

RDG R1 Solar Home System

R12022
RDG Collective

Verify online:
<https://data.verasol.org/products/sek/rdg-r12022>
Valid until: 6/30/2024

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



Meets the requirements in IEC TS 62257-9-8 for Size B Kits



Mobile charging

PAYG

Pay-As-You-Go option available

3

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty covering manufacturing defects in the system and all included appliances.

PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance ^a	Description	Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
				Used alone ^b	Used in combination ^c
yes	included	Main lighting unit	3 light points on (On) totaling 474 lumens and 3.3 W power	46 hours	12 hours
no	not included	Television	18 W power consumption while in use	9.6 hours	6.1 hours
no	not included	Radio	portable radio (Li-ion battery: 1 Ah, 3.7 V) with power consumption of 0.5 W while in use	220 hours	9 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	30 full charge(s)	3 full charge(s)

Available daily electrical energy ^f (Wh/day)	170
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Performance measure	Brightness setting: On
Lighting full battery run time ^d for main unit (hours)	46
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	21600

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

^b Without any other loads used during the run time

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

^d 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 ^g (lm/W)	CRI ^f	CCT ^g	Distribution type	Lumen maintenance ^h
LED bulb	3	1	On	160	140	73	6800	Wide	100%

^g Lumen efficacy is the power consumption at a light point during the light output test.

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

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

^h Percent of the original light output that remains after 2,000 hours of run time

PORTS		
2	USB 2.0 type A	 Mobile phones can be charged. Adapters are not included.
4	Barrel jack	 12 V ports available to power appliances and light points and to charge radios.
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	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
SOLAR DETAILS		
PV module type		Monocrystalline silicon
PV maximum power		52 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		26650
Battery capacity		12 Ah
Battery nominal voltage		12.8 V
Battery status/ other indicator lights		The screen on the main unit shows battery charge level.
PRODUCT DETAILS		
Manufacturer name		RDG Collective
Product name		RDG R1 Solar Home System
Product model / ID number		R12022
Contact information		rune@rdg-home.com
Website		www.rdg-home.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		n/a
SSS INFORMATION		
Specs sheet expiration date		6/30/2024
Revision		2022.06