

# Power Equation Solar Home Power Station with 3 Lights, Radio and Flashlight

RNTS022

Renewit Solar Limited

Results based on test procedures detailed in IEC 62257-9-5 v.4

Verify online:

[www.lightingglobal.org/products/ri-hpsrf](http://www.lightingglobal.org/products/ri-hpsrf)

Valid until January 31, 2022



Meets the Lighting Global Pico-PV Quality Standards



Mobile charging

4

Light point(s)



Plug-and-play



## WARRANTY INFORMATION

A 2-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)	
			Used alone <sup>b</sup>	Used in combination <sup>c</sup>
			Appliance <sup>a</sup>	
			Description	
included in kit	Main lighting unit	3 wired lamps on High totaling 330 lumens and 2.8 W power	8.4 hours	5.4 hours
	Radio	portable (990 mAh battery, 3.7 V nominal voltage with a power consumption of 0.16 W while in-use)	5.1 hours	1.3 hours
	Flashlight	420 mAh, 24 lumens torch, 3.2 V nominal voltage	121 hours	4 hours
sold separately	Mobile phone	Basic phone (3.7 Wh battery)	77 full charge(s)	5.4 full charge(s)

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

22

## Performance measure

Brightness setting: High

Lighting full battery run time<sup>d</sup> for main unit (hours)

8.8

Lighting full battery run time Flashlight (hours)

79

Total lighting service (lumen-hours/solar-day)

2600

(includes the both main lighting unit and any auxiliary lights included with the product)

<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>
Wired bulb	3	2	High	110	100	84	6200	Wide	100%
Flashlight	1	3	High	24	110	83	6200	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

PORTS		
1	USB 2.0 type A  Mobile phones and radios can be charged. Adapters are included.	
3	Barrel jack  Three 6 V ports available to power light points or appliances	
DURABILITY		
Overall durability and workmanship	Pass	
Durability tests passed	Switch test, Drop test, Strain relief test, physical ingress protection.	
Level of water protection	Main Unit	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
	Wired bulb	Water ingress protection not tested, meant for indoor use only.
	Flashlight	Has protection from occasional rain; met with appropriate warning label
	Radio	Has protection from occasional rain; met with appropriate warning label
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	10 watts	
BATTERY DETAILS		
Battery replaceability	Easily replaceable with common tools; however, the warranty is void if product is opened.	
Battery chemistry	Main unit: Lithium Ion	
Battery package type	Main unit: 4 x 18650	
Battery capacity	Main unit: 8.6 Ah	
Battery nominal voltage	Main Unit: 3.7 V	
Battery status indication	Four indicators for battery state-of-charge, one indicator for charging status on main unit; flashlight and radio each have one indicator for charging status	
MARKS AND CERTIFICATIONS		
Factory certification	ISO 9001:2015; ISO 14001:2015	
PRODUCT DETAILS		
Manufacturer name	Renewit Solar Limited	
Product name	Power Equation Solar Home Power Station with 3 Lights, Radio and Flashlight	
Product model / ID number	RNTS022	
Contact information	richard@renewit.com	
Website	www.renewit.com	
Dimensions (entire product in package)	24 x 34 x 10.5 cm	
Mass	2385 g	
SSS INFORMATION		
Specs sheet expiration date	January 31, 2022	
Quality standards framework version	2020	
Revision	2020.06	