

# VeraSol Standardized Specifications Book

**Manufacturer:** Solar Panda Corporation

**Component Family Name:** Solar Panda Family

**Date of Standardized Specifications Book Expiration:** April 30, 2023

**Verify Online:** <https://data.verasol.org/products/sek/panda-family>

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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.

**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:** 2021.02

# Component-Level Standardized Specifications Sheet

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Solar Panda Family

## Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)
6.3 Ah control unit	Lithium iron phosphate	6.4	6.3	6.4
12 Ah control unit	Lithium iron phosphate	12.8	12	12
Portable lantern battery	Lithium iron phosphate	3.2	0.6	0.6
Flashlight battery	Lithium-ion	3.7	1.8	1.9
Radio battery	Lithium-ion	3.7	1.8	1.7

## PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
10 W PV module	10	9.8
20 W PV module	20	21
40 W PV module	40	39

## Light Sources\*

Name / Model Number	Luminous Flux Rating (lm)		Measured Luminous Flux (lm)		Measured Lamp Efficacy (lm/W)	
	High	Low	High	Low	High	Low
Wired lantern	140	--	160	--	150	--
Tubelight	190	--	210	--	130	--
Portable Lantern	63	--	63	--	160	--
Flashlight	81	--	81	--	57	--

## Appliances\*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (Ah)
Radio	Portable radio with a 3.7V Lithium-ion battery	--	0.32	1.8	1.7
32" TV	32" diagonal TV	12	11	--	--

**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

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System Name	Number of each component included in each system										
	6.3 Ah control unit	12 Ah control unit	10 W PV module	20 W PV module	40 W PV module	Wired lantern	Tubelight	Portable lantern	Flash light	Radio	32" TV
<b>Solar Panda Home Kit**</b>	1			1		3	1	1	1	1	
<b>Starter Kit</b>	1		1			2					
<b>TV Upgrade Kit</b>	1			1							1
<b>TV Premium Kit</b>		1			1	5	1	1	1	1	1

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

## **NOTICE:**

Only the Solar Panda Home Kit was fully tested as a system according to Edition 4 of IEC 62257-9-5. An individual Standardized Specifications Sheet (SSS) that report system-level performance is available for the Solar Panda Home Kit 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**

Two year warranty for all control units, solar panel and light bulbs; 1-year warranty for the appliances

### **Marks and Certifications**

Factory certification	ISO 9001:2015
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# Available Daily Electrical Energy and Port Information

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System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
<b>Solar Panda Home Kit **</b>	42	yes
<b>Starter Kit</b>	32	yes
<b>TV Upgrade Kit</b>	42	yes
<b>TV Premium Kit</b>	87	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.