

VeraSol

Standardized Specifications Book

Manufacturer: Qingdao Sunshine New Energy Co., Ltd

Component Family Name: Solar & Music Family

Date of Standardized Specifications Book Expiration: November 30, 2025

Verify Online: <https://data.verasol.org/products/sek/sc-smffamily>

Contact Information: steven@solarchange.com.cn

Website: <https://www.solarchange.com.cn>



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: 2023.11

Component-Level Standardized Specifications Sheet

Qingdao Sunshine New Energy Co., Ltd

Solar & Music Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
3.4 Ah battery	Lithium iron phosphate	6.4	3400	3700
6.2 Ah battery	Lithium iron phosphate	6.4	6200	6100
12 Ah battery	Lithium iron phosphate	6.4	12000	12000
Radio battery	Lithium ion	3.7	2000	2000
Torch battery	Lithium iron phosphate	3.2	600	610

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
5 W PV module	5	5.3
10 W PV module	10	10
15 W PV module	15	Not tested
20 W PV module	20	20
Torch PV module	0.35	0.36

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)		Measured Luminous Flux (lm)		Measured Lamp Efficacy (lm/W)	
	on	high	on	high	on	high
1.2 W bulb	120	--	140	--	110	--
Torch	--	--	--	83	--	87

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Radio	portable Li-ion battery: 2 Ah, 3.7 V, with a power consumption of 0.42 W while in-use	3	0.42	2	2
Torch	83 lumens torch, LiFePO4 battery: 0.6 Ah, 3.2 V	--	0.95	0.6	0.61

*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

Qingdao Sunshine New Energy Co., Ltd

Solar & Music Family

System Name	Number of each component included in each system									
	1.2 W bulb	5W PV module	10W PV module	15W PV module	20W PV module	3.4 Ah battery	6.2 Ah battery	12 Ah battery	Radio (2 Ah)	Torch (0.6 Ah)
SC-805	3	1	--	--	--	1	--	--	1	1
SC-810 **	4	--	1	--	--	--	1	--	1	1
SC-815	4	--	--	1	--	--	--	1	1	1
SC-820	4	--	--	--	1	--	--	1	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 on all components. A 3-year warranty covering manufacturing defects on all components in Rwanda.

Available Daily Electrical Energy and Port Information

Qingdao Sunshine New Energy Co., Ltd
Solar & Music Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
SC-805	19	yes
SC-810**	37	yes
SC-815	56	yes
SC-820	70	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.