

# Solar Home System

## SolarWorks!

Results based on test procedures detailed in  
Solar Home System Test Method, Ed. 1.0

Verify online:

[www.lightingglobal.org/products/sw-shs](http://www.lightingglobal.org/products/sw-shs)

Valid Until: August 2017



### Available Daily Electrical Energy (Wh/day)

43

### Lumens

650



Meets  
Quality Standards



Mobile Charging

5 Light Points

1 5-volt USB Ports



4 12-volt Ports



## Warranty Information

A 3-year warranty covering manufacturing defects in the system including the battery.

## Performance Details

			Run Time After a Typical Day of Solar Charging*		
Appliance**	Description	Included/ Advertised	Used Alone***	Used In Combination****	Run Time Units
Main lighting	5 light points on totaling 650 lumens	included	6	2.0	hours
Television	16" TV	advertised	5	1.0	hours
Fan	table fan	advertised	16	2.5	hours
Radio	portable radio	advertised	9	1.5	hours
Mobile	3.7 Wh battery	advertised	15	1.4	number of full charges
Available daily electrical energy**** (Wh/day)		43			
Performance Measure		Brightness Setting: Five lights on			
Lighting full battery run time***** (hours)		7.2			
Total light output (lumens)		650			
Work surface illuminance of a single lamp***** (lux)		64			

\* A typical day of solar charging assumes 5 kWh/m<sup>2</sup>/day

\*\*Only included appliances were tested. Run times for other appliances come from manufacturer power ratings or standard estimates.

\*\*\* Without any other loads used during the run time

\*\*\*\* Based on an example use profile with all of the advertised appliances listed above used in combination

\*\*\*\*\* 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.

\*\*\*\*\* The work surface illuminance is the brightness over two A4 sheets of paper with the brightest light at a distance of 0.75 m.

Lighting Details	
Lamp type	LED
Description of light points	Five 130-lumen light points
Lumen efficacy	111 lm/W
Colour characteristics	CRI 72 CCT "Cool" (5000-7000 K)
Distribution type	Wide
Lumen maintenance	104% of the original output remains after 2,000 hours of run time

Special Features	
Mobile charging and appliances	USB and 12 V ports available to charge devices and power

Durability	
Overall durability and workmanship	Pass
Durability tests passed	Switch and connector cycling, strain relief test, physical ingress protection

Solar Details	
PV module type	Polycrystalline silicon
PV maximum power	14 watts

Battery Details	
Battery replaceability	Easily replaceable with common tools
Battery chemistry	Lithium iron phosphate
Battery package type	4x 26650
Battery capacity	3.2 Ah
Battery nominal voltage	12.8 V
Appropriate battery protection circuit	Pass

Marks and Certifications	
Factory certification	ISO 9001
Other certification	AC charger has CE mark

Product Details	
Manufacturer name	SolarWorks!
Product name	Solar Home System
Contact information	info@solar-works.nl
Website	www.solar-works.nl

SSS Information	
Specs sheet expiration date	August 2017
Quality Standards Framework Version	2015
Revision	2015.09