

# Solar Home System D100R

D100R

d.light design Ltd

Results based on test procedures detailed in IEC TS 62257-9-5 and IEC TS 62257-9-8

Verify online:

<https://data.verasol.org/products/sek/dl-d100r>

Valid until: November 30, 2024



Meets the requirements in IEC TS 62257-9-8:2020 for Size A Kits



Mobile charging

PAYG

Pay-As-You-Go

3

Light point(s)



Plug-and-play



## WARRANTY INFORMATION

A 3-year warranty covering manufacturing defects in the system

## PERFORMANCE DETAILS

				Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)	
VeraSol Certified?	Included in Kit?	Appliance <sup>a</sup>	Description	Used alone <sup>b</sup>	Used in combination <sup>c</sup>
yes	included	Main lighting unit	3 light points on High totaling 460 lumens and 3.3 W power	10 hours	4.1 hours
no	not included	Radio	Portable Li-ion battery: 0.6 Ah with a power consumption of 0.4 W while in-use	55 hours	3.1 hours
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	3.8 full charge(s)	1 full charge(s)
no	not included	Torch	Li-ion battery: 1.9 Ah, 3.7 V, and 1.3 W power consumption.	14 hours	4.1 hours

Available daily electrical energy<sup>c</sup> (Wh/day)

28

Performance measure	Brightness setting: High
Lighting full battery run time <sup>d</sup> for main unit (hours)	10
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	4900

<sup>a</sup> Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

<sup>b</sup> Without any other loads used during the run time

<sup>c</sup> Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.

<sup>d</sup> Lighting full battery run time estimates do not account for mobile phone charging or other auxiliary loads; the run time is defined as the time until the output is 70% of the initial, stabilized output.

## LIGHTING DETAILS



Lamp name	Number of lamps	Number of settings	Setting	Light output (lm)	Lumen efficacy <sup>e</sup> (lm/W)	CRI <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
LED bulb (8m)	2	2	High	120	120	85	6200	Wide	100%
Tubelight (4m)	1	2	High	220	120	84	5800	Wide	100%

<sup>e</sup> Lumen efficacy is the power consumption at a light point during the light output test.

<sup>f</sup> Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.

<sup>g</sup> Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

<sup>h</sup> Percent of the original light output that remains after 2,000 hours of run time

SPECIAL FEATURES			
PAYG		Pay-As-You-Go enabled	
PORTS			
1	USB 2.0 type A		Mobile phones, torches, and radios can be charged. Adapters are included.
3	Barrel jack		24 V ports available for light points.
DURABILITY			
Overall durability and workmanship		Pass	
Durability tests passed		Switch test, Strain relief test, Physical ingress protection, PV durability tests	
Level of water protection	Main Unit, LED bulbs, and Tubelight	Water ingress protection not tested, meant for indoor use only.	
	PV module	Has protection from permanent outdoor exposure	
SOLAR DETAILS			
PV module type		Polycrystalline silicon	
PV maximum power		7.8 watts	
MAIN UNIT BATTERY DETAILS			
Battery replaceability		Not easily replaceable with common tools.	
Battery chemistry		Lithium iron phosphate	
Battery package type		32700	
Battery capacity		11 Ah	
Battery nominal voltage		3.2 V	
Battery status/ other indicator lights		Three indicators for battery status	
PRODUCT DETAILS			
Manufacturer name		d.light design Ltd	
Product name		Solar Home System D100R	
Product model / ID number		D100R	
Contact information		testing@dlight.com	
Website		www.dlight.com	
Dimensions (entire product in package)		41 x 21 x 8 cm	
Mass		2300 g	
SSS INFORMATION			
Specs sheet expiration date		November 30, 2024	
Revision		2023.03	