VeraSol Standardized Specifications Book

Company Name: Ningbo Supsolar Electric Co., Ltd

Brand Name: SupSolar

Component Family Name: SupSolar Family

Family Expiration Date: January 31, 2026

Verify Online: https://data.verasol.org/products/sek/nss-sf

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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: 2024

Revision: 2025.10

Component-Level Standardized Specifications Sheet

Ningbo Supsolar Electric Co., Ltd SupSolar Family

Batteries / Control Boxes								
Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)				
7 Ah 6.4 V main unit	Lithium iron phosphate	6.4	7000	6900				
6.3 Ah 3.2 V main unit	Lithium iron phosphate	3.2	6300	6400				
12.5 Ah 12.8 V main unit	Lithium iron phosphate	12.8	12500	13000				
15 Ah 12.8 V main unit	Lithium iron phosphate	12.8	15000	15000				
6 Ah 12.8 V main unit	Lithium iron phosphate	12.8	6000	6400				
30 Ah 12.8 V main unit	Lithium iron phosphate	12.8	30000	30000				
torch battery	Lithium ion	3.6	1800	1900				
portable lantern battery	Lithium iron phosphate	3.2	600	590				
radio battery	Lithium ion	3.6	1000	990				

PV Modules									
Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)							
8 W Monocrystalline PV	8	7.5							
12 W Monocrystalline PV	12	12							
25 W Monocrystalline PV	25	not tested							
40 W Monocrystalline PV	40	not tested							
56 W Monocrystalline PV	56	58							
100 W Monocrystalline PV	100	not tested							
180 W Monocrystalline PV	180	190							

Light Sources*								
Name / Model Number		Flux Rating m)	Measured Fl (Ir		Measured Lamp Efficacy (lm/W)			
	high	low	high	low	high	low		
1 W bulb	115	-	120	-	120	-		
3 W bulb	280	-	410	-	120	-		
tubelight	200	-	200	-	110	-		
lantern	60	-	78	-	130	-		
torch	80	-	91	-	61	-		
5 W bulb	500	not rated	570	320	110	130		

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
lantern	78 lumens portable lantern, (Li- ion, LiFePO4 battery: 0.59 Ah, 3.2 V)	1	0.59	600	590
torch	91 lumens torch, (Li-ion battery: 1.85 Ah, 3.6 V)	3	1.5	1800	1850
radio	portable (Li-ion battery: 0.99 Ah, 3.6 V), with a power consumption of 0.29 W while in-use	2	0.29	1000	990
24" TV	24" diagonal (8.1 W power consumption while in-use)	10	8.1		
32" TV	24" diagonal (9.7 W power consumption while in-use)	12	9.7		
Standing Fan	16 " standing fan (16 W power)	16	16		

^{*} 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 Ningbo Supsolar Electric Co., Ltd SupSolar Family

		Number of each component included in each system																						
System Name	1 W bulb	3 W bulb	tubelight	5 W bulb	7 Ah 6.4 V main unit	6.3 Ah 3.2 V main unit	12.5 Ah 12.8 V main unit	15 Ah 12.8 V main unit	6 Ah 12.8 V main unit	30 Ah main unit	8 W PV	12 W PV	25 W PV	40 W PV	56 W PV	100 W PV	180 W PV	lantern	torch	radio	phone charging cable	24" TV	32" TV	Standing Fan
Solar Medium Kit **	3		1		1							1						1	1	1	1			
Solar Econo Kit	4					1					1							1	1	1	1			
Solar Premium Kit 1	3		1				1							1				1	1	1	1	1		
Solar Premium Kit 2		5	1					1							1			1	1	1	1		1	1
Solar Premium Kit 3 with PAY AS YOU Go ^o	3	-	1						1				1					1	1	1	1			
Solar Premium Kit 4 with PAYG°		6						1								1								
Solar Great Kit 1				5						1							1							
Solar Great Kit 2 with PAYG°		5								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-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 for the main compoets, and one year warranty for accessories

[°] Kit has PAYG function.

Available Daily Electrical Energy and Port Information

Ningbo Supsolar Electric Co., Ltd SupSolar Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?				
Solar Medium Kit**	36	yes				
Solar Premium Kit 1	76	yes				
Solar Premium Kit 2	88	yes				
Solar Great kit 1	360	yes				
Solar Great kit 2 with PAYG°	320	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.

[°] Kit has PAYG function.