1	--	0-1	0-1
Energy Station Next **	1	--	--	3	--	--	--	1	--	1

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

NOTICE:

Only the Energy Station Plus and Energy Station Next 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 Energy Station Plus and the Energy Station Next at <https://data.verasol.org>. 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

A 3-year warranty for the Energy Station Next, radio, and torch, and a 1-year warranty covering manufacturing defects for all other kits and components.

Available Daily Electrical Energy and Port Information

OffgridSun Energy Station Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
Energy Station Plus	25	yes
Energy Station Next **	37	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.