VeraSol Standardized Specifications Book

Company Name: OffgridSun

Brand Name: OffgridSun

Component Family Name: Energy Station Family

Date of Standardized S

Specifications Book Expiration: September 30, 2025

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

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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.

<u>NOTICE</u>: 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 IEC TS 62257-9-8.

Quality Standards Framework Version: 2024

Revision: 2025.01

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)		
6000 mAh battery	Lithium iron	6.4	6000	5900		
Radio battery	Lithium ion	3.7	1500	2000		
Torch battery	Lithium iron	3.2	250	330		

PV Module							
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)					
8 W PV module (M-8W)	8	8					
10 W PV module	10	Not tested					
15 W PV module (M-15W)	15	16					
Torch Integrated PV module	0.2	0.2					

Light Sources*						
Name / Model Number	Luminous Flux Rating (Im)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)			
	On	On	On			
1 W lamp	110	100	100			
1.3 W lamp	240	Not Tested	Not Tested			
1.7 W lamp	240	230	140			
Torch (front lamp)	Not Tested	57	120			
Torch (reading light)	Not Tested	Not Tested	Not Tested			

Appliances*						
Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)	
Torch	57 lumens torch, (LiFePO4 battery: 330 mAh, 3.2 V) and a 0.2 W, 5 V PV module	0.5	0.47	250	330	
Radio (F170)	Portable radio with 3.7 V Li-ion battery	3	0.45	1500	2000	

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

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 IEC TS 62257-9-8:2020. 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).

List of Covered Systems

OffgridSun

Energy Station Family

	Number of each component included in each system								
System Name	6000 mAh main unit	1 W lamp	1.3 W lamp	1.7 W lamp	8 W PV module	10 W PV module	15 W PV module	Torch	Radio
Energy Station Plus	1	3			1				-
Energy Station Premium	1	2		1		1		1	1
Energy Station Premium A	1	2	1			1		1	1
Energy Station Next **	1			3			1		1
Energy Station Next A	1		3				1		1
Energy Station Premium Paygo	1	2		1		1		1	1
Energy Station Premium Paygo A	1	2	1		-	1		1	1

NOTICE:

Only the kits denoted with ** were tested as full systems according to Edition 4 of IEC 62257-9-5 and passed IEC 62257-9-8 standards. An Individual Standardized Specification Sheet (SSS) that reports system-level performance is available for these systems at 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 IEC 62257-9-8.

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

Warranty Information

A 3-year warranty covering manufacturing defects in the system for the PV module, control box, cables, lights, and battery. A 1-year warranty for the non-lighting appliances and USB adapters.

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 Premium	31	yes		
Energy Station Next**	38	yes		
Energy Station Premium Paygo	31	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.