VeraSol
Standardized Specifications Book

Manufacturer:	Chaohu Venus Solar Technology Co., LTD
Component Family Name:	Solar Home System Family
Date of Standardized Specifications Book Expiration:	December 31, 2025
Verify Online:	https://data.verasol.org/products/sek/cvs-shsfamily
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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 IEC TS 62257-9-8.

Quality Standards Framework Version: 2023
Revision: 2025.10

Component-Level Standardized Specifications Sheet

Chaohu Venus Solar Technology Co., LTD

Solar Home System Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
12 Ah Battery	Lithium ion	11.1	12	13
18 Ah Battery	Lithium ion	11.1	18	18
24 Ah Battery	Lithium ion	11.1	24	Not tested
30 Ah Battery	Lithium ion	11.1	30	Not tested
36 Ah Battery	Lithium ion	11.1	36	37
12 Ah Battery	Lithium iron phosphate	12.8	12	12
18 Ah Battery	Lithium iron phosphate	12.8	18	18
24 Ah Battery	Lithium iron phosphate	12.8	24	Not tested
30 Ah Battery	Lithium iron phosphate	12.8	30	29

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
40 W PV	40	40
50 W PV	50	60
60 W PV	60	Not tested
80 W PV	80	Not tested
100 W PV	100	120
120 W PV	120	Not tested
150 W PV	150	150

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	On	On	On
2 W LED	200	320	140
3 W LED	300	Not Tested	Not Tested
5 W LED	500	Not Tested	Not Tested
7 W LED	700	1020	140

*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

Chaohu Venus Solar Technology Co., LTD

Solar Home System Family

	Number of each component included in each system																		
System Name	2 W LED	3 W LED	5 W LED	7 W LED	40 W PV	50 W PV	60 W PV	80 W PV	100 W PV	120 W PV	150 W PV	12 Ah Li-ion Batttery	18 Ah Li-ion Batttery	24 Ah Li-ion Batttery	30 Ah Li-ion Batttery	36 Ah Li-ion Batttery	12 Ah LiFePO4 Battery	18 Ah LiFePO4 Battery	24 Ah LiFePO4 Battery	30 Ah LiFePO4 Battery
VE-SHS-1212-LFP(40W)	4	0-4	0-4	0-4	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
VE-SHS-1212-LFP (50W)	4	0-4	0-4	0-4	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--
VE-SHS-1218-LFP(50W)	4	0-4	0-4	0-4	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--
VE-SHS-1218-LFP(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
VE-SHS-1224-LFP(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1224-LFP(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1224-LFP(100W)	4	0-4	0-4	0-4	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1230-LFP(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1
VE-SHS-1230-LFP(120W)	4	0-4	0-4	0-4	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
VE-SHS-1230-LFP(150W)	4	0-4	0-4	0-4	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
VE-SHS-1212-LFP-PAYG(40W)	4	0-4	0-4	0-4	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
VE-SHS-1212-LFP-PAYG (50W)	4	0-4	0-4	0-4	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--
VE-SHS-1218-LFP-PAYG(50W) **	4	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--
VE-SHS-1218-LFP-PAYG(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
VE-SHS-1224-LFP-PAYG(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1224-LFP-PAYG(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1224-LFP-PAYG(100W)	4	0-4	0-4	0-4	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
VE-SHS-1230-LFP-PAYG(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1
VE-SHS-1230-LFP-PAYG(120W)	4	0-4	0-4	0-4	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
VE-SHS-1230-LFP-PAYG(150W)	4	0-4	0-4	0-4	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
VE-SHS-1212(40W)	4	0-4	0-4	0-4	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--
VE-SHS-1212(50W)	4	0-4	0-4	0-4	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--
VE-SHS-1218(50W)	4	0-4	0-4	0-4	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--
VE-SHS-1218(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--
VE-SHS-1224(60W)	4	0-4	0-4	0-4	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--
VE-SHS-1224(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--
VE-SHS-1230(80W)	4	0-4	0-4	0-4	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--
VE-SHS-1230(100W)	4	0-4	0-4	0-4	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--
VE-SHS-1230(120W)	4	0-4	0-4	0-4	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--
VE-SHS-1236(100W)	4	0-4	0-4	0-4	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--

VE-SHS-1236(120W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**
VE-SHS-1236(150W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**
VE-SHS-1212-PAYG(40W)	**4**	**0-4**	**0-4**	**0-4**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1212-PAYG(50W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1218-PAYG(50W) **	**4**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1218-PAYG(60W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1224-PAYG(60W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1224-PAYG(80W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1230-PAYG(80W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1230-PAYG(100W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1230-PAYG(120W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**
VE-SHS-1236-PAYG(100W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**
VE-SHS-1236-PAYG(120W)	**4**	**0-4**	**0-4**	**0-4**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**	**--**

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

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 2-year warranty covering manufacturing defects in the system.

Available Daily Elelctrical Energy and Port Information

Chaohu Venus Solar Technology Co., LTD

Solar Home System Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
VE-SHS-1218-LFP-PAYG(50W)**	**210**	**yes**
VE-SHS-1218-PAYG(50W)**	**170**	**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.