

VeraSol

Standardized Specifications Book

Manufacturer: d.light design

Component Family Name: D1XX Family

Date of Standardized Specifications Book Expiration: March 31, 2023

Verify Online: <https://data.verasol.org/products/sek/dl-d1xxfamily>

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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: 2022.07

Component-Level Standardized Specifications Sheet

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D1XX Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (mAh)	Measured Battery Capacity (mAh)
Power Pack	Lithium iron phosphate	3.2	10000	10900
FM Radio (SR11)	Lithium ion	3.7	600	640
AM/FM Radio (SR21)	Lithium ion	3.7	600	640
Torch	Lithium ion	3.7	2000	1900

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
9 W PV	9	7.8
10 W PV	10	- not tested -
12 W PV	12	10

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
Bulb (8m)	120	--	--	120	--	--	120	--	--
Tube light (4m)	220	50	35	250	--	33	120	--	--
Tube light (6m)	--	--	--	- not tested -					
Torch	75	--	--	98	--	22	59	--	62

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (mAh)	Measured Battery Capacity (mAh)
Radio (SR11 and SR21)	portable radio with internal battery; charges via USB	--	0.4	600	640

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									
	10Ah Power Pack	Bulb (8m)	Tube Light (4m)	Tube Light (6m)	9W PV	10W PV	12W PV	Torch	FM Radio (SR11)	AM/FM Radio (SR21)
D100 †	1	2	1	--	1	--	--	--	--	--
D111	1	1	1	1	1	--	--	--	--	--
D120 °	1	2	1	--	1	--	--	1	0-1	0-1
D130 °	1	4	--	--	1	--	--	--	--	--
D150 †	1	2	1	--	--	1	--	1	0-1	0-1
D160 °	1	4	--	--	--	--	--	--	0-1	0-1
D180 °	1	2	1	--	--	--	1	1	0-1	0-1
D100R °	1	2	1	--	1	--	--	--	--	--
D180R** °	1	2	1	--	--	--	1	1	1	--
X50 °	1	2	1	--	1	--	--	--	--	--
X100 °	1	2	1	--	1	--	--	--	0-1	0-1
X150 °	1	3	1	--	--	--	1	1	0-1	0-1

**Tested as full systems. Individual SSS available on Lighting Global website.

†Kit is available with and without PAYG feature

°Kit has PAYG function

NOTICE:

Only the D180R was fully tested as a system according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheet (SSS) that report system-level performance is available for the D180R 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 or the requirements in IEC 62257-9-8.

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

Warranty Information

2-year warranty for kits, except the D100R and D180R which have a 3-year warranty. 1-year warranty for radios and torch.

Available Daily Electrical Energy and Port Information

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D1XX Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
D100	23	yes
D180R	27	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.