

# Solar Home System

VE-SHS-1224-PAYG (100W)  
Brand name: VENUS

Results based on test procedures detailed in IEC TS 62257-9-5:2024

Verify online:  
<https://data.verasol.org/products/sek/vel-shs1224>  
Valid until: August 31, 2028



- Meets the Requirements in IEC TS 62257-9-8:2025 for Size B kits
- Mobile charging
- Pay-As-You-Go option available
- 4
- Light point(s)
- Electrical connections require tools\*



\*Some terminals on this product are not plug-and-play. Lighting Global verification assesses the performance of the system, but cannot assess proper installation of the product.

## 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)	
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	4 light points on "on" totaling 1400 lumens and 9.6 W power	33 hours	7.3 hours
no	not included	Smart phone	Smart phone (15 Wh battery)	15 full charge(s)	1.8 full charge(s)
no	not included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V) with power consumption of 0.7 W while in use	310 hours	5.5 hours
no	not included	Torch	Torch (0.5 W while in use)	430 hours	--
yes	not included	Television	32" diagonal television (30 W power consumption while in use)	12 hours	3.7 hours
yes	not included	Fan	16" diameter table fan (16 W power consumption while in use)	23 hours	9.2 hours

Available daily electrical energy [Wh/day]	370
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Performance measure	Brightness setting: 4 lights on "on"
Lighting full battery run time for main unit [hours]	33
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	46200

<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 name	Light output [lm]	Power Consumption [W]	Lumen efficacy <sup>e</sup> [lm/W]	CRI <sup>f</sup>	CCT <sup>g</sup>	Lumen maintenance <sup>h</sup>
2 W bulb	4	1	on	350	2.4	150	82	6780	99

<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 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			
2	USB 2.0 type A		Mobile phones, torches, and radios can be charged.
4	Barrel jack		12 V ports available to power fans and light points.
4	Barrel jack		12 V ports available to power appliances.
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	Permanent rooftop installation for PV modules	
	2 W bulb	Water ingress protection not tested, meant for indoor use only.	
SOLAR DETAILS			
PV Module Type		Monocrystalline silicon	
PV Maximum Power		110 W	
PV Rated Power		100 W	
PV Open-Circuit Voltage (V <sub>OC</sub> )		22.4 V	
MAIN UNIT BATTERY DETAILS			
Battery Replaceability		Easily replaceable with common tools; however, the warranty is void if product is opened.	
Battery Chemistry		Lithium iron phosphate	
Battery Package Type		32700	
Battery Capacity (tested)		24 Ah	
Battery Capacity (rated)		24 Ah	
Battery Nominal Voltage		12.8 V	
Battery status / other indicator lights		On screen indicators for battery level	
PRODUCT DETAILS			
Company Name (full)		Venus Energy Limited	
Company Name ("brand")		VENUS	
Product Name		Solar Home System	
Product Model or ID Number		VE-SHS-1224-PAYG (100W)	
Company Contact Information		wei.cheng@ezrenewables.com	
Company Website		www.ezrenewables.com	
Mass		n/a	
SSS INFORMATION			
Expiration Date		August 31, 2028	
Revision		2025.11	