VeraSol
Standardized Specifications Book

Manufacturer: d.light design

Component Family Name: SHS Family

Date of Standardized Specifications Book Expiration: November 30, 2021

Verify Online: https://data.verasol.org/products/sek/dl-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 IEC 62257-9-5 Ed 4. 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.

Quality Standards Framework Version: 2019
Revision: 2021.04

Component-Level Standardized Specifications Sheet
d.light design
SHS Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (Ah)
5.6 Ah LFP battery	Lithium Iron Phosphate	12.8	5.6	5.6
6 Ah LFP battery	Lithium Iron Phosphate	12.8	6.0	6.0
10 Ah LFP battery	Lithium Iron Phosphate	12.8	10.0	10.0
12 Ah LFP battery	Lithium Iron Phosphate	12.8	12.0	not tested
18 Ah LFP battery	Lithium Iron Phosphate	12.8	18.0	18.0

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
25 W PV Module	25	28
30 W PV module	30	30
40 W PV module	40	40
50 W PV module	50	not tested
60 W PV module	60	not tested
80 W PV Module	80	80
120 W PV Module	120	120

Light Sources

Name / Model Number	Luminous Flux Rating (lm)			Measured Luminous Flux (lm)			Measured Lamp Efficacy (lm/W)		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
Hanging Lamps	200	--	--	230	--	--	110	--	--
Tube Light (600 lm)	600	--	--	630	--	--	110	--	--
Tube Light (400 lm)	400	--	--	460	--	--	110	--	--
Torch	75	--	--	88	--	--	90	--	--

Appliances

Name/ Model Number	Description	Rated Power (W)	Measured Power (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (1Ah)
Radio (SR10 and SR20)	portable with 3.7 V Li-ion battery; charges via USB	--	0.3	1	1
Television (SV190S, SV190S-P, SV190Si, SV190Si-P)	18.5" LED TV	--	8.3	--	--
Television (SV220Si, SV220Si-P)	22" LED TV	--	not tested	--	--
Television (SV24S, SV24S-p, SV24Si, SV24Si-p)	24" LED TV	--	not tested	--	--
Television (SV320Si, SV320Si-P)	32" LED TV	--	11	--	--

NOTICE: As indicated, not all components listed on the previous page were tested according to the Quality Test Method (QTM) in 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. 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
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System Name	Number of each component included in each system																				
	hanging lamp	tube light (400 lm)	tube light (600 lm)	5.6 Ah LFP battery	6Ah LFP battery	10 Ah LFP battery	12 Ah LFP battery	18 Ah LFP Battery	25 W PV Module	30 W PV Module	40 W PV Module	50 W PV Module	60 W PV Module	80 W PV Module	120 W PV Module	18.5" TV	22" TV	24" TV	32" TV	Radio	Torch
X732	3	1			1				1											1	
X732 (base unit with data logger)	3	1			1				1											1	
X450	2			1					1												
X500	2	1		1					1												
X740	3	1			1					1											
X850*	4	1			1						1									1	1
X850V	4	1			1											1				1	1
X1000 / X850 Plus	4		1			1					1									1	1
X1000V	4		1			1					1							1		1	1
X1200	2		3			1					1									1	2
X2000	4		1				1							1						1	1
X2000V	4		1				1							1			0-1		0-1	1	1
X3000	4		2					1							1					1	1
X3000V	4		2					1							1				1	1	1

*Tested as full system. Individual SSS available on the VeraSol website.

NOTICE:
Only the X850 was fully tested as a system according to Edition 4 of IEC 62257-9-5. An individual Standardized Specifications Sheet (SSS) that reports system-level performance is available for the X850 at https://data.verasol.org/products/sek. 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.

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

Warranty Information

Two-year warranty on all kits and components with the exception of the TV remote, solar radio, and solar torch, which have a one-year warranty.

Marks and Certifications

Factory certification	ISO 9001:2015; ISO 14001:2015

Available Daily Electrical Energy and Port Information
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SHS Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
X850**	110	yes
X500	70	yes
X1000 / X850 Plus	130	yes
X2000	160	yes
X3000	240	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.